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 – 3. Riverbank Angled Borings

Apex Laboratories Work Order #:

A9K0332

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

Table of Contents
A9K0332
(page 1 of 3)

APEX LABORATORIES, LLC
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Table of Contents
A9K0332
(page 2 of 3)

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Table of Contents
A9K0332
(page 3 of 3)

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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: 01/20/2020
Project: Gasco PreRD_DG 2019 – 3. Riverbank Angled Borings
Apex Work Order Number: A9K0332

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

AMENDED REPORT

Monday, January 6, 2020

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

RE: A9K0332 - Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings - [none]

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

Enclosed are the results of analyses for work order A9K0332, which was received by the laboratory on 11/12/2019 at 4:00:00PM.

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	5.4 degC	Cooler #2	5.8 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PDI-FB-1911121146	A9K0332-01	WQ	11/12/19 11:46	11/12/19 16:00
PDI-RB-1911120944	A9K0332-02	WQ	11/12/19 09:44	11/12/19 16:00
PDI-TB-1911071515	A9K0332-03	WQ	11/07/19 15:15	11/12/19 16:00
PDI-140RAB-00-10-191108	A9K0332-04	SO	11/08/19 11:40	11/12/19 16:00
PDI-140RAB-10-12.7-191108	A9K0332-05	SO	11/08/19 12:15	11/12/19 16:00
PDI-141RAB-00-10-191107	A9K0332-06	SO	11/07/19 15:15	11/12/19 16:00
PDI-141RAB-10-17.7-191107	A9K0332-07	SO	11/07/19 16:45	11/12/19 16:00
PDI-143RAB-00-10-191111	A9K0332-08	SO	11/11/19 12:30	11/12/19 16:00
PDI-143RAB-10-20-191112	A9K0332-09	SO	11/12/19 14:05	11/12/19 16:00
PDI-143RAB-20-31.1-191111	A9K0332-10	SO	11/11/19 15:30	11/12/19 16:00

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL CASE NARRATIVE

Work Order: A9K0332

Amended Report Revision 1: This report supersedes all previous reports.

Sample Matrix Change:
The sample matrix for client sample "PDI-141RAB-00-10-191107" (A9K0332-06) was changed from Sediment (SE) to Soil (SO) per the Chain of Custody.

Mercury by EPA 6020A: Additional Results Reported
The final report has been amended to include client sample results for Mercury by EPA method 6020A. Previously, only the Batch QC results were included for this analysis.

David Jack
Technical Manager
Apex Laboratories
January 6, 2020

Apex Laboratories

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110803**		
Diesel	**18.3**	11.7	25.0	mg/kg dry	1	11/14/19 19:55	NWTPH-Dx	**J**
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*	*Limits: 50-150 %*		*1*	*11/14/19 19:55*	*NWTPH-Dx*	
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**		**Batch: 9110803**		
Diesel	ND	11.8	25.0	mg/kg dry	1	11/14/19 20:58	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*	*Limits: 50-150 %*		*1*	*11/14/19 20:58*	*NWTPH-Dx*	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**		**Batch: 9110803**		
Diesel	ND	10.5	25.0	mg/kg dry	1	11/14/19 21:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 81 %*	*Limits: 50-150 %*		*1*	*11/14/19 21:20*	*NWTPH-Dx*	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110803**		
Diesel	**6980**	1130	2260	mg/kg dry	100	11/14/19 21:41	NWTPH-Dx	**F-17**
Surrogate: o-Terphenyl (Surr)		*Recovery: %*	*Limits: 50-150 %*		*100*	*11/14/19 21:41*	*NWTPH-Dx*	*S-01*
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**		**Batch: 9110803**		
Diesel	ND	10.6	25.0	mg/kg dry	1	11/14/19 22:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*	*Limits: 50-150 %*		*1*	*11/14/19 22:24*	*NWTPH-Dx*	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**		**Batch: 9110803**		
Diesel	ND	10.6	25.0	mg/kg dry	1	11/14/19 22:46	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 86 %*	*Limits: 50-150 %*		*1*	*11/14/19 22:46*	*NWTPH-Dx*	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**		**Batch: 9110803**		
Diesel	ND	10.2	25.0	mg/kg dry	1	11/14/19 23:07	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*11/14/19 23:07*	*NWTPH-Dx*	

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110745**		
Benzene	ND	6.47	12.9	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
2-Butanone (MEK)	ND	323	647	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Carbon tetrachloride	ND	32.3	64.7	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Chlorobenzene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Chloroform	ND	32.3	64.7	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
1,4-Dichlorobenzene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
1,1-Dichloroethene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
cis-1,2-Dichloroethene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
trans-1,2-Dichloroethene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Ethylbenzene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Tetrachloroethene (PCE)	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Toluene	ND	32.3	64.7	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Trichloroethene (TCE)	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Vinyl chloride	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
m,p-Xylene	ND	32.3	64.7	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
o-Xylene	ND	16.2	32.3	ug/kg dry	50	11/13/19 20:41	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*11/13/19 20:41*	*5035A/8260C*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*11/13/19 20:41*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*11/13/19 20:41*	*5035A/8260C*	
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**		**Batch: 9110745**		
Benzene	ND	11.7	23.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
2-Butanone (MEK)	ND	584	1170	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Carbon tetrachloride	ND	58.4	117	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Chlorobenzene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Chloroform	ND	58.4	117	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
1,4-Dichlorobenzene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
1,1-Dichloroethene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
cis-1,2-Dichloroethene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
trans-1,2-Dichloroethene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Ethylbenzene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Tetrachloroethene (PCE)	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**		**Batch: 9110745**		
Toluene	ND	58.4	117	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Trichloroethene (TCE)	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Vinyl chloride	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
m,p-Xylene	ND	58.4	117	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
o-Xylene	ND	29.2	58.4	ug/kg dry	50	11/13/19 21:07	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*11/13/19 21:07*	*5035A/8260C*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*11/13/19 21:07*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*11/13/19 21:07*	*5035A/8260C*	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**		**Batch: 9110745**		
Benzene	ND	7.73	15.5	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
2-Butanone (MEK)	ND	387	773	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Carbon tetrachloride	ND	38.7	77.3	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Chlorobenzene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Chloroform	ND	38.7	77.3	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
1,4-Dichlorobenzene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
1,1-Dichloroethene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
cis-1,2-Dichloroethene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
trans-1,2-Dichloroethene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Ethylbenzene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Tetrachloroethene (PCE)	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Toluene	ND	38.7	77.3	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Trichloroethene (TCE)	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Vinyl chloride	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
m,p-Xylene	ND	38.7	77.3	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
o-Xylene	ND	19.3	38.7	ug/kg dry	50	11/13/19 21:34	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*99 %*	*Limits: 80-120 %*	*1*	*11/13/19 21:34*	*5035A/8260C*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*11/13/19 21:34*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*11/13/19 21:34*	*5035A/8260C*	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110788**		
Benzene	**36300**	1280	2560	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
2-Butanone (MEK)	ND	63900	128000	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110788**		
Carbon tetrachloride	ND	6390	12800	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Chlorobenzene	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Chloroform	ND	6390	12800	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
1,4-Dichlorobenzene	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
1,1-Dichloroethene	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
cis-1,2-Dichloroethene	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
trans-1,2-Dichloroethene	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Ethylbenzene	**36400**	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Tetrachloroethene (PCE)	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Toluene	**10500**	6390	12800	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	J
Trichloroethene (TCE)	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Vinyl chloride	ND	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
m,p-Xylene	**51100**	6390	12800	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
o-Xylene	**21500**	3200	6390	ug/kg dry	10000	11/14/19 14:16	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*96 %*	*Limits:*	*80-120 %*	*1*	*11/14/19 14:16*	*5035A/8260C*	
Toluene-d8 (Surr)			*98 %*		*80-120 %*	*1*	*11/14/19 14:16*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*	*1*	*11/14/19 14:16*	*5035A/8260C*	
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**		**Batch: 9110788**		
Benzene	ND	5.60	11.2	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
2-Butanone (MEK)	ND	280	560	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Carbon tetrachloride	ND	28.0	56.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Chlorobenzene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Chloroform	ND	28.0	56.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
1,4-Dichlorobenzene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
1,1-Dichloroethene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
cis-1,2-Dichloroethene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
trans-1,2-Dichloroethene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Ethylbenzene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Tetrachloroethene (PCE)	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Toluene	ND	28.0	56.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Trichloroethene (TCE)	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**		**Batch: 9110788**		
Vinyl chloride	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
m,p-Xylene	ND	28.0	56.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
o-Xylene	ND	14.0	28.0	ug/kg dry	50	11/14/19 12:28	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*97 %*	*Limits: 80-120 %*	*1*	*11/14/19 12:28*	*5035A/8260C*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*11/14/19 12:28*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*11/14/19 12:28*	*5035A/8260C*	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**		**Batch: 9110788**		
Benzene	ND	4.75	9.50	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
2-Butanone (MEK)	ND	238	475	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Carbon tetrachloride	ND	23.8	47.5	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Chlorobenzene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Chloroform	ND	23.8	47.5	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
1,4-Dichlorobenzene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
1,1-Dichloroethene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
cis-1,2-Dichloroethene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
trans-1,2-Dichloroethene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Ethylbenzene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Tetrachloroethene (PCE)	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Toluene	ND	23.8	47.5	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Trichloroethene (TCE)	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Vinyl chloride	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
m,p-Xylene	ND	23.8	47.5	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
o-Xylene	ND	11.9	23.8	ug/kg dry	50	11/14/19 13:22	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*97 %*	*Limits: 80-120 %*	*1*	*11/14/19 13:22*	*5035A/8260C*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*11/14/19 13:22*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*11/14/19 13:22*	*5035A/8260C*	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**		**Batch: 9110788**		
Benzene	**7.11**	5.04	10.1	ug/kg dry	50	11/14/19 13:49	5035A/8260C	**J**
2-Butanone (MEK)	ND	252	504	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Carbon tetrachloride	ND	25.2	50.4	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Chlorobenzene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**		**Batch: 9110788**		
Chloroform	ND	25.2	50.4	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
1,4-Dichlorobenzene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
1,2-Dichloroethane (EDC)	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
1,1-Dichloroethene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
cis-1,2-Dichloroethene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
trans-1,2-Dichloroethene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Ethylbenzene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Tetrachloroethene (PCE)	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Toluene	ND	25.2	50.4	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Trichloroethene (TCE)	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Vinyl chloride	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
m,p-Xylene	ND	25.2	50.4	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
o-Xylene	ND	12.6	25.2	ug/kg dry	50	11/14/19 13:49	5035A/8260C	
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*	*Limits: 80-120 %*	*1*	*11/14/19 13:49*	*5035A/8260C*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*11/14/19 13:49*	*5035A/8260C*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*11/14/19 13:49*	*5035A/8260C*	

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-FB-1911121146 (A9K0332-01)				**Matrix: WQ**		**Batch: 9110473**		
Benzene	ND	0.100	0.200	ug/L	1	11/13/19 14:30	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	11/13/19 14:30	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	11/13/19 14:30	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:30	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	11/13/19 14:30	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:30	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:30	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	11/13/19 14:30	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	11/13/19 14:30	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	11/13/19 14:30	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	11/13/19 14:30	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*11/13/19 14:30*	*EPA 8260C*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*11/13/19 14:30*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*11/13/19 14:30*	*EPA 8260C*	
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**		**Batch: 9110473**		
Benzene	ND	0.100	0.200	ug/L	1	11/13/19 14:57	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	11/13/19 14:57	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	11/13/19 14:57	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:57	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	11/13/19 14:57	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:57	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/13/19 14:57	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	

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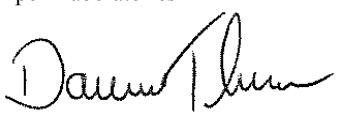

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**		**Batch: 9110473**		
Toluene	ND	0.500	1.00	ug/L	1	11/13/19 14:57	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	11/13/19 14:57	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	11/13/19 14:57	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	11/13/19 14:57	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits: 80-120 %*	*1*	*11/13/19 14:57*	*EPA 8260C*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*11/13/19 14:57*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*11/13/19 14:57*	*EPA 8260C*	
PDI-TB-1911071515 (A9K0332-03)				**Matrix: WQ**		**Batch: 9110473**		
Benzene	ND	0.100	0.200	ug/L	1	11/13/19 15:24	EPA 8260C	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	11/13/19 15:24	EPA 8260C	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	11/13/19 15:24	EPA 8260C	
Chlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 15:24	EPA 8260C	
Chloroform	ND	0.500	1.00	ug/L	1	11/13/19 15:24	EPA 8260C	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	11/13/19 15:24	EPA 8260C	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/13/19 15:24	EPA 8260C	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
Toluene	ND	0.500	1.00	ug/L	1	11/13/19 15:24	EPA 8260C	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
Vinyl chloride	ND	0.200	0.400	ug/L	1	11/13/19 15:24	EPA 8260C	
m,p-Xylene	ND	0.500	1.00	ug/L	1	11/13/19 15:24	EPA 8260C	
o-Xylene	ND	0.250	0.500	ug/L	1	11/13/19 15:24	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*11/13/19 15:24*	*EPA 8260C*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*11/13/19 15:24*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*11/13/19 15:24*	*EPA 8260C*	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-FB-1911121146 (A9K0332-01)				**Matrix: WQ**		**Batch: 9110782**		**C-07**
Aroclor 1016	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1221	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1232	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1242	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1248	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1254	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1260	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1262	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Aroclor 1268	ND	0.0192	0.0385	ug/L	1	11/15/19 09:51	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 64 %*		*Limits: 40-135 %*	*1*	*11/15/19 09:51*	*EPA 8082A*	
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**		**Batch: 9110782**		**C-07**
Aroclor 1016	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1221	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1232	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1242	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1248	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1254	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1260	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1262	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Aroclor 1268	ND	0.0189	0.0377	ug/L	1	11/15/19 10:09	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 55 %*		*Limits: 40-135 %*	*1*	*11/15/19 10:09*	*EPA 8082A*	
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1221	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1232	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1242	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1248	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1254	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1260	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1262	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	
Aroclor 1268	ND	0.808	1.60	ug/kg dry	1	11/14/19 13:48	EPA 8082A	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 67 %*		*Limits: 43-120 %*	*1*	*11/14/19 13:48*	*EPA 8082A*	
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1221	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1232	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1242	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1248	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1254	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1260	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1262	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Aroclor 1268	ND	0.825	1.64	ug/kg dry	1	11/14/19 14:23	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 72 %*		*Limits: 43-120 %*	*1*	*11/14/19 14:23*	*EPA 8082A*	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Aroclor 1221	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Aroclor 1232	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Aroclor 1242	**4.93**	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	**P-10**
Aroclor 1248	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Aroclor 1254	**24.0**	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	**P-10**
Aroclor 1260	**22.2**	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	**P-10**
Aroclor 1262	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Aroclor 1268	ND	0.752	1.49	ug/kg dry	1	11/14/19 14:59	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 84 %*		*Limits: 43-120 %*	*1*	*11/14/19 14:59*	*EPA 8082A*	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110780**		**C-07, R-04**
Aroclor 1016	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1221	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1232	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1242	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1248	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1254	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1260	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110780**		**C-07, R-04**
Aroclor 1262	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Aroclor 1268	ND	2.01	3.99	ug/kg dry	1	11/14/19 12:55	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 49 %*		*Limits: 43-120 %*	*1*	*11/14/19 12:55*	*EPA 8082A*	
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1221	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1232	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1242	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1248	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1254	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1260	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1262	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Aroclor 1268	ND	0.711	1.41	ug/kg dry	1	11/14/19 13:30	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 88 %*		*Limits: 43-120 %*	*1*	*11/14/19 13:30*	*EPA 8082A*	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1221	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1232	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1242	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1248	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1254	**0.963**	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	**J**
Aroclor 1260	**1.38**	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	**J**
Aroclor 1262	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Aroclor 1268	ND	0.730	1.45	ug/kg dry	1	11/14/19 14:05	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 86 %*		*Limits: 43-120 %*	*1*	*11/14/19 14:05*	*EPA 8082A*	
PDI-143RAB-20-31.1-191111 (A9K0332-10RE1)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1016	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Aroclor 1221	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Aroclor 1232	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Aroclor 1242	**176**	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	**P-10**

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-143RAB-20-31.1-191111 (A9K0332-10RE1)				**Matrix: SO**		**Batch: 9110780**		**C-07**
Aroclor 1248	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Aroclor 1254	**178**	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	**P-10**
Aroclor 1260	**74.8**	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	**P-10**
Aroclor 1262	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Aroclor 1268	ND	3.64	7.23	ug/kg dry	5	11/18/19 10:16	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 93 %*		*Limits: 43-120 %*	*5*	*11/18/19 10:16*	*EPA 8082A*	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-FB-1911121146 (A9K0332-01)				**Matrix: WQ**		**Batch: 9110772**		
Acenaphthene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Acenaphthylene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Anthracene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Benz(a)anthracene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Benzo(a)pyrene	ND	0.0144	0.0288	ug/L	1	11/13/19 22:50	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0144	0.0288	ug/L	1	11/13/19 22:50	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0144	0.0288	ug/L	1	11/13/19 22:50	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Chrysene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Fluoranthene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Fluorene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/13/19 22:50	EPA 8270D	
Naphthalene	ND	0.0192	0.0385	ug/L	1	11/13/19 22:50	EPA 8270D	
Phenanthrene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Pyrene	ND	0.00962	0.0192	ug/L	1	11/13/19 22:50	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0962	0.192	ug/L	1	11/13/19 22:50	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0481	0.0962	ug/L	1	11/13/19 22:50	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.192	0.385	ug/L	1	11/13/19 22:50	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*107 %*	*Limits:* *44-120 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*74 %*	*44-120 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
Phenol-d6 (Surr)			*25 %*	*10-120 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*92 %*	*50-133 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
2-Fluorophenol (Surr)			*42 %*	*19-120 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*86 %*	*43-140 %*	*1*	*11/13/19 22:50*	*EPA 8270D*	
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**		**Batch: 9110772**		
Acenaphthene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Acenaphthylene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Anthracene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Benz(a)anthracene	**0.0110**	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	**J**
Benzo(a)pyrene	**0.0148**	0.0140	0.0280	ug/L	1	11/13/19 23:25	EPA 8270D	**J**
Benzo(b)fluoranthene	ND	0.0140	0.0280	ug/L	1	11/13/19 23:25	EPA 8270D	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**		**Batch: 9110772**		
Benzo(k)fluoranthene	ND	0.0140	0.0280	ug/L	1	11/13/19 23:25	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Chrysene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Fluoranthene	**0.0337**	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Fluorene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
2-Methylnaphthalene	ND	0.0187	0.0374	ug/L	1	11/13/19 23:25	EPA 8270D	
Naphthalene	**0.0293**	0.0187	0.0374	ug/L	1	11/13/19 23:25	EPA 8270D	**J**
Phenanthrene	**0.0147**	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	**J**
Pyrene	**0.0431**	0.00935	0.0187	ug/L	1	11/13/19 23:25	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0935	0.187	ug/L	1	11/13/19 23:25	EPA 8270D	
2,4,5-Trichlorophenol	ND	0.0467	0.0935	ug/L	1	11/13/19 23:25	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.187	0.374	ug/L	1	11/13/19 23:25	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 110 %*		*Limits: 44-120 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*79 %*	*44-120 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
Phenol-d6 (Surr)			*26 %*	*10-120 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*89 %*	*50-133 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
2-Fluorophenol (Surr)			*44 %*	*19-120 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*87 %*	*43-140 %*	*1*	*11/13/19 23:25*	*EPA 8270D*	
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	**454**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Acenaphthylene	**305**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Anthracene	**631**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Benz(a)anthracene	**557**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Benzo(a)pyrene	**849**	95.0	190	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Benzo(b)fluoranthene	**834**	95.0	190	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Benzo(k)fluoranthene	**378**	95.0	190	ug/kg dry	40	11/14/19 14:37	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**779**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Chrysene	**765**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Dibenz(a,h)anthracene	**79.6**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	**J**
Fluoranthene	**2160**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Fluorene	**413**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**		**Batch: 9110781**		
Indeno(1,2,3-cd)pyrene	**662**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
2-Methylnaphthalene	**370**	127	253	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Naphthalene	**1720**	127	253	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Phenanthrene	**2900**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Pyrene	**2630**	63.1	127	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Pentachlorophenol (PCP)	ND	631	1270	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
2,4,5-Trichlorophenol	ND	317	631	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	950	1900	ug/kg dry	40	11/14/19 14:37	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*41 %*	*Limits: 37-122 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*60 %*	*44-115 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
Phenol-d6 (Surr)			*37 %*	*33-122 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
p-Terphenyl-d14 (Surr)			*75 %*	*54-127 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
2-Fluorophenol (Surr)			*51 %*	*35-115 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
2,4,6-Tribromophenol (Surr)			*79 %*	*39-132 %*	*40*	*11/14/19 14:37*	*EPA 8270D*	*S-05*
PDI-140RAB-10-12.7-191108 (A9K0332-05RE1)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	**53.4**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Acenaphthylene	**35.2**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Anthracene	**73.0**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Benz(a)anthracene	**141**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Benzo(a)pyrene	**267**	9.97	19.9	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Benzo(b)fluoranthene	**287**	9.97	19.9	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Benzo(k)fluoranthene	**96.1**	9.97	19.9	ug/kg dry	4	11/15/19 21:21	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**309**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Chrysene	**198**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Dibenz(a,h)anthracene	**32.2**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Fluoranthene	**356**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Fluorene	**42.4**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**237**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
2-Methylnaphthalene	**25.6**	13.3	26.6	ug/kg dry	4	11/15/19 21:21	EPA 8270D	**J**
Naphthalene	**107**	13.3	26.6	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Phenanthrene	**343**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Pyrene	**466**	6.63	13.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Pentachlorophenol (PCP)	ND	66.3	133	ug/kg dry	4	11/15/19 21:21	EPA 8270D	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-10-12.7-191108 (A9K0332-05RE1)				**Matrix: SO**		**Batch: 9110781**		
2,4,5-Trichlorophenol	ND	33.2	66.3	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	99.7	199	ug/kg dry	4	11/15/19 21:21	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*52 %*	*Limits: 37-122 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*73 %*	*44-115 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
Phenol-d6 (Surr)			*45 %*	*33-122 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*84 %*	*54-127 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
2-Fluorophenol (Surr)			*61 %*	*35-115 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*51 %*	*39-132 %*	*4*	*11/15/19 21:21*	*EPA 8270D*	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	ND	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Acenaphthylene	ND	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Anthracene	**63.8**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	**J**
Benz(a)anthracene	**345**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Benzo(a)pyrene	**630**	90.6	181	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Benzo(b)fluoranthene	**656**	90.6	181	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Benzo(k)fluoranthene	**313**	90.6	181	ug/kg dry	40	11/14/19 12:50	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**701**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Chrysene	**443**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Dibenz(a,h)anthracene	**72.4**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	**J**
Fluoranthene	**563**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Fluorene	ND	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**571**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
2-Methylnaphthalene	ND	121	241	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Naphthalene	ND	121	241	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Phenanthrene	**324**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Pyrene	**798**	60.2	121	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Pentachlorophenol (PCP)	ND	602	1210	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
2,4,5-Trichlorophenol	ND	302	602	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	906	1810	ug/kg dry	40	11/14/19 12:50	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*46 %*	*Limits: 37-122 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*65 %*	*44-115 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*
Phenol-d6 (Surr)			*43 %*	*33-122 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*
p-Terphenyl-d14 (Surr)			*84 %*	*54-127 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*

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Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**		**Batch: 9110781**		
Surrogate: 2-Fluorophenol (Surr)			*Recovery: 59 %*	*Limits: 35-115 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*
2,4,6-Tribromophenol (Surr)			*75 %*	*39-132 %*	*40*	*11/14/19 12:50*	*EPA 8270D*	*S-05*
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	**185000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Acenaphthylene	**64400**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Anthracene	**172000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Benz(a)anthracene	**174000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Benzo(a)pyrene	**243000**	5810	11600	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Benzo(b)fluoranthene	**214000**	5810	11600	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Benzo(k)fluoranthene	**88400**	5810	11600	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**193000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Chrysene	**219000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Dibenz(a,h)anthracene	**19200**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Fluoranthene	**640000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Fluorene	**131000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**159000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
2-Methylnaphthalene	**156000**	7750	15500	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Naphthalene	**1050000**	7750	15500	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Phenanthrene	**790000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Pyrene	**782000**	3860	7750	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Pentachlorophenol (PCP)	ND	38600	77500	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
2,4,5-Trichlorophenol	ND	19400	38600	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	58100	116000	ug/kg dry	1000	11/14/19 12:14	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 78 %*	*Limits: 37-122 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*166 %*	*44-115 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-05*
Phenol-d6 (Surr)			*%*	*33-122 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-01*
p-Terphenyl-d14 (Surr)			*227 %*	*54-127 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-05*
2-Fluorophenol (Surr)			*44 %*	*35-115 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-05*
2,4,6-Tribromophenol (Surr)			*%*	*39-132 %*	*1000*	*11/14/19 12:14*	*EPA 8270D*	*S-01*
PDI-143RAB-00-10-191111 (A9K0332-08RE1)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	ND	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Acenaphthylene	**8.54**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	**J**

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-143RAB-00-10-191111 (A9K0332-08RE1)				**Matrix: SO**		**Batch: 9110781**		
Anthracene	ND	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Benz(a)anthracene	**48.8**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Benzo(a)pyrene	**82.4**	8.34	16.7	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Benzo(b)fluoranthene	**71.4**	8.34	16.7	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Benzo(k)fluoranthene	**32.1**	8.34	16.7	ug/kg dry	4	11/15/19 21:56	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**88.1**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Chrysene	**65.6**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Dibenz(a,h)anthracene	**9.26**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	**J**
Fluoranthene	**72.4**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Fluorene	ND	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**67.8**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
2-Methylnaphthalene	ND	11.1	22.2	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Naphthalene	ND	11.1	22.2	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Phenanthrene	**7.79**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	**J**
Pyrene	**105**	5.54	11.1	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Pentachlorophenol (PCP)	ND	55.4	111	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
2,4,5-Trichlorophenol	ND	27.8	55.4	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	83.4	167	ug/kg dry	4	11/15/19 21:56	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*65 %*	*Limits: 37-122 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*91 %*	*44-115 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
Phenol-d6 (Surr)			*58 %*	*33-122 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*103 %*	*54-127 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
2-Fluorophenol (Surr)			*76 %*	*35-115 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*65 %*	*39-132 %*	*4*	*11/15/19 21:56*	*EPA 8270D*	
PDI-143RAB-10-20-191112 (A9K0332-09RE1)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	ND	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Acenaphthylene	**26.1**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Anthracene	**6.34**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	**J**
Benz(a)anthracene	**34.9**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Benzo(a)pyrene	**108**	8.72	17.4	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Benzo(b)fluoranthene	**96.0**	8.72	17.4	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Benzo(k)fluoranthene	**39.8**	8.72	17.4	ug/kg dry	4	11/14/19 16:28	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**169**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-143RAB-10-20-191112 (A9K0332-09RE1)				**Matrix: SO**		**Batch: 9110781**		
Chrysene	**48.7**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Dibenz(a,h)anthracene	**12.9**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Fluoranthene	**37.3**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Fluorene	ND	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**123**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
2-Methylnaphthalene	ND	11.6	23.2	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Naphthalene	**21.2**	11.6	23.2	ug/kg dry	4	11/14/19 16:28	EPA 8270D	**J**
Phenanthrene	**11.8**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Pyrene	**58.3**	5.80	11.6	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Pentachlorophenol (PCP)	ND	58.0	116	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
2,4,5-Trichlorophenol	ND	29.1	58.0	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	87.2	174	ug/kg dry	4	11/14/19 16:28	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*77 %*	*Limits: 37-122 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*79 %*	*44-115 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
Phenol-d6 (Surr)			*69 %*	*33-122 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*100 %*	*54-127 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
2-Fluorophenol (Surr)			*76 %*	*35-115 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*67 %*	*39-132 %*	*4*	*11/14/19 16:28*	*EPA 8270D*	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**		**Batch: 9110781**		
Acenaphthene	**2920**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Acenaphthylene	**271**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Anthracene	**627**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Benz(a)anthracene	**982**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Benzo(a)pyrene	**1540**	88.2	176	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Benzo(b)fluoranthene	**1430**	88.2	176	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Benzo(k)fluoranthene	**643**	88.2	176	ug/kg dry	40	11/14/19 13:26	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**1520**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Chrysene	**1380**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Dibenz(a,h)anthracene	**156**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Fluoranthene	**2750**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Fluorene	**869**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**1170**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
2-Methylnaphthalene	ND	118	235	ug/kg dry	40	11/14/19 13:26	EPA 8270D	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**		**Batch: 9110781**		
Naphthalene	**196**	118	235	ug/kg dry	40	11/14/19 13:26	EPA 8270D	**J**
Phenanthrene	**526**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Pyrene	**3790**	58.6	118	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Pentachlorophenol (PCP)	ND	586	1180	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
2,4,5-Trichlorophenol	ND	294	586	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	882	1760	ug/kg dry	40	11/14/19 13:26	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*52 %*	*Limits: 37-122 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*80 %*	*44-115 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*
Phenol-d6 (Surr)			*51 %*	*33-122 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*
p-Terphenyl-d14 (Surr)			*103 %*	*54-127 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*
2-Fluorophenol (Surr)			*66 %*	*35-115 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*
2,4,6-Tribromophenol (Surr)			*98 %*	*39-132 %*	*40*	*11/14/19 13:26*	*EPA 8270D*	*S-05*

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-FB-1911121146 (A9K0332-01)				**Matrix: WQ**				
Batch: 9110769								
Arsenic	ND	0.500	1.00	ug/L	1	11/15/19 20:55	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	11/15/19 20:55	EPA 6020A	
Chromium	ND	0.500	1.00	ug/L	1	11/15/19 20:55	EPA 6020A	
Copper	ND	0.500	1.00	ug/L	1	11/15/19 20:55	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	11/15/19 20:55	EPA 6020A	
Manganese	ND	0.500	1.00	ug/L	1	11/15/19 20:55	EPA 6020A	
Mercury	ND	---	0.0800	ug/L	1	11/15/19 20:55	EPA 6020A	AMEND
Vanadium	ND	0.500	1.00	ug/L	1	11/15/19 20:55	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	11/15/19 20:55	EPA 6020A	
PDI-RB-1911120944 (A9K0332-02)				**Matrix: WQ**				
Batch: 9110769								
Arsenic	ND	0.500	1.00	ug/L	1	11/15/19 21:00	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	11/15/19 21:00	EPA 6020A	
Chromium	ND	0.500	1.00	ug/L	1	11/15/19 21:00	EPA 6020A	
Copper	ND	0.500	1.00	ug/L	1	11/15/19 21:00	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	11/15/19 21:00	EPA 6020A	
Manganese	ND	0.500	1.00	ug/L	1	11/15/19 21:00	EPA 6020A	
Mercury	ND	---	0.0800	ug/L	1	11/15/19 21:00	EPA 6020A	AMEND
Vanadium	ND	0.500	1.00	ug/L	1	11/15/19 21:00	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	11/15/19 21:00	EPA 6020A	
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**3.06**	0.657	1.31	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Cadmium	ND	0.131	0.263	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Chromium	**41.3**	0.657	1.31	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Copper	**30.7**	0.657	1.31	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Lead	**6.78**	0.131	0.263	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Manganese	**768**	0.657	1.31	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Mercury	ND	---	0.105	mg/kg dry	10	11/15/19 21:28	EPA 6020A	AMEND
Vanadium	**115**	0.657	1.31	mg/kg dry	10	11/15/19 21:28	EPA 6020A	
Zinc	**78.3**	2.63	5.25	mg/kg dry	10	11/15/19 21:28	EPA 6020A	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**3.33**	0.615	1.23	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Cadmium	ND	0.123	0.246	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Chromium	**32.8**	0.615	1.23	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Copper	**29.0**	0.615	1.23	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Lead	**9.82**	0.123	0.246	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Manganese	**1210**	0.615	1.23	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Mercury	ND	---	0.0984	mg/kg dry	10	11/15/19 21:32	EPA 6020A	AMEND
Vanadium	**152**	0.615	1.23	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
Zinc	**85.2**	2.46	4.92	mg/kg dry	10	11/15/19 21:32	EPA 6020A	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**1.61**	0.597	1.19	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Cadmium	**0.462**	0.119	0.239	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Chromium	**12.9**	0.597	1.19	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Copper	**28.3**	0.597	1.19	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Lead	**33.9**	0.119	0.239	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Manganese	**1410**	0.597	1.19	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Mercury	ND	---	0.0954	mg/kg dry	10	11/15/19 21:37	EPA 6020A	AMEND
Vanadium	**147**	0.597	1.19	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
Zinc	**133**	2.39	4.77	mg/kg dry	10	11/15/19 21:37	EPA 6020A	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**1.62**	0.582	1.16	mg/kg dry	10	11/15/19 21:51	EPA 6020A	
Cadmium	ND	0.116	0.233	mg/kg dry	10	11/15/19 21:51	EPA 6020A	
Chromium	**12.5**	0.582	1.16	mg/kg dry	10	11/15/19 21:51	EPA 6020A	
Copper	**38.2**	0.582	1.16	mg/kg dry	10	11/15/19 21:51	EPA 6020A	**Q-42**
Lead	**6.74**	0.116	0.233	mg/kg dry	10	11/15/19 21:51	EPA 6020A	
Manganese	**1340**	0.582	1.16	mg/kg dry	10	11/15/19 21:51	EPA 6020A	**Q-42**
Mercury	ND	---	0.0932	mg/kg dry	10	11/15/19 21:51	EPA 6020A	AMEND
Vanadium	**119**	0.582	1.16	mg/kg dry	10	11/15/19 21:51	EPA 6020A	**Q-42**

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**				
Zinc	**63.6**	2.33	4.66	mg/kg dry	10	11/15/19 21:51	EPA 6020A	**Q-42**
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**3.19**	0.540	1.08	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Cadmium	ND	0.108	0.216	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Chromium	**15.5**	0.540	1.08	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Copper	**16.3**	0.540	1.08	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Lead	**3.13**	0.108	0.216	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Manganese	**356**	0.540	1.08	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Mercury	ND	---	0.0864	mg/kg dry	10	11/15/19 22:05	EPA 6020A	AMEND
Vanadium	**72.5**	0.540	1.08	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
Zinc	**54.4**	2.16	4.32	mg/kg dry	10	11/15/19 22:05	EPA 6020A	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**3.29**	0.560	1.12	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Cadmium	ND	0.112	0.224	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Chromium	**15.6**	0.560	1.12	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Copper	**18.7**	0.560	1.12	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Lead	**3.74**	0.112	0.224	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Manganese	**315**	0.560	1.12	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Mercury	ND	---	0.0897	mg/kg dry	10	11/15/19 22:09	EPA 6020A	AMEND
Vanadium	**68.3**	0.560	1.12	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
Zinc	**52.9**	2.24	4.48	mg/kg dry	10	11/15/19 22:09	EPA 6020A	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**				
Batch: 9110847								
Arsenic	**2.70**	0.550	1.10	mg/kg dry	10	11/15/19 22:14	EPA 6020A	
Cadmium	**0.122**	0.110	0.220	mg/kg dry	10	11/15/19 22:14	EPA 6020A	**J**
Chromium	**13.1**	0.550	1.10	mg/kg dry	10	11/15/19 22:14	EPA 6020A	
Copper	**17.1**	0.550	1.10	mg/kg dry	10	11/15/19 22:14	EPA 6020A	
Lead	**7.47**	0.110	0.220	mg/kg dry	10	11/15/19 22:14	EPA 6020A	
Manganese	**256**	0.550	1.10	mg/kg dry	10	11/15/19 22:14	EPA 6020A	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**				
Mercury	ND	---	0.0880	mg/kg dry	10	11/15/19 22:14	EPA 6020A	AMEND
Vanadium	**52.9**	0.550	1.10	mg/kg dry	10	11/15/19 22:14	EPA 6020A	
Zinc	**80.6**	2.20	4.40	mg/kg dry	10	11/15/19 22:14	EPA 6020A	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
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Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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-140RAB-00-10-191108 (A9K0332-04RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	**0.00000956**	0.00000615	0.0000123	% dry	1	11/22/19 11:12	D7511-12	**J**
PDI-140RAB-10-12.7-191108 (A9K0332-05RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	ND	0.00000617	0.0000123	% dry	1	11/22/19 11:20	D7511-12	
PDI-141RAB-00-10-191107 (A9K0332-06RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	**0.0000321**	0.00000565	0.0000113	% dry	1	11/22/19 11:22	D7511-12	**H-01**
PDI-141RAB-10-17.7-191107 (A9K0332-07RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	**0.000560**	0.0000300	0.0000600	% dry	5	11/22/19 11:24	D7511-12	**H-01**
PDI-143RAB-00-10-191111 (A9K0332-08RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	ND	0.00000540	0.0000108	% dry	1	11/22/19 11:28	D7511-12	
PDI-143RAB-10-20-191112 (A9K0332-09RE1)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	**0.0000353**	0.00000538	0.0000108	% dry	1	11/22/19 11:38	D7511-12	
PDI-143RAB-20-31.1-191111 (A9K0332-10RE3)				**Matrix: SO**		**Batch: 9111083**		
Total Cyanide	**0.00105**	0.000136	0.000272	% dry	25	11/22/19 13:37	D7511-12	

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AMENDED REPORT

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Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Demand Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.29**	0.020	0.020	% by Weight	1	11/15/19 14:50	SM 5310 B MOD	
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.36**	0.020	0.020	% by Weight	1	11/15/19 16:00	SM 5310 B MOD	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.62**	0.020	0.020	% by Weight	1	11/15/19 16:30	SM 5310 B MOD	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**3.7**	0.020	0.020	% by Weight	1	11/15/19 16:58	SM 5310 B MOD	
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.026**	0.020	0.020	% by Weight	1	11/15/19 17:43	SM 5310 B MOD	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.061**	0.020	0.020	% by Weight	1	11/15/19 18:09	SM 5310 B MOD	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**				
Batch: 9110807								
Total Organic Carbon	**0.15**	0.020	0.020	% by Weight	1	11/15/19 19:00	SM 5310 B MOD	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-140RAB-00-10-191108 (A9K0332-04)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**81.0**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-140RAB-10-12.7-191108 (A9K0332-05)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**79.6**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-141RAB-00-10-191107 (A9K0332-06)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**87.9**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**82.9**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-143RAB-00-10-191111 (A9K0332-08)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**92.6**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-143RAB-10-20-191112 (A9K0332-09)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**91.6**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				**Matrix: SO**				
Batch: 9110765								
Total Solids	**90.2**	1.00	1.00	% by Weight	1	11/14/19 16:31	SM 2540 G	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110803 - EPA 3546 (Fuels)							**Soil**					
Blank (9110803-BLK1)			Prepared: 11/14/19 11:45		Analyzed: 11/14/19 19:13							
NWTPH-Dx												
Diesel	ND	9.09	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	18.2	36.4	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	18.2	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 94 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (9110803-BS1)			Prepared: 11/14/19 11:45		Analyzed: 11/14/19 19:35							
NWTPH-Dx												
Diesel	116	10.0	20.0	mg/kg wet	1	125	---	93	76-115%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 95 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (9110803-DUP1)			Prepared: 11/14/19 11:45		Analyzed: 11/14/19 20:16							
QC Source Sample: PDI-140RAB-00-10-191108 (A9K0332-04)												
NWTPH-Dx												
Diesel	**15.6**	11.7	23.3	mg/kg dry	1	---	18.3	---	---	16	30%	J
Oil	ND	23.3	46.6	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	**30.8**	23.3	46.6	mg/kg dry	1	---	36.6	---	---	17	30%	J
Surr: o-Terphenyl (Surr)			*Recovery: 80 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (9110803-DUP2)			Prepared: 11/14/19 11:45		Analyzed: 11/14/19 23:29							
QC Source Sample: Non-SDG (A9K0363-01)												
Diesel	**20.7**	12.1	25.0	mg/kg dry	1	---	13.2	---	---	**45**	**30%**	Q-05, J
Oil	ND	24.3	50.0	mg/kg dry	1	---	ND	---	---	---	30%	
Mineral Oil	ND	24.3	48.5	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 96 %*		*Limits: 50-150 %*		*Dilution: 1x*					

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Blank (9110745-BLK1)			Prepared: 11/13/19 09:30 Analyzed: 11/13/19 11:41									
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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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Blank (9110745-BLK1)			Prepared: 11/13/19 09:30 Analyzed: 11/13/19 11:41									
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: 96 %* *Limits: 80-120 %* *Dilution: 1x*

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Blank (9110745-BLK1)				Prepared: 11/13/19 09:30 Analyzed: 11/13/19 11:41								
Surr: Toluene-d8 (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*				*"*				
LCS (9110745-BS1)				Prepared: 11/13/19 09:30 Analyzed: 11/13/19 10:47								
5035A/8260C												
Acetone	1840	500	1000	ug/kg wet	50	2000	---	92	80-120%	---	---	
Acrylonitrile	1060	50.0	100	ug/kg wet	50	1000	---	106	80-120%	---	---	
Benzene	906	5.00	10.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Bromobenzene	955	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromochloromethane	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Bromodichloromethane	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
Bromoform	909	50.0	100	ug/kg wet	50	1000	---	91	80-120%	---	---	
Bromomethane	1290	500	500	ug/kg wet	50	1000	---	**129**	**80-120%**	---	---	Q-56
2-Butanone (MEK)	1770	250	500	ug/kg wet	50	2000	---	89	80-120%	---	---	
n-Butylbenzene	1120	25.0	50.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
sec-Butylbenzene	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
tert-Butylbenzene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Carbon disulfide	876	250	500	ug/kg wet	50	1000	---	88	80-120%	---	---	
Carbon tetrachloride	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Chlorobenzene	957	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chloroethane	1340	250	500	ug/kg wet	50	1000	---	**134**	**80-120%**	---	---	Q-56
Chloroform	985	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Chloromethane	902	125	250	ug/kg wet	50	1000	---	90	80-120%	---	---	
2-Chlorotoluene	989	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
4-Chlorotoluene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dibromochloromethane	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,2-Dibromo-3-chloropropane	896	125	250	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,2-Dibromoethane (EDB)	992	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
Dibromomethane	995	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2-Dichlorobenzene	952	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,3-Dichlorobenzene	990	12.5	25.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
1,4-Dichlorobenzene	927	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Dichlorodifluoromethane	930	50.0	100	ug/kg wet	50	1000	---	93	80-120%	---	---	
1,1-Dichloroethane	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
LCS (9110745-BS1)			Prepared: 11/13/19 09:30 Analyzed: 11/13/19 10:47									
1,2-Dichloroethane (EDC)	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
1,1-Dichloroethene	965	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
cis-1,2-Dichloroethene	935	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
trans-1,2-Dichloroethene	962	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2-Dichloropropane	947	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,3-Dichloropropane	994	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
2,2-Dichloropropane	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
1,1-Dichloropropene	915	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
cis-1,3-Dichloropropene	1000	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
trans-1,3-Dichloropropene	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	
Ethylbenzene	995	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Hexachlorobutadiene	1060	50.0	100	ug/kg wet	50	1000	---	106	80-120%	---	---	
2-Hexanone	1820	250	500	ug/kg wet	50	2000	---	91	80-120%	---	---	
Isopropylbenzene	998	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
4-Isopropyltoluene	1100	25.0	50.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Methylene chloride	966	125	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1950	250	500	ug/kg wet	50	2000	---	98	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	960	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Naphthalene	949	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
n-Propylbenzene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Styrene	878	25.0	50.0	ug/kg wet	50	1000	---	88	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1,2,2-Tetrachloroethane	905	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Tetrachloroethene (PCE)	957	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Toluene	923	25.0	50.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,2,3-Trichlorobenzene	940	125	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2,4-Trichlorobenzene	904	125	250	ug/kg wet	50	1000	---	90	80-120%	---	---	
1,1,1-Trichloroethane	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,1,2-Trichloroethane	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Trichloroethene (TCE)	955	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Trichlorofluoromethane	1090	50.0	100	ug/kg wet	50	1000	---	109	80-120%	---	---	
1,2,3-Trichloropropane	997	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
1,2,4-Trimethylbenzene	1190	25.0	50.0	ug/kg wet	50	1000	---	119	80-120%	---	---	
1,3,5-Trimethylbenzene	1160	25.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	

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Darwin Thomas, Business Development Director

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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**
Portland, OR 97219	Project Manager:	**Ryan Barth**

Report ID:
A9K0332 - 01 06 20 1231

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 9110745 - EPA 5035A							**Soil**					
LCS (9110745-BS1)			Prepared: 11/13/19 09:30 Analyzed: 11/13/19 10:47									
Vinyl chloride	899	12.5	25.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
m,p-Xylene	2050	25.0	50.0	ug/kg wet	50	2000	---	102	80-120%	---	---	
o-Xylene	969	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*		*"*					
Duplicate (9110745-DUP1)			Prepared: 11/06/19 11:30 Analyzed: 11/13/19 13:29									
QC Source Sample: Non-SDG (A9K0179-01)												
Acetone	ND	1440	2870	ug/kg dry	100	---	ND	---	---	---	30%	
Acrylonitrile	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
Benzene	ND	14.4	28.7	ug/kg dry	100	---	ND	---	---	---	30%	
Bromobenzene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
Bromochloromethane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Bromodichloromethane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Bromoform	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
Bromomethane	ND	1440	1440	ug/kg dry	100	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	719	1440	ug/kg dry	100	---	ND	---	---	---	30%	
n-Butylbenzene	**578**	71.9	144	ug/kg dry	100	---	650	---	---	12	30%	
sec-Butylbenzene	**484**	71.9	144	ug/kg dry	100	---	663	---	---	**31**	**30%**	Q-04
tert-Butylbenzene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Carbon disulfide	ND	719	1440	ug/kg dry	100	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Chlorobenzene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
Chloroethane	ND	719	1440	ug/kg dry	100	---	ND	---	---	---	30%	
Chloroform	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Chloromethane	ND	359	719	ug/kg dry	100	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Dibromochloromethane	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	359	719	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Dibromomethane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Duplicate (9110745-DUP1)			Prepared: 11/06/19 11:30 Analyzed: 11/13/19 13:29									
QC Source Sample: Non-SDG (A9K0179-01)												
1,3-Dichlorobenzene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Ethylbenzene	**92.5**	35.9	71.9	ug/kg dry	100	---	141	---	---	**42**	**30%**	Q-04
Hexachlorobutadiene	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
2-Hexanone	ND	719	1440	ug/kg dry	100	---	ND	---	---	---	30%	
Isopropylbenzene	**131**	71.9	144	ug/kg dry	100	---	184	---	---	**34**	**30%**	Q-04, J
4-Isopropyltoluene	**587**	71.9	144	ug/kg dry	100	---	762	---	---	26	30%	
Methylene chloride	ND	359	719	ug/kg dry	100	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	719	1440	ug/kg dry	100	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
Naphthalene	**1200**	144	287	ug/kg dry	100	---	1820	---	---	**41**	**30%**	Q-04
n-Propylbenzene	**286**	35.9	71.9	ug/kg dry	100	---	424	---	---	**39**	**30%**	Q-04
Styrene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	144	144	ug/kg dry	100	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
Toluene	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	**380**	359	719	ug/kg dry	100	---	ND	---	---		**30%**	Q-04, J
1,2,4-Trichlorobenzene	ND	359	719	ug/kg dry	100	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Duplicate (9110745-DUP1)			Prepared: 11/06/19 11:30 Analyzed: 11/13/19 13:29									
QC Source Sample: Non-SDG (A9K0179-01)												
Trichloroethene (TCE)	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	144	287	ug/kg dry	100	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	71.9	144	ug/kg dry	100	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	**2140**	71.9	144	ug/kg dry	100	---	2950	---	---	**32**	**30%**	Q-04
1,3,5-Trimethylbenzene	**418**	71.9	144	ug/kg dry	100	---	525	---	---	23	30%	
Vinyl chloride	ND	35.9	71.9	ug/kg dry	100	---	ND	---	---	---	30%	
m,p-Xylene	**469**	71.9	144	ug/kg dry	100	---	577	---	---	21	30%	
o-Xylene	**698**	35.9	71.9	ug/kg dry	100	---	1010	---	---	**37**	**30%**	Q-04
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*							
Toluene-d8 (Surr)			*96 %*		*80-120 %*							
4-Bromofluorobenzene (Surr)			*104 %*		*80-120 %*							
Matrix Spike (9110745-MS1)			Prepared: 11/11/19 10:20 Analyzed: 11/13/19 19:47									
QC Source Sample: Non-SDG (A9K0329-05)												
5035A/8260C												
Acetone	5630	1880	3760	ug/kg dry	200	7510	ND	75	36-164%	---	---	
Acrylonitrile	4900	188	376	ug/kg dry	200	3760	ND	96	65-134%	---	---	
Benzene	3460	18.8	37.6	ug/kg dry	200	3760	ND	92	77-121%	---	---	
Bromobenzene	3710	47.0	93.9	ug/kg dry	200	3760	ND	99	78-121%	---	---	
Bromochloromethane	3580	93.9	188	ug/kg dry	200	3760	ND	95	78-125%	---	---	
Bromodichloromethane	3850	93.9	188	ug/kg dry	200	3760	ND	102	75-127%	---	---	
Bromoform	3230	188	376	ug/kg dry	200	3760	ND	86	67-132%	---	---	
Bromomethane	4260	1880	1880	ug/kg dry	200	3760	ND	113	53-143%	---	---	Q-54a
2-Butanone (MEK)	9590	939	1880	ug/kg dry	200	7510	ND	114	51-148%	---	---	
n-Butylbenzene	8940	93.9	188	ug/kg dry	200	3760	2350	**176**	**70-128%**	---	---	Q-01
sec-Butylbenzene	4980	93.9	188	ug/kg dry	200	3760	956	107	73-126%	---	---	
tert-Butylbenzene	3950	93.9	188	ug/kg dry	200	3760	ND	105	73-125%	---	---	
Carbon disulfide	3220	939	1880	ug/kg dry	200	3760	ND	86	63-132%	---	---	
Carbon tetrachloride	3760	93.9	188	ug/kg dry	200	3760	ND	100	70-135%	---	---	
Chlorobenzene	3510	47.0	93.9	ug/kg dry	200	3760	ND	93	79-120%	---	---	
Chloroethane	4080	939	1880	ug/kg dry	200	3760	ND	109	59-139%	---	---	Q-54
Chloroform	3750	93.9	188	ug/kg dry	200	3760	ND	100	78-123%	---	---	
Chloromethane	2990	470	939	ug/kg dry	200	3760	ND	80	50-136%	---	---	

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Matrix Spike (9110745-MS1)			Prepared: 11/11/19 10:20		Analyzed: 11/13/19 19:47							
QC Source Sample: Non-SDG (A9K0329-05)												
2-Chlorotoluene	4010	93.9	188	ug/kg dry	200	3760	ND	107	75-122%	---	---	
4-Chlorotoluene	3840	93.9	188	ug/kg dry	200	3760	ND	102	72-124%	---	---	
Dibromochloromethane	3810	188	376	ug/kg dry	200	3760	ND	101	74-126%	---	---	
1,2-Dibromo-3-chloropropane	4110	470	939	ug/kg dry	200	3760	ND	109	61-132%	---	---	
1,2-Dibromoethane (EDB)	3880	93.9	188	ug/kg dry	200	3760	ND	103	78-122%	---	---	
Dibromomethane	3730	93.9	188	ug/kg dry	200	3760	ND	99	78-125%	---	---	
1,2-Dichlorobenzene	3640	47.0	93.9	ug/kg dry	200	3760	ND	97	78-121%	---	---	
1,3-Dichlorobenzene	3660	47.0	93.9	ug/kg dry	200	3760	ND	97	77-121%	---	---	
1,4-Dichlorobenzene	3410	47.0	93.9	ug/kg dry	200	3760	ND	91	75-120%	---	---	
Dichlorodifluoromethane	3100	188	376	ug/kg dry	200	3760	ND	82	29-149%	---	---	
1,1-Dichloroethane	3700	47.0	93.9	ug/kg dry	200	3760	ND	98	76-125%	---	---	
1,2-Dichloroethane (EDC)	3540	47.0	93.9	ug/kg dry	200	3760	ND	94	73-128%	---	---	
1,1-Dichloroethene	3350	47.0	93.9	ug/kg dry	200	3760	ND	89	70-131%	---	---	
cis-1,2-Dichloroethene	3460	47.0	93.9	ug/kg dry	200	3760	ND	92	77-123%	---	---	
trans-1,2-Dichloroethene	3450	47.0	93.9	ug/kg dry	200	3760	ND	92	74-125%	---	---	
1,2-Dichloropropane	3850	188	376	ug/kg dry	200	3760	ND	103	76-123%	---	---	
1,3-Dichloropropane	3630	93.9	188	ug/kg dry	200	3760	ND	97	77-121%	---	---	
2,2-Dichloropropane	3350	93.9	188	ug/kg dry	200	3760	ND	89	67-133%	---	---	
1,1-Dichloropropene	3500	93.9	188	ug/kg dry	200	3760	ND	93	76-125%	---	---	
cis-1,3-Dichloropropene	4010	93.9	188	ug/kg dry	200	3760	ND	107	74-126%	---	---	
trans-1,3-Dichloropropene	3840	93.9	188	ug/kg dry	200	3760	ND	102	71-130%	---	---	
Ethylbenzene	5460	47.0	93.9	ug/kg dry	200	3760	1810	97	76-122%	---	---	
Hexachlorobutadiene	4270	188	376	ug/kg dry	200	3760	ND	114	61-135%	---	---	
2-Hexanone	8750	939	1880	ug/kg dry	200	7510	ND	100	53-145%	---	---	
Isopropylbenzene	5950	93.9	188	ug/kg dry	200	3760	1920	107	68-134%	---	---	
4-Isopropyltoluene	6500	93.9	188	ug/kg dry	200	3760	501	**160**	**73-127%**	---	---	Q-01
Methylene chloride	3710	470	939	ug/kg dry	200	3760	ND	99	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	10100	939	1880	ug/kg dry	200	7510	ND	111	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	3600	93.9	188	ug/kg dry	200	3760	ND	96	73-125%	---	---	
Naphthalene	7410	188	376	ug/kg dry	200	3760	3220	111	62-129%	---	---	
n-Propylbenzene	12300	47.0	93.9	ug/kg dry	200	3760	8430	103	73-125%	---	---	
Styrene	3650	93.9	188	ug/kg dry	200	3760	ND	97	76-124%	---	---	
1,1,1,2-Tetrachloroethane	3690	47.0	93.9	ug/kg dry	200	3760	ND	98	78-125%	---	---	

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110745 - EPA 5035A							**Soil**					
Matrix Spike (9110745-MS1)			Prepared: 11/11/19 10:20 Analyzed: 11/13/19 19:47									
QC Source Sample: Non-SDG (A9K0329-05)												
1,1,2,2-Tetrachloroethane	3450	93.9	188	ug/kg dry	200	3760	ND	89	70-124%	---	---	
Tetrachloroethene (PCE)	3590	47.0	93.9	ug/kg dry	200	3760	ND	96	73-128%	---	---	
Toluene	3400	93.9	188	ug/kg dry	200	3760	ND	91	77-121%	---	---	
1,2,3-Trichlorobenzene	3880	470	939	ug/kg dry	200	3760	ND	88	66-130%	---	---	
1,2,4-Trichlorobenzene	3840	470	939	ug/kg dry	200	3760	ND	102	67-129%	---	---	
1,1,1-Trichloroethane	3570	47.0	93.9	ug/kg dry	200	3760	ND	95	73-130%	---	---	
1,1,2-Trichloroethane	3910	47.0	93.9	ug/kg dry	200	3760	ND	104	78-121%	---	---	
Trichloroethene (TCE)	3860	47.0	93.9	ug/kg dry	200	3760	ND	103	77-123%	---	---	
Trichlorofluoromethane	3130	188	376	ug/kg dry	200	3760	ND	83	62-140%	---	---	
1,2,3-Trichloropropane	3560	93.9	188	ug/kg dry	200	3760	ND	95	73-125%	---	---	
1,2,4-Trimethylbenzene	42800	93.9	188	ug/kg dry	200	3760	39400	90	75-123%	---	---	
1,3,5-Trimethylbenzene	17300	93.9	188	ug/kg dry	200	3760	13300	106	73-124%	---	---	
Vinyl chloride	3200	47.0	93.9	ug/kg dry	200	3760	ND	85	56-135%	---	---	
m,p-Xylene	8020	93.9	188	ug/kg dry	200	7510	376	102	77-124%	---	---	
o-Xylene	4000	47.0	93.9	ug/kg dry	200	3760	ND	107	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*106 %*		*80-120 %*		*"*					

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Blank (9110788-BLK1)			Prepared: 11/14/19 09:30 Analyzed: 11/14/19 11:34									
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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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Blank (9110788-BLK1)			Prepared: 11/14/19 09:30 Analyzed: 11/14/19 11:34									
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: 98 %* *Limits: 80-120 %* *Dilution: 1x*

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Blank (9110788-BLK1)				Prepared: 11/14/19 09:30 Analyzed: 11/14/19 11:34								
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*			*"*					
LCS (9110788-BS1)				Prepared: 11/14/19 09:30 Analyzed: 11/14/19 10:41								
5035A/8260C												
Acetone	1770	500	1000	ug/kg wet	50	2000	---	89	80-120%	---	---	
Acrylonitrile	1030	50.0	100	ug/kg wet	50	1000	---	103	80-120%	---	---	
Benzene	901	5.00	10.0	ug/kg wet	50	1000	---	90	80-120%	---	---	
Bromobenzene	948	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromochloromethane	948	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Bromodichloromethane	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Bromoform	895	50.0	100	ug/kg wet	50	1000	---	89	80-120%	---	---	
Bromomethane	1190	500	500	ug/kg wet	50	1000	---	119	80-120%	---	---	
2-Butanone (MEK)	1700	250	500	ug/kg wet	50	2000	---	85	80-120%	---	---	
n-Butylbenzene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
sec-Butylbenzene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
tert-Butylbenzene	982	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Carbon disulfide	878	250	500	ug/kg wet	50	1000	---	88	80-120%	---	---	
Carbon tetrachloride	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Chlorobenzene	935	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
Chloroethane	1200	250	500	ug/kg wet	50	1000	---	120	80-120%	---	---	
Chloroform	959	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Chloromethane	855	125	250	ug/kg wet	50	1000	---	85	80-120%	---	---	
2-Chlorotoluene	968	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
4-Chlorotoluene	997	25.0	50.0	ug/kg wet	50	1000	---	100	80-120%	---	---	
Dibromochloromethane	1010	50.0	100	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2-Dibromo-3-chloropropane	869	125	250	ug/kg wet	50	1000	---	87	80-120%	---	---	
1,2-Dibromoethane (EDB)	979	25.0	50.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Dibromomethane	966	25.0	50.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,2-Dichlorobenzene	925	12.5	25.0	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,3-Dichlorobenzene	954	12.5	25.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,4-Dichlorobenzene	911	12.5	25.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
Dichlorodifluoromethane	879	50.0	100	ug/kg wet	50	1000	---	88	80-120%	---	---	
1,1-Dichloroethane	999	12.5	25.0	ug/kg wet	50	1000	---	100	80-120%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
LCS (9110788-BS1)			Prepared: 11/14/19 09:30 Analyzed: 11/14/19 10:41									
1,2-Dichloroethane (EDC)	966	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
1,1-Dichloroethene	925	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
cis-1,2-Dichloroethene	927	12.5	25.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
trans-1,2-Dichloroethene	939	12.5	25.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2-Dichloropropane	953	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,3-Dichloropropane	964	25.0	50.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
2,2-Dichloropropane	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
1,1-Dichloropropene	929	25.0	50.0	ug/kg wet	50	1000	---	93	80-120%	---	---	
cis-1,3-Dichloropropene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
trans-1,3-Dichloropropene	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Ethylbenzene	963	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Hexachlorobutadiene	1040	50.0	100	ug/kg wet	50	1000	---	104	80-120%	---	---	
2-Hexanone	1760	250	500	ug/kg wet	50	2000	---	88	80-120%	---	---	
Isopropylbenzene	993	25.0	50.0	ug/kg wet	50	1000	---	99	80-120%	---	---	
4-Isopropyltoluene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Methylene chloride	970	125	250	ug/kg wet	50	1000	---	97	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1860	250	500	ug/kg wet	50	2000	---	93	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	952	25.0	50.0	ug/kg wet	50	1000	---	95	80-120%	---	---	
Naphthalene	948	50.0	100	ug/kg wet	50	1000	---	95	80-120%	---	---	
n-Propylbenzene	978	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Styrene	873	25.0	50.0	ug/kg wet	50	1000	---	87	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,1,2,2-Tetrachloroethane	876	25.0	50.0	ug/kg wet	50	1000	---	88	80-120%	---	---	
Tetrachloroethene (PCE)	965	12.5	25.0	ug/kg wet	50	1000	---	96	80-120%	---	---	
Toluene	906	25.0	50.0	ug/kg wet	50	1000	---	91	80-120%	---	---	
1,2,3-Trichlorobenzene	937	125	250	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2,4-Trichlorobenzene	916	125	250	ug/kg wet	50	1000	---	92	80-120%	---	---	
1,1,1-Trichloroethane	978	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
1,1,2-Trichloroethane	974	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Trichloroethene (TCE)	982	12.5	25.0	ug/kg wet	50	1000	---	98	80-120%	---	---	
Trichlorofluoromethane	956	50.0	100	ug/kg wet	50	1000	---	96	80-120%	---	---	
1,2,3-Trichloropropane	944	25.0	50.0	ug/kg wet	50	1000	---	94	80-120%	---	---	
1,2,4-Trimethylbenzene	1160	25.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
1,3,5-Trimethylbenzene	1140	25.0	50.0	ug/kg wet	50	1000	---	114	80-120%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC
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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
LCS (9110788-BS1)			Prepared: 11/14/19 09:30 Analyzed: 11/14/19 10:41									
Vinyl chloride	860	12.5	25.0	ug/kg wet	50	1000	---	86	80-120%	---	---	
m,p-Xylene	1990	25.0	50.0	ug/kg wet	50	2000	---	99	80-120%	---	---	
o-Xylene	967	12.5	25.0	ug/kg wet	50	1000	---	97	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*100 %*		*80-120 %*				*"*			
Duplicate (9110788-DUP1)			Prepared: 11/11/19 12:30 Analyzed: 11/14/19 12:55									
QC Source Sample: PDI-143RAB-00-10-191111 (A9K0332-08)												
5035A/8260C												
Acetone	ND	587	1170	ug/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	5.87	11.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	587	587	ug/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	294	587	ug/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	294	587	ug/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	294	587	ug/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	147	294	ug/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	147	294	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	29.4	58.7	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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Duplicate (9110788-DUP1)			Prepared: 11/11/19 12:30 Analyzed: 11/14/19 12:55									
QC Source Sample: PDI-143RAB-00-10-191111 (A9K0332-08)												
1,2-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	294	587	ug/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	147	294	ug/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	294	587	ug/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	147	294	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	147	294	ug/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	

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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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Duplicate (9110788-DUP1)			Prepared: 11/11/19 12:30 Analyzed: 11/14/19 12:55									
QC Source Sample: PDI-143RAB-00-10-191111 (A9K0332-08)												
1,1,2-Trichloroethane	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	58.7	117	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	29.4	58.7	ug/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	14.7	29.4	ug/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*			*"*					
Matrix Spike (9110788-MS1)			Prepared: 11/13/19 18:10 Analyzed: 11/14/19 20:34									**V-16**
QC Source Sample: Non-SDG (A9K0234-12)												
5035A/8260C												
Acetone	4110	888	1780	ug/kg dry	50	3550	ND	116	36-164%	---	---	
Acrylonitrile	1950	88.8	178	ug/kg dry	50	1780	ND	110	65-134%	---	---	
Benzene	1620	8.88	17.8	ug/kg dry	50	1780	ND	91	77-121%	---	---	
Bromobenzene	1730	22.2	44.4	ug/kg dry	50	1780	ND	97	78-121%	---	---	
Bromochloromethane	1780	44.4	88.8	ug/kg dry	50	1780	ND	100	78-125%	---	---	
Bromodichloromethane	1820	44.4	88.8	ug/kg dry	50	1780	117	96	75-127%	---	---	
Bromoform	1620	88.8	178	ug/kg dry	50	1780	ND	91	67-132%	---	---	
Bromomethane	2370	888	888	ug/kg dry	50	1780	ND	134	53-143%	---	---	
2-Butanone (MEK)	3650	444	888	ug/kg dry	50	3550	ND	103	51-148%	---	---	
n-Butylbenzene	2210	44.4	88.8	ug/kg dry	50	1780	ND	124	70-128%	---	---	
sec-Butylbenzene	1860	44.4	88.8	ug/kg dry	50	1780	ND	105	73-126%	---	---	
tert-Butylbenzene	1820	44.4	88.8	ug/kg dry	50	1780	ND	102	73-125%	---	---	
Carbon disulfide	1610	444	888	ug/kg dry	50	1780	ND	90	63-132%	---	---	
Carbon tetrachloride	1770	44.4	88.8	ug/kg dry	50	1780	ND	100	70-135%	---	---	
Chlorobenzene	1640	22.2	44.4	ug/kg dry	50	1780	ND	92	79-120%	---	---	
Chloroethane	2100	444	888	ug/kg dry	50	1780	ND	118	59-139%	---	---	
Chloroform	1850	44.4	88.8	ug/kg dry	50	1780	ND	104	78-123%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Matrix Spike (9110788-MS1)			Prepared: 11/13/19 18:10		Analyzed: 11/14/19 20:34							**V-16**
QC Source Sample: Non-SDG (A9K0234-12)												
Chloromethane	1470	222	444	ug/kg dry	50	1780	ND	83	50-136%	---	---	
2-Chlorotoluene	1810	44.4	88.8	ug/kg dry	50	1780	ND	102	75-122%	---	---	
4-Chlorotoluene	1780	44.4	88.8	ug/kg dry	50	1780	ND	100	72-124%	---	---	
Dibromochloromethane	1740	88.8	178	ug/kg dry	50	1780	ND	98	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1730	222	444	ug/kg dry	50	1780	ND	97	61-132%	---	---	
1,2-Dibromoethane (EDB)	1800	44.4	88.8	ug/kg dry	50	1780	ND	101	78-122%	---	---	
Dibromomethane	1830	44.4	88.8	ug/kg dry	50	1780	ND	103	78-125%	---	---	
1,2-Dichlorobenzene	1680	22.2	44.4	ug/kg dry	50	1780	ND	94	78-121%	---	---	
1,3-Dichlorobenzene	1720	22.2	44.4	ug/kg dry	50	1780	ND	97	77-121%	---	---	
1,4-Dichlorobenzene	1600	22.2	44.4	ug/kg dry	50	1780	ND	90	75-120%	---	---	
Dichlorodifluoromethane	1570	88.8	178	ug/kg dry	50	1780	ND	89	29-149%	---	---	
1,1-Dichloroethane	1890	22.2	44.4	ug/kg dry	50	1780	ND	106	76-125%	---	---	
1,2-Dichloroethane (EDC)	1640	22.2	44.4	ug/kg dry	50	1780	ND	92	73-128%	---	---	
1,1-Dichloroethene	1610	22.2	44.4	ug/kg dry	50	1780	ND	91	70-131%	---	---	
cis-1,2-Dichloroethene	1670	22.2	44.4	ug/kg dry	50	1780	ND	94	77-123%	---	---	
trans-1,2-Dichloroethene	1670	22.2	44.4	ug/kg dry	50	1780	ND	94	74-125%	---	---	
1,2-Dichloropropane	1710	88.8	178	ug/kg dry	50	1780	ND	96	76-123%	---	---	
1,3-Dichloropropane	1680	44.4	88.8	ug/kg dry	50	1780	ND	95	77-121%	---	---	
2,2-Dichloropropane	1560	44.4	88.8	ug/kg dry	50	1780	ND	88	67-133%	---	---	
1,1-Dichloropropene	1650	44.4	88.8	ug/kg dry	50	1780	ND	93	76-125%	---	---	
cis-1,3-Dichloropropene	1780	44.4	88.8	ug/kg dry	50	1780	ND	100	74-126%	---	---	
trans-1,3-Dichloropropene	1800	44.4	88.8	ug/kg dry	50	1780	ND	101	71-130%	---	---	
Ethylbenzene	1700	22.2	44.4	ug/kg dry	50	1780	23.6	94	76-122%	---	---	
Hexachlorobutadiene	1900	88.8	178	ug/kg dry	50	1780	ND	107	61-135%	---	---	
2-Hexanone	3710	444	888	ug/kg dry	50	3550	ND	104	53-145%	---	---	
Isopropylbenzene	1890	44.4	88.8	ug/kg dry	50	1780	ND	106	68-134%	---	---	
4-Isopropyltoluene	1950	44.4	88.8	ug/kg dry	50	1780	ND	110	73-127%	---	---	
Methylene chloride	1830	222	444	ug/kg dry	50	1780	ND	103	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	3850	444	888	ug/kg dry	50	3550	ND	108	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1700	44.4	88.8	ug/kg dry	50	1780	ND	96	73-125%	---	---	
Naphthalene	1920	88.8	178	ug/kg dry	50	1780	ND	108	62-129%	---	---	
n-Propylbenzene	1740	22.2	44.4	ug/kg dry	50	1780	39.2	96	73-125%	---	---	
Styrene	1710	44.4	88.8	ug/kg dry	50	1780	ND	96	76-124%	---	---	

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110788 - EPA 5035A							**Soil**					
Matrix Spike (9110788-MS1)			Prepared: 11/13/19 18:10		Analyzed: 11/14/19 20:34							**V-16**
QC Source Sample: Non-SDG (A9K0234-12)												
1,1,1,2-Tetrachloroethane	1730	22.2	44.4	ug/kg dry	50	1780	ND	98	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1510	44.4	88.8	ug/kg dry	50	1780	ND	85	70-124%	---	---	
Tetrachloroethene (PCE)	1660	22.2	44.4	ug/kg dry	50	1780	ND	93	73-128%	---	---	
Toluene	1550	44.4	88.8	ug/kg dry	50	1780	ND	87	77-121%	---	---	
1,2,3-Trichlorobenzene	1700	222	444	ug/kg dry	50	1780	ND	96	66-130%	---	---	
1,2,4-Trichlorobenzene	1730	222	444	ug/kg dry	50	1780	ND	98	67-129%	---	---	
1,1,1-Trichloroethane	1670	22.2	44.4	ug/kg dry	50	1780	ND	94	73-130%	---	---	
1,1,2-Trichloroethane	1790	22.2	44.4	ug/kg dry	50	1780	96.2	95	78-121%	---	---	
Trichloroethene (TCE)	1770	22.2	44.4	ug/kg dry	50	1780	ND	99	77-123%	---	---	
Trichlorofluoromethane	1440	88.8	178	ug/kg dry	50	1780	ND	81	62-140%	---	---	
1,2,3-Trichloropropane	1640	44.4	88.8	ug/kg dry	50	1780	ND	92	73-125%	---	---	
1,2,4-Trimethylbenzene	2040	44.4	88.8	ug/kg dry	50	1780	204	104	75-123%	---	---	
1,3,5-Trimethylbenzene	1970	44.4	88.8	ug/kg dry	50	1780	105	105	73-124%	---	---	
Vinyl chloride	1730	22.2	44.4	ug/kg dry	50	1780	ND	97	56-135%	---	---	
m,p-Xylene	3600	44.4	88.8	ug/kg dry	50	3550	102	98	77-124%	---	---	
o-Xylene	1900	22.2	44.4	ug/kg dry	50	1780	73.8	103	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*97 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*105 %*		*80-120 %*				*"*			

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110473 - EPA 5030B							**Water**					
Blank (9110473-BLK1)			Prepared: 11/13/19 09:00		Analyzed: 11/13/19 10:55							
EPA 8260C												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	---	---	---	---	---	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Chloroform	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
o-Xylene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
LCS (9110473-BS1)			Prepared: 11/13/19 09:00		Analyzed: 11/13/19 10:01							
EPA 8260C												
Benzene	20.7	0.100	0.200	ug/L	1	20.0	---	104	80-120%	---	---	
2-Butanone (MEK)	39.8	5.00	10.0	ug/L	1	40.0	---	99	80-120%	---	---	
Carbon tetrachloride	22.0	0.500	1.00	ug/L	1	20.0	---	110	80-120%	---	---	
Chlorobenzene	20.3	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Chloroform	21.0	0.500	1.00	ug/L	1	20.0	---	105	80-120%	---	---	
1,4-Dichlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
1,2-Dichloroethane (EDC)	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
1,1-Dichloroethene	19.3	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
cis-1,2-Dichloroethene	20.0	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
trans-1,2-Dichloroethene	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110473 - EPA 5030B							**Water**					
LCS (9110473-BS1)			Prepared: 11/13/19 09:00		Analyzed: 11/13/19 10:01							
Ethylbenzene	19.1	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Tetrachloroethene (PCE)	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
Toluene	18.9	0.500	1.00	ug/L	1	20.0	---	95	80-120%	---	---	
Trichloroethene (TCE)	21.8	0.200	0.400	ug/L	1	20.0	---	109	80-120%	---	---	
Vinyl chloride	19.7	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
m,p-Xylene	38.5	0.500	1.00	ug/L	1	40.0	---	96	80-120%	---	---	
o-Xylene	18.9	0.250	0.500	ug/L	1	20.0	---	94	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*				*"*			
Duplicate (9110473-DUP1)			Prepared: 11/13/19 10:44		Analyzed: 11/13/19 16:18							
QC Source Sample: Non-SDG (A9K0336-01)												
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	5.00	10.0	ug/L	1	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Chlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Chloroform	**0.527**	0.500	1.00	ug/L	1	---	0.544	---	---	3	30%	J
1,4-Dichlorobenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	ND	---	---	---	30%	
m,p-Xylene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
o-Xylene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*				*"*			

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110473 - EPA 5030B							**Water**					
Matrix Spike (9110473-MS1)			Prepared: 11/13/19 10:44		Analyzed: 11/13/19 13:36							
QC Source Sample: Non-SDG (A9K0327-01)												
EPA 8260C												
Benzene	21.5	0.100	0.200	ug/L	1	20.0	0.231	106	79-120%	---	---	
2-Butanone (MEK)	52.6	5.00	10.0	ug/L	1	40.0	11.3	103	56-143%	---	---	
Carbon tetrachloride	23.1	0.500	1.00	ug/L	1	20.0	ND	116	72-136%	---	---	
Chlorobenzene	20.2	0.250	0.500	ug/L	1	20.0	ND	101	80-120%	---	---	
Chloroform	21.7	0.500	1.00	ug/L	1	20.0	ND	108	79-124%	---	---	
1,4-Dichlorobenzene	20.1	0.250	0.500	ug/L	1	20.0	0.688	97	79-120%	---	---	
1,2-Dichloroethane (EDC)	18.9	0.200	0.400	ug/L	1	20.0	ND	95	73-128%	---	---	
1,1-Dichloroethene	20.9	0.200	0.400	ug/L	1	20.0	ND	104	71-131%	---	---	
cis-1,2-Dichloroethene	20.3	0.200	0.400	ug/L	1	20.0	ND	101	78-123%	---	---	
trans-1,2-Dichloroethene	21.3	0.200	0.400	ug/L	1	20.0	ND	106	75-124%	---	---	
Ethylbenzene	19.9	0.250	0.500	ug/L	1	20.0	0.445	97	79-121%	---	---	
Tetrachloroethene (PCE)	21.2	0.200	0.400	ug/L	1	20.0	ND	106	74-129%	---	---	
Toluene	21.2	0.500	1.00	ug/L	1	20.0	1.65	98	80-121%	---	---	
Trichloroethene (TCE)	21.8	0.200	0.400	ug/L	1	20.0	ND	109	79-123%	---	---	
Vinyl chloride	20.8	0.200	0.400	ug/L	1	20.0	ND	104	58-137%	---	---	
m,p-Xylene	41.1	0.500	1.00	ug/L	1	40.0	1.94	98	80-121%	---	---	
o-Xylene	20.9	0.250	0.500	ug/L	1	20.0	1.43	98	78-122%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110780 - EPA 3546							**Soil**					
Blank (9110780-BLK1)			Prepared: 11/14/19 07:06	Analyzed: 11/14/19 12:55								**C-07**
EPA 8082A												
Aroclor 1016	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1262	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1268	ND	0.648	1.29	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 95 %*	*Limits: 43-120 %*			*Dilution: 1x*					
LCS (9110780-BS1)			Prepared: 11/14/19 07:06	Analyzed: 11/14/19 13:13								**C-07**
EPA 8082A												
Aroclor 1016	59.3	0.670	1.33	ug/kg wet	1	83.3	---	71	47-134%	---	---	
Aroclor 1260	72.2	0.670	1.33	ug/kg wet	1	83.3	---	87	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 96 %*	*Limits: 43-120 %*			*Dilution: 1x*					
LCS Dup (9110780-BSD1)			Prepared: 11/14/19 07:07	Analyzed: 11/14/19 13:30								**C-07, Q-19**
EPA 8082A												
Aroclor 1016	54.9	0.670	1.33	ug/kg wet	1	83.3	---	66	47-134%	8	30%	
Aroclor 1260	69.9	0.670	1.33	ug/kg wet	1	83.3	---	84	53-140%	3	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 98 %*	*Limits: 43-120 %*			*Dilution: 1x*					

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110782 - EPA 3510C (Neutral pH)							**Water**					
Blank (9110782-BLK1)			Prepared: 11/14/19 08:15		Analyzed: 11/15/19 08:58							**C-07**
EPA 8082A												
Aroclor 1016	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1262	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Aroclor 1268	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 40-135 %*			*Dilution: 1x*				
LCS (9110782-BS1)			Prepared: 11/14/19 08:15		Analyzed: 11/15/19 09:15							**C-07**
EPA 8082A												
Aroclor 1016	1.44	0.0200	0.0400	ug/L	1	2.50	---	57	46-129%	---	---	
Aroclor 1260	1.69	0.0200	0.0400	ug/L	1	2.50	---	67	45-134%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 70 %*		*Limits: 40-135 %*			*Dilution: 1x*				
LCS Dup (9110782-BSD1)			Prepared: 11/14/19 08:15		Analyzed: 11/15/19 09:33							**C-07, Q-19**
EPA 8082A												
Aroclor 1016	1.39	0.0200	0.0400	ug/L	1	2.50	---	55	46-129%	4	30%	
Aroclor 1260	1.71	0.0200	0.0400	ug/L	1	2.50	---	68	45-134%	2	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 72 %*		*Limits: 40-135 %*			*Dilution: 1x*				

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110772 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9110772-BLK1)			Prepared: 11/13/19 15:27 Analyzed: 11/13/19 21:04									
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 76 %*		*Limits: 44-120 %*				*Dilution: 1x*			
2-Fluorobiphenyl (Surr)			*72 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*22 %*		*10-120 %*				*"*			
p-Terphenyl-d14 (Surr)			*98 %*		*50-133 %*				*"*			
2-Fluorophenol (Surr)			*43 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*76 %*		*43-140 %*				*"*			
LCS (9110772-BS1)			Prepared: 11/13/19 15:27 Analyzed: 11/13/19 21:39									
EPA 8270D												
Acenaphthene	3.41	0.0100	0.0200	ug/L	1	4.00	---	85	47-122%	---	---	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110772 - EPA 3510C (Acid Extraction)							**Water**					
LCS (9110772-BS1)			Prepared: 11/13/19 15:27		Analyzed: 11/13/19 21:39							
Acenaphthylene	3.58	0.0100	0.0200	ug/L	1	4.00	---	90	41-130%	---	---	
Anthracene	3.77	0.0100	0.0200	ug/L	1	4.00	---	94	57-123%	---	---	
Benz(a)anthracene	4.03	0.0100	0.0200	ug/L	1	4.00	---	101	58-125%	---	---	
Benzo(a)pyrene	3.66	0.0150	0.0300	ug/L	1	4.00	---	91	54-128%	---	---	
Benzo(b)fluoranthene	3.70	0.0150	0.0300	ug/L	1	4.00	---	92	53-131%	---	---	
Benzo(k)fluoranthene	3.84	0.0150	0.0300	ug/L	1	4.00	---	96	57-129%	---	---	
Benzo(g,h,i)perylene	3.86	0.0100	0.0200	ug/L	1	4.00	---	97	50-134%	---	---	
Chrysene	3.87	0.0100	0.0200	ug/L	1	4.00	---	97	59-123%	---	---	
Dibenz(a,h)anthracene	4.06	0.0100	0.0200	ug/L	1	4.00	---	102	51-134%	---	---	
Fluoranthene	3.99	0.0100	0.0200	ug/L	1	4.00	---	100	57-128%	---	---	
Fluorene	3.70	0.0100	0.0200	ug/L	1	4.00	---	93	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.74	0.0100	0.0200	ug/L	1	4.00	---	94	52-133%	---	---	
1-Methylnaphthalene	4.17	0.0200	0.0400	ug/L	1	4.00	---	104	41-120%	---	---	
2-Methylnaphthalene	4.18	0.0200	0.0400	ug/L	1	4.00	---	105	40-121%	---	---	
Naphthalene	3.31	0.0200	0.0400	ug/L	1	4.00	---	83	40-121%	---	---	
Phenanthrene	3.53	0.0100	0.0200	ug/L	1	4.00	---	88	59-120%	---	---	
Pyrene	3.99	0.0100	0.0200	ug/L	1	4.00	---	100	57-126%	---	---	
Carbazole	4.11	0.0150	0.0300	ug/L	1	4.00	---	103	60-122%	---	---	
Dibenzofuran	3.64	0.0100	0.0200	ug/L	1	4.00	---	91	53-120%	---	---	
Pentachlorophenol (PCP)	3.76	0.100	0.200	ug/L	1	4.00	---	94	35-138%	---	---	
2,4,5-Trichlorophenol	3.90	0.0500	0.100	ug/L	1	4.00	---	97	53-123%	---	---	
Bis(2-ethylhexyl)phthalate	3.97	0.200	0.400	ug/L	1	4.00	---	99	55-135%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 120 %*		*Limits: 44-120 %*				*Dilution: 1x*			
2-Fluorobiphenyl (Surr)			*79 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*36 %*		*10-120 %*				*"*			
p-Terphenyl-d14 (Surr)			*97 %*		*50-133 %*				*"*			
2-Fluorophenol (Surr)			*52 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*102 %*		*43-140 %*				*"*			
LCS Dup (9110772-BSD1)			Prepared: 11/13/19 15:27		Analyzed: 11/13/19 22:15							**Q-19**
EPA 8270D												
Acenaphthene	3.38	0.0100	0.0200	ug/L	1	4.00	---	84	47-122%	0.8	30%	
Acenaphthylene	3.54	0.0100	0.0200	ug/L	1	4.00	---	88	41-130%	1	30%	
Anthracene	3.79	0.0100	0.0200	ug/L	1	4.00	---	95	57-123%	0.6	30%	

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AMENDED REPORT

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110772 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9110772-BSD1)			Prepared: 11/13/19 15:27		Analyzed: 11/13/19 22:15							**Q-19**
Benz(a)anthracene	4.00	0.0100	0.0200	ug/L	1	4.00	---	100	58-125%	0.8	30%	
Benzo(a)pyrene	3.64	0.0150	0.0300	ug/L	1	4.00	---	91	54-128%	0.6	30%	
Benzo(b)fluoranthene	3.74	0.0150	0.0300	ug/L	1	4.00	---	94	53-131%	1	30%	
Benzo(k)fluoranthene	3.78	0.0150	0.0300	ug/L	1	4.00	---	94	57-129%	2	30%	
Benzo(g,h,i)perylene	3.85	0.0100	0.0200	ug/L	1	4.00	---	96	50-134%	0.2	30%	
Chrysene	3.80	0.0100	0.0200	ug/L	1	4.00	---	95	59-123%	2	30%	
Dibenz(a,h)anthracene	4.06	0.0100	0.0200	ug/L	1	4.00	---	101	51-134%	0.1	30%	
Fluoranthene	4.15	0.0100	0.0200	ug/L	1	4.00	---	104	57-128%	4	30%	
Fluorene	3.66	0.0100	0.0200	ug/L	1	4.00	---	92	52-124%	1	30%	
Indeno(1,2,3-cd)pyrene	3.81	0.0100	0.0200	ug/L	1	4.00	---	95	52-133%	2	30%	
1-Methylnaphthalene	3.75	0.0200	0.0400	ug/L	1	4.00	---	94	41-120%	11	30%	
2-Methylnaphthalene	3.69	0.0200	0.0400	ug/L	1	4.00	---	92	40-121%	12	30%	
Naphthalene	3.21	0.0200	0.0400	ug/L	1	4.00	---	80	40-121%	3	30%	
Phenanthrene	3.49	0.0100	0.0200	ug/L	1	4.00	---	87	59-120%	1	30%	
Pyrene	4.15	0.0100	0.0200	ug/L	1	4.00	---	104	57-126%	4	30%	
Carbazole	4.24	0.0150	0.0300	ug/L	1	4.00	---	106	60-122%	3	30%	
Dibenzofuran	3.58	0.0100	0.0200	ug/L	1	4.00	---	90	53-120%	2	30%	
Pentachlorophenol (PCP)	3.90	0.100	0.200	ug/L	1	4.00	---	98	35-138%	4	30%	
2,4,5-Trichlorophenol	3.98	0.0500	0.100	ug/L	1	4.00	---	99	53-123%	2	30%	
Bis(2-ethylhexyl)phthalate	3.87	0.200	0.400	ug/L	1	4.00	---	97	55-135%	3	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 109 %*		*Limits: 44-120 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*78 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*31 %*		*10-120 %*			*"*				
p-Terphenyl-d14 (Surr)			*91 %*		*50-133 %*			*"*				
2-Fluorophenol (Surr)			*46 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*99 %*		*43-140 %*			*"*				

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110781 - EPA 3546							**Soil**					
Blank (9110781-BLK2)			Prepared: 11/14/19 07:10 Analyzed: 11/15/19 14:56									
EPA 8270D												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	12.5	25.0	ug/kg wet	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	6.25	12.5	ug/kg wet	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	18.7	37.5	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 73 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*82 %*		*44-115 %*			*"*				
Phenol-d6 (Surr)			*69 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*94 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*82 %*		*35-115 %*			*"*				
2,4,6-Tribromophenol (Surr)			*84 %*		*39-132 %*			*"*				
LCS (9110781-BS1)			Prepared: 11/14/19 07:10 Analyzed: 11/14/19 11:03									
EPA 8270D												
Acenaphthene	518	1.33	2.67	ug/kg wet	1	533	---	97	40-122%	---	---	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110781 - EPA 3546							**Soil**					
LCS (9110781-BS1)			Prepared: 11/14/19 07:10		Analyzed: 11/14/19 11:03							
Acenaphthylene	548	1.33	2.67	ug/kg wet	1	533	---	103	32-132%	---	---	
Anthracene	567	1.33	2.67	ug/kg wet	1	533	---	106	47-123%	---	---	
Benz(a)anthracene	595	1.33	2.67	ug/kg wet	1	533	---	112	49-126%	---	---	
Benzo(a)pyrene	536	2.00	4.00	ug/kg wet	1	533	---	100	45-129%	---	---	
Benzo(b)fluoranthene	547	2.00	4.00	ug/kg wet	1	533	---	102	45-132%	---	---	
Benzo(k)fluoranthene	571	2.00	4.00	ug/kg wet	1	533	---	107	47-132%	---	---	
Benzo(g,h,i)perylene	549	1.33	2.67	ug/kg wet	1	533	---	103	43-134%	---	---	
Chrysene	565	1.33	2.67	ug/kg wet	1	533	---	106	50-124%	---	---	
Dibenz(a,h)anthracene	600	1.33	2.67	ug/kg wet	1	533	---	112	45-134%	---	---	
Fluoranthene	602	1.33	2.67	ug/kg wet	1	533	---	113	50-127%	---	---	
Fluorene	546	1.33	2.67	ug/kg wet	1	533	---	102	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	549	1.33	2.67	ug/kg wet	1	533	---	103	45-133%	---	---	
1-Methylnaphthalene	587	2.67	5.33	ug/kg wet	1	533	---	110	40-120%	---	---	
2-Methylnaphthalene	589	2.67	5.33	ug/kg wet	1	533	---	111	38-122%	---	---	
Naphthalene	513	2.67	5.33	ug/kg wet	1	533	---	96	35-123%	---	---	
Phenanthrene	515	1.33	2.67	ug/kg wet	1	533	---	97	50-121%	---	---	
Pyrene	598	1.33	2.67	ug/kg wet	1	533	---	112	47-127%	---	---	
Carbazole	617	2.00	4.00	ug/kg wet	1	533	---	116	50-122%	---	---	
Dibenzofuran	538	1.33	2.67	ug/kg wet	1	533	---	101	44-120%	---	---	
Pentachlorophenol (PCP)	559	13.3	26.7	ug/kg wet	1	533	---	105	25-133%	---	---	
2,4,5-Trichlorophenol	618	6.67	13.3	ug/kg wet	1	533	---	116	41-124%	---	---	
Bis(2-ethylhexyl)phthalate	576	20.0	40.0	ug/kg wet	1	533	---	108	51-133%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 144 %*		*Limits: 37-122 %*			*Dilution: 1x*				S-06
2-Fluorobiphenyl (Surr)			*99 %*		*44-115 %*			*"*				
Phenol-d6 (Surr)			*132 %*		*33-122 %*			*"*				S-06
p-Terphenyl-d14 (Surr)			*114 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*106 %*		*35-115 %*			*"*				
2,4,6-Tribromophenol (Surr)			*121 %*		*39-132 %*			*"*				
LCS Dup (9110781-BSD1)			Prepared: 11/14/19 07:10		Analyzed: 11/14/19 11:39							**Q-19**
EPA 8270D												
Acenaphthene	505	1.33	2.67	ug/kg wet	1	533	---	95	40-122%	3	30%	
Acenaphthylene	533	1.33	2.67	ug/kg wet	1	533	---	100	32-132%	3	30%	
Anthracene	557	1.33	2.67	ug/kg wet	1	533	---	104	47-123%	2	30%	

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110781 - EPA 3546							**Soil**					
LCS Dup (9110781-BSD1)			Prepared: 11/14/19 07:10		Analyzed: 11/14/19 11:39							**Q-19**
Benz(a)anthracene	576	1.33	2.67	ug/kg wet	1	533	---	108	49-126%	3	30%	
Benzo(a)pyrene	531	2.00	4.00	ug/kg wet	1	533	---	100	45-129%	0.9	30%	
Benzo(b)fluoranthene	540	2.00	4.00	ug/kg wet	1	533	---	101	45-132%	1	30%	
Benzo(k)fluoranthene	568	2.00	4.00	ug/kg wet	1	533	---	107	47-132%	0.4	30%	
Benzo(g,h,i)perylene	524	1.33	2.67	ug/kg wet	1	533	---	98	43-134%	5	30%	
Chrysene	551	1.33	2.67	ug/kg wet	1	533	---	103	50-124%	3	30%	
Dibenz(a,h)anthracene	581	1.33	2.67	ug/kg wet	1	533	---	109	45-134%	3	30%	
Fluoranthene	577	1.33	2.67	ug/kg wet	1	533	---	108	50-127%	4	30%	
Fluorene	525	1.33	2.67	ug/kg wet	1	533	---	98	43-125%	4	30%	
Indeno(1,2,3-cd)pyrene	529	1.33	2.67	ug/kg wet	1	533	---	99	45-133%	4	30%	
1-Methylnaphthalene	565	2.67	5.33	ug/kg wet	1	533	---	106	40-120%	4	30%	
2-Methylnaphthalene	565	2.67	5.33	ug/kg wet	1	533	---	106	38-122%	4	30%	
Naphthalene	495	2.67	5.33	ug/kg wet	1	533	---	93	35-123%	3	30%	
Phenanthrene	509	1.33	2.67	ug/kg wet	1	533	---	95	50-121%	1	30%	
Pyrene	580	1.33	2.67	ug/kg wet	1	533	---	109	47-127%	3	30%	
Carbazole	597	2.00	4.00	ug/kg wet	1	533	---	112	50-122%	3	30%	
Dibenzofuran	523	1.33	2.67	ug/kg wet	1	533	---	98	44-120%	3	30%	
Pentachlorophenol (PCP)	552	13.3	26.7	ug/kg wet	1	533	---	103	25-133%	1	30%	
2,4,5-Trichlorophenol	592	6.67	13.3	ug/kg wet	1	533	---	111	41-124%	4	30%	
Bis(2-ethylhexyl)phthalate	559	20.0	40.0	ug/kg wet	1	533	---	105	51-133%	3	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 136 %*		*Limits: 37-122 %*		*Dilution: 1x*					S-06
2-Fluorobiphenyl (Surr)			*95 %*		*44-115 %*		*"*					
Phenol-d6 (Surr)			*125 %*		*33-122 %*		*"*					S-06
p-Terphenyl-d14 (Surr)			*110 %*		*54-127 %*		*"*					
2-Fluorophenol (Surr)			*99 %*		*35-115 %*		*"*					
2,4,6-Tribromophenol (Surr)			*117 %*		*39-132 %*		*"*					

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110769 - EPA 3015A							**Water**					
Blank (9110769-BLK1)			Prepared: 11/13/19 14:44		Analyzed: 11/15/19 20:32							
EPA 6020A												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.0400	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Manganese	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	---	0.0800	ug/L	1	---	---	---	---	---	---	
Vanadium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
LCS (9110769-BS1)			Prepared: 11/13/19 14:44		Analyzed: 11/15/19 20:37							
EPA 6020A												
Arsenic	50.8	0.500	1.00	ug/L	1	55.6	---	92	80-120%	---	---	
Cadmium	51.3	0.0400	0.200	ug/L	1	55.6	---	92	80-120%	---	---	
Chromium	52.1	0.500	1.00	ug/L	1	55.6	---	94	80-120%	---	---	
Copper	53.2	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Lead	52.8	0.100	0.200	ug/L	1	55.6	---	95	80-120%	---	---	
Manganese	53.6	0.500	1.00	ug/L	1	55.6	---	96	80-120%	---	---	
Mercury	1.07	---	0.0800	ug/L	1	1.11	---	97	80-120%	---	---	
Vanadium	50.6	0.500	1.00	ug/L	1	55.6	---	91	80-120%	---	---	
Zinc	52.2	2.00	4.00	ug/L	1	55.6	---	94	80-120%	---	---	
Duplicate (9110769-DUP1)			Prepared: 11/13/19 14:44		Analyzed: 11/15/19 21:09							
QC Source Sample: Non-SDG (A9K0336-02)												
Arsenic	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	**20%**	Q-05, R-04
Cadmium	ND	0.200	1.00	ug/L	5	---	ND	---	---	---	20%	R-04
Chromium	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	20%	R-04
Copper	**2.84**	2.50	5.00	ug/L	5	---	2.75	---	---	3	20%	R-04, J
Lead	ND	0.500	1.00	ug/L	5	---	ND	---	---	---	20%	R-04
Manganese	**35.4**	2.50	5.00	ug/L	5	---	35.1	---	---	1	20%	
Mercury	ND	---	0.400	ug/L	5	---	ND	---	---	---	20%	R-04
Vanadium	ND	2.50	5.00	ug/L	5	---	ND	---	---	---	20%	R-04
Zinc	ND	10.0	20.0	ug/L	5	---	ND	---	---	---	20%	R-04

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110769 - EPA 3015A							**Water**					
Matrix Spike (9110769-MS1)			Prepared: 11/13/19 14:44		Analyzed: 11/15/19 21:14							
QC Source Sample: Non-SDG (A9K0336-02)												
EPA 6020A												
Arsenic	56.4	2.50	5.00	ug/L	5	55.6	ND	102	75-125%	---	---	
Cadmium	55.8	0.200	1.00	ug/L	5	55.6	ND	100	75-125%	---	---	
Chromium	56.2	2.50	5.00	ug/L	5	55.6	ND	101	75-125%	---	---	
Copper	58.0	2.50	5.00	ug/L	5	55.6	2.75	99	75-125%	---	---	
Lead	53.2	0.500	1.00	ug/L	5	55.6	ND	96	75-125%	---	---	
Manganese	93.3	2.50	5.00	ug/L	5	55.6	35.1	105	75-125%	---	---	
Mercury	1.13	---	0.400	ug/L	5	1.11	ND	102	75-125%	---	---	
Vanadium	55.3	2.50	5.00	ug/L	5	55.6	ND	100	75-125%	---	---	
Zinc	55.7	10.0	20.0	ug/L	5	55.6	ND	100	75-125%	---	---	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110847 - EPA 3051A							**Soil**					
Blank (9110847-BLK1)			Prepared: 11/15/19 12:16 Analyzed: 11/15/19 21:18									
EPA 6020A												
Arsenic	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	0.0962	0.192	mg/kg wet	10	---	---	---	---	---	---	
Manganese	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Vanadium	ND	0.481	0.962	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	1.92	3.85	mg/kg wet	10	---	---	---	---	---	---	
LCS (9110847-BS1)			Prepared: 11/15/19 12:16 Analyzed: 11/15/19 21:23									
EPA 6020A												
Arsenic	48.5	0.500	1.00	mg/kg wet	10	50.0	---	97	80-120%	---	---	
Cadmium	48.5	0.100	0.200	mg/kg wet	10	50.0	---	97	80-120%	---	---	
Chromium	49.5	0.500	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Copper	50.3	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Lead	50.5	0.100	0.200	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Manganese	50.7	0.500	1.00	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Mercury	0.958	---	0.0800	mg/kg wet	10	1.00	---	96	80-120%	---	---	
Vanadium	48.1	0.500	1.00	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Zinc	49.4	2.00	4.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Duplicate (9110847-DUP1)			Prepared: 11/15/19 12:16 Analyzed: 11/15/19 21:55									
QC Source Sample: PDI-141RAB-10-17.7-191107 (A9K0332-07)												
EPA 6020A												
Arsenic	**1.66**	0.581	1.16	mg/kg dry	10	---	1.62	---	---	3	40%	
Cadmium	ND	0.116	0.233	mg/kg dry	10	---	ND	---	---	---	40%	
Chromium	**13.8**	0.581	1.16	mg/kg dry	10	---	12.5	---	---	10	40%	
Copper	**38.4**	0.581	1.16	mg/kg dry	10	---	38.2	---	---	0.6	40%	
Lead	**6.84**	0.116	0.233	mg/kg dry	10	---	6.74	---	---	1	40%	
Manganese	**1490**	0.581	1.16	mg/kg dry	10	---	1340	---	---	10	40%	
Mercury	ND	---	0.0930	mg/kg dry	10	---	ND	---	---	---	40%	
Vanadium	**134**	0.581	1.16	mg/kg dry	10	---	119	---	---	12	40%	

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9110847 - EPA 3051A							**Soil**					
Duplicate (9110847-DUP1)			Prepared: 11/15/19 12:16		Analyzed: 11/15/19 21:55							
QC Source Sample: PDI-141RAB-10-17.7-191107 (A9K0332-07)												
Zinc	**66.4**	2.33	4.65	mg/kg dry	10	---	63.6	---	---	4	40%	
Matrix Spike (9110847-MS1)			Prepared: 11/15/19 12:16		Analyzed: 11/15/19 22:00							
QC Source Sample: PDI-141RAB-10-17.7-191107 (A9K0332-07)												
EPA 6020A												
Arsenic	60.3	0.617	1.23	mg/kg dry	10	61.7	1.62	95	75-125%	---	---	
Cadmium	60.3	0.123	0.247	mg/kg dry	10	61.7	ND	98	75-125%	---	---	
Chromium	67.9	0.617	1.23	mg/kg dry	10	61.7	12.5	90	75-125%	---	---	
Copper	83.9	0.617	1.23	mg/kg dry	10	61.7	38.2	**74**	**75-125%**	---	---	Q-04
Lead	64.3	0.123	0.247	mg/kg dry	10	61.7	6.74	93	75-125%	---	---	
Manganese	780	0.617	1.23	mg/kg dry	10	61.7	1340	**-912**	**75-125%**	---	---	Q-03, Q-04
Mercury	1.19	---	0.0987	mg/kg dry	10	1.23	ND	96	75-125%	---	---	
Vanadium	129	0.617	1.23	mg/kg dry	10	61.7	119	**17**	**75-125%**	---	---	Q-04
Zinc	95.4	2.47	4.94	mg/kg dry	10	61.7	63.6	**52**	**75-125%**	---	---	Q-04

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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 9111083 - ASTM D7511-12mod (S)							**Soil**					
Blank (9111083-BLK1)			Prepared: 11/21/19 16:08		Analyzed: 11/22/19 11:06							
D7511-12												
Total Cyanide	ND	0.00000500	0.0000100	% wet	1	---	---	---	---	---	---	
LCS (9111083-BS1)			Prepared: 11/21/19 16:08		Analyzed: 11/22/19 11:08							
D7511-12												
Total Cyanide	0.0000456	0.00000500	0.0000100	% wet	1	0.0000400	---	114	84-116%	---	---	
LCS (9111083-BS2)			Prepared: 11/21/19 16:08		Analyzed: 11/22/19 11:04							
D7511-12												
Total Cyanide	0.00000913	0.00000500	0.0000100	% wet	1	0.000100	---	9	0-100%	---	---	J, CN_I
Matrix Spike (9111083-MS1)			Prepared: 11/21/19 16:08		Analyzed: 11/22/19 11:14							
QC Source Sample: PDI-140RAB-00-10-191108 (A9K0332-04RE1)												
D7511-12												
Total Cyanide	0.0000589	0.00000612	0.0000122	% dry	1	0.0000490	0.00000956	101	64-136%	---	---	
Matrix Spike Dup (9111083-MSD1)			Prepared: 11/21/19 16:08		Analyzed: 11/22/19 11:16							
QC Source Sample: PDI-140RAB-00-10-191108 (A9K0332-04RE1)												
D7511-12												
Total Cyanide	0.0000583	0.00000605	0.0000121	% dry	1	0.0000484	0.00000956	101	64-136%	1	47%	

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AMENDED REPORT

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALITY CONTROL (QC) SAMPLE RESULTS

Demand Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9110807 - PSEP-5310B TOC							**Sediment**					
Blank (9110807-BLK1)			Prepared: 11/13/19 19:28		Analyzed: 11/15/19 13:55							
SM 5310 B MOD												
Total Organic Carbon	ND	0.020	0.020	% by Weight	1	---	---	---	---	---	---	
LCS (9110807-BS1)			Prepared: 11/13/19 19:28		Analyzed: 11/15/19 14:23							
SM 5310 B MOD												
Total Organic Carbon	10000			mg/kg	1	10000	---	100	90-110%	---	---	
Duplicate (9110807-DUP1)			Prepared: 11/13/19 19:28		Analyzed: 11/15/19 15:25							
QC Source Sample: PDI-140RAB-00-10-191108 (A9K0332-04)												
SM 5310 B MOD												
Total Organic Carbon	**0.27**	0.020	0.020	% by Weight	1	---	0.29	---	---	5	20%	

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AMENDED REPORT

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

Report ID:
A9K0332 - 01 06 20 1231

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 9110765 - Total Solids (SM2540G/PSEP)							**Sediment**					
Duplicate (9110765-DUP1)			Prepared: 11/13/19 13:30		Analyzed: 11/14/19 16:31							
QC Source Sample: PDI-140RAB-00-10-191108 (A9K0332-04)												
SM 2540 G												
Total Solids	**81.4**	1.00	1.00	% by Weight	1	---	81.0	---	---	0.5	10%	

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AMENDED REPORT

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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: 9110803							
A9K0332-04	SO	NWTPH-Dx	11/08/19 11:40	11/14/19 11:45	10.55g/5mL	10g/5mL	0.95
A9K0332-05	SO	NWTPH-Dx	11/08/19 12:15	11/14/19 11:45	10.63g/5mL	10g/5mL	0.94
A9K0332-06	SO	NWTPH-Dx	11/07/19 15:15	11/14/19 11:45	10.8g/5mL	10g/5mL	0.93
A9K0332-07	SO	NWTPH-Dx	11/07/19 16:45	11/14/19 11:45	10.7g/5mL	10g/5mL	0.94
A9K0332-08	SO	NWTPH-Dx	11/11/19 12:30	11/14/19 11:45	10.21g/5mL	10g/5mL	0.98
A9K0332-09	SO	NWTPH-Dx	11/12/19 14:05	11/14/19 11:45	10.34g/5mL	10g/5mL	0.97
A9K0332-10	SO	NWTPH-Dx	11/11/19 15:30	11/14/19 11:45	10.85g/5mL	10g/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: 9110745							
A9K0332-04	SO	5035A/8260C	11/08/19 11:40	11/08/19 11:40	5.83g/5mL	5g/5mL	0.86
A9K0332-05	SO	5035A/8260C	11/08/19 12:15	11/08/19 12:15	3.02g/5mL	5g/5mL	1.66
A9K0332-06	SO	5035A/8260C	11/07/19 15:15	11/07/19 15:15	4.04g/5mL	5g/5mL	1.24
Batch: 9110788							
A9K0332-07	SO	5035A/8260C	11/07/19 16:45	11/07/19 16:45	5.63g/5mL	5g/5mL	0.89
A9K0332-08	SO	5035A/8260C	11/11/19 12:30	11/11/19 12:30	5.19g/5mL	5g/5mL	0.96
A9K0332-09	SO	5035A/8260C	11/12/19 14:05	11/12/19 14:05	6.36g/5mL	5g/5mL	0.79
A9K0332-10	SO	5035A/8260C	11/11/19 15:30	11/11/19 15:30	6.16g/5mL	5g/5mL	0.81

Volatile Organic Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110473							
A9K0332-01	WQ	EPA 8260C	11/12/19 11:46	11/13/19 10:44	5mL/5mL	5mL/5mL	1.00
A9K0332-02	WQ	EPA 8260C	11/12/19 09:44	11/13/19 10:44	5mL/5mL	5mL/5mL	1.00
A9K0332-03	WQ	EPA 8260C	11/07/19 15:15	11/13/19 10:44	5mL/5mL	5mL/5mL	1.00

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3510C (Neutral pH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110782							

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3510C (Neutral pH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9K0332-01	WQ	EPA 8082A	11/12/19 11:46	11/14/19 08:15	1040mL/2mL	1000mL/2mL	0.96
A9K0332-02	WQ	EPA 8082A	11/12/19 09:44	11/14/19 08:15	1060mL/2mL	1000mL/2mL	0.94

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110780							
A9K0332-04	SO	EPA 8082A	11/08/19 11:40	11/14/19 07:06	30.71g/2mL	30g/2mL	0.98
A9K0332-05	SO	EPA 8082A	11/08/19 12:15	11/14/19 07:06	30.61g/2mL	30g/2mL	0.98
A9K0332-06	SO	EPA 8082A	11/07/19 15:15	11/14/19 07:06	30.41g/2mL	30g/2mL	0.99
A9K0332-07	SO	EPA 8082A	11/07/19 16:45	11/14/19 07:06	30.18g/5mL	30g/2mL	2.49
A9K0332-08	SO	EPA 8082A	11/11/19 12:30	11/14/19 07:06	30.51g/2mL	30g/2mL	0.98
A9K0332-09	SO	EPA 8082A	11/12/19 14:05	11/14/19 07:06	30.05g/2mL	30g/2mL	1.00
A9K0332-10RE1	SO	EPA 8082A	11/11/19 15:30	11/14/19 07:06	30.6g/2mL	30g/2mL	0.98

Semivolatile Organic Compounds by EPA 8270D

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110772							
A9K0332-01	WQ	EPA 8270D	11/12/19 11:46	11/13/19 15:27	1040mL/1mL	1000mL/1mL	0.96
A9K0332-02	WQ	EPA 8270D	11/12/19 09:44	11/13/19 15:27	1070mL/1mL	1000mL/1mL	0.94

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110781							
A9K0332-04	SO	EPA 8270D	11/08/19 11:40	11/14/19 07:10	15.6g/2mL	15g/2mL	0.96
A9K0332-05RE1	SO	EPA 8270D	11/08/19 12:15	11/14/19 07:10	15.13g/2mL	15g/2mL	0.99
A9K0332-06	SO	EPA 8270D	11/07/19 15:15	11/14/19 07:10	15.08g/2mL	15g/2mL	1.00
A9K0332-07	SO	EPA 8270D	11/07/19 16:45	11/14/19 07:10	15.59g/5mL	15g/2mL	2.41
A9K0332-08RE1	SO	EPA 8270D	11/11/19 12:30	11/14/19 07:10	15.54g/2mL	15g/2mL	0.97
A9K0332-09RE1	SO	EPA 8270D	11/12/19 14:05	11/14/19 07:10	15.03g/2mL	15g/2mL	1.00
A9K0332-10	SO	EPA 8270D	11/11/19 15:30	11/14/19 07:10	15.09g/2mL	15g/2mL	0.99

Total Metals by EPA 6020A (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020A (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110769							
A9K0332-01	WQ	EPA 6020A	11/12/19 11:46	11/13/19 14:44	45mL/50mL	45mL/50mL	1.00
A9K0332-02	WQ	EPA 6020A	11/12/19 09:44	11/13/19 14:44	45mL/50mL	45mL/50mL	1.00

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110847							
A9K0332-04	SO	EPA 6020A	11/08/19 11:40	11/15/19 12:16	0.47g/50mL	0.5g/50mL	1.06
A9K0332-05	SO	EPA 6020A	11/08/19 12:15	11/15/19 12:16	0.511g/50mL	0.5g/50mL	0.98
A9K0332-06	SO	EPA 6020A	11/07/19 15:15	11/15/19 12:16	0.477g/50mL	0.5g/50mL	1.05
A9K0332-07	SO	EPA 6020A	11/07/19 16:45	11/15/19 12:16	0.518g/50mL	0.5g/50mL	0.97
A9K0332-08	SO	EPA 6020A	11/11/19 12:30	11/15/19 12:16	0.5g/50mL	0.5g/50mL	1.00
A9K0332-09	SO	EPA 6020A	11/12/19 14:05	11/15/19 12:16	0.487g/50mL	0.5g/50mL	1.03
A9K0332-10	SO	EPA 6020A	11/11/19 15:30	11/15/19 12:16	0.504g/50mL	0.5g/50mL	0.99

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: 9111083							
A9K0332-04RE1	SO	D7511-12	11/08/19 11:40	11/21/19 16:08	2.5069g/50mL	2.5g/50mL	1.00
A9K0332-05RE1	SO	D7511-12	11/08/19 12:15	11/21/19 16:08	2.5468g/50mL	2.5g/50mL	0.98
A9K0332-06RE1	SO	D7511-12	11/07/19 15:15	11/21/19 16:08	2.5173g/50mL	2.5g/50mL	0.99
A9K0332-07RE1	SO	D7511-12	11/07/19 16:45	11/21/19 16:08	2.5153g/50mL	2.5g/50mL	0.99
A9K0332-08RE1	SO	D7511-12	11/11/19 12:30	11/21/19 16:08	2.5006g/50mL	2.5g/50mL	1.00
A9K0332-09RE1	SO	D7511-12	11/12/19 14:05	11/21/19 16:08	2.5384g/50mL	2.5g/50mL	0.99
A9K0332-10RE3	SO	D7511-12	11/11/19 15:30	11/21/19 16:08	2.5455g/50mL	2.5g/50mL	0.98

Demand Parameters

Prep: PSEP-5310B TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110807							
A9K0332-04	SO	SM 5310 B MOD	11/08/19 11:40	11/13/19 19:28			NA
A9K0332-05	SO	SM 5310 B MOD	11/08/19 12:15	11/13/19 19:28			NA
A9K0332-06	SO	SM 5310 B MOD	11/07/19 15:15	11/13/19 19:28			NA
A9K0332-07	SO	SM 5310 B MOD	11/07/19 16:45	11/13/19 19:28			NA

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

SAMPLE PREPARATION INFORMATION

Demand Parameters

Prep: PSEP-5310B TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9K0332-08	SO	SM 5310 B MOD	11/11/19 12:30	11/13/19 19:28			NA
A9K0332-09	SO	SM 5310 B MOD	11/12/19 14:05	11/13/19 19:28			NA
A9K0332-10	SO	SM 5310 B MOD	11/11/19 15:30	11/13/19 19:28			NA

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: 9110765							
A9K0332-04	SO	SM 2540 G	11/08/19 11:40	11/13/19 13:30			NA
A9K0332-05	SO	SM 2540 G	11/08/19 12:15	11/13/19 13:30			NA
A9K0332-06	SO	SM 2540 G	11/07/19 15:15	11/13/19 13:30			NA
A9K0332-07	SO	SM 2540 G	11/07/19 16:45	11/13/19 13:30			NA
A9K0332-08	SO	SM 2540 G	11/11/19 12:30	11/13/19 13:30			NA
A9K0332-09	SO	SM 2540 G	11/12/19 14:05	11/13/19 13:30			NA
A9K0332-10	SO	SM 2540 G	11/11/19 15:30	11/13/19 13:30			NA

Apex Laboratories

Darwin Thomas, Business Development Director

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.

Apex Laboratories, LLC

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

QUALIFIER DEFINITIONS

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

Apex Laboratories

AMEND	Result for this sample or analyte has been amended from the original report. See Case Narrative for details.
C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
CN_I	Cyanide Interference Challenge Solution. No Cyanide is present in spike solution. Results are valid if Non Detect (No Cyanide detected.)
F-17	No fuel pattern detected. The Diesel result represents carbon range C12 to C24, and the Oil result represents >C24 to C40.
H-01	This sample was analyzed outside the recommended holding time.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
M-05	Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
P-10	Result estimated due to the presence of multiple PCB Aroclors and/or matrix interference.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-03	Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
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-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
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.)
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +14%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260C/8270D by +9%. The results are reported as Estimated Values.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260C
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
S-01	Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
S-06	Surrogate recovery is outside of established control limits.
V-16	Sample aliquot was subsampled from the sample container in the laboratory. The subsampled aliquot was not preserved within 48 hours of sampling.

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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.

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Laboratories, LLC

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503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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.

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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.

Apex Laboratories

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Darwin Thomas, Business Development Director

AMENDED REPORT

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

Project: **Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**
Project Number: **[none]**
Project Manager: **Ryan Barth**

Report ID:
A9K0332 - 01 06 20 1231

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: A9K0332 APEX-20191112-150117
Sample Custodian: SN
Lab: Apex

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

Project: Gasco PDI
Client: NW Natural

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-FB-1911121146	FB	WQ	11/12/2019	11:46	8	☐				
								Metals (QAPP 3)	SW6020A	30	HNO3(pH<2)/4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	
002	PDI-RB-1911120944	RB	WQ	11/12/2019	9:44	8	☐				
								Metals (QAPP 3)	SW6020A	30	HNO3(pH<2)/4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	
003	PDI-TB-1911071515	TB	WQ	11/07/2019	15:15	2	☐				
								VOCs (QAPP 4c)	SW8260C	30	
004	PDI-140RAB-00-10-191108	N	SO	11/08/2019	11:40	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
005	PDI-140RAB-10-12.7-191108	N	SO	11/08/2019	12:15	3	☐				
								Diesel Range Organics	SW8015D	30	4°C

Comment:

	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	[signature]	[signature]				
Print Name	Sasha Norwood	Charles Heffner				
Company	Anchor QEA	Apex				
Date/Time	11/12/19 @ 1600	11/12/19 1600				

Date Printed: 11/12/2019

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

Page 1 of 4

Anchor QEA, LLC	Project: **Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9K0332

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

Project: Gasco PDI
Client: NW Natural

COC ID: APEX-20191112-150117
Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
005	PDI-140RAB-10-12.7-191108	N	SO	11/08/2019	12:15	3	☐				
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
006	PDI-140RAB-C-00-12.7-191108	N	SE	11/08/2019	12:15	~~3~~ 2 SN 12Nov19	☐				
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
007	PDI-141RAB-00-10-191107	N	SO	11/07/2019	15:15	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
008	PDI-141RAB-10-17.7-191107	N	SO	11/07/2019	16:45	3	☐				

Comment:

	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	[signature]	[signature]				
Print Name	Sasha Norwood	Charles Hoffman				
Company	Anchor QEA	Apex				
Date/Time	11/12/19 @1600	11/12/19 1600				

Date Printed: 11/12/2019

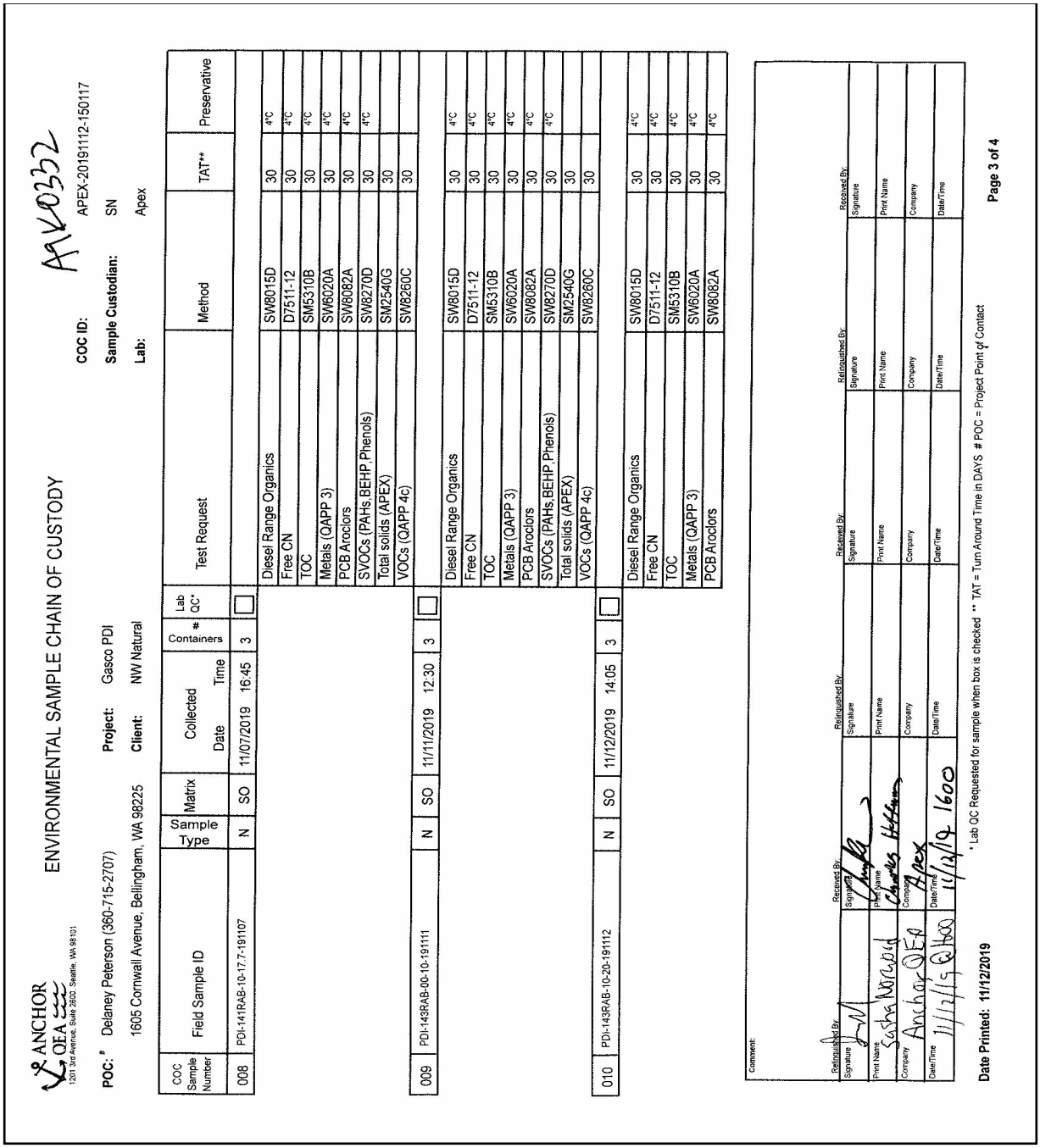
* Lab QC Requested for sample when box is checked ** TAT = Turn Around Time in DAYS # POC = Project Point of Contact

Page 2 of 4

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**



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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9K0332

COC ID: APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
008	PDI-141RAB-10-17.7-191107	N	SO	11/07/2019	16:45	3	☐	Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
009	PDI-143RAB-00-10-191111	N	SO	11/11/2019	12:30	3	☐	Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
010	PDI-143RAB-10-20-191112	N	SO	11/12/2019	14:05	3	☐	Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C

Comment:

Relinquished By: Signature / Print Name: Sasha Warwood / Company: Anchor QEA / Date/Time: 11/12/19 1600

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

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

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

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

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

Date Printed: 11/12/2019

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

Page 3 of 4

Apex Laboratories

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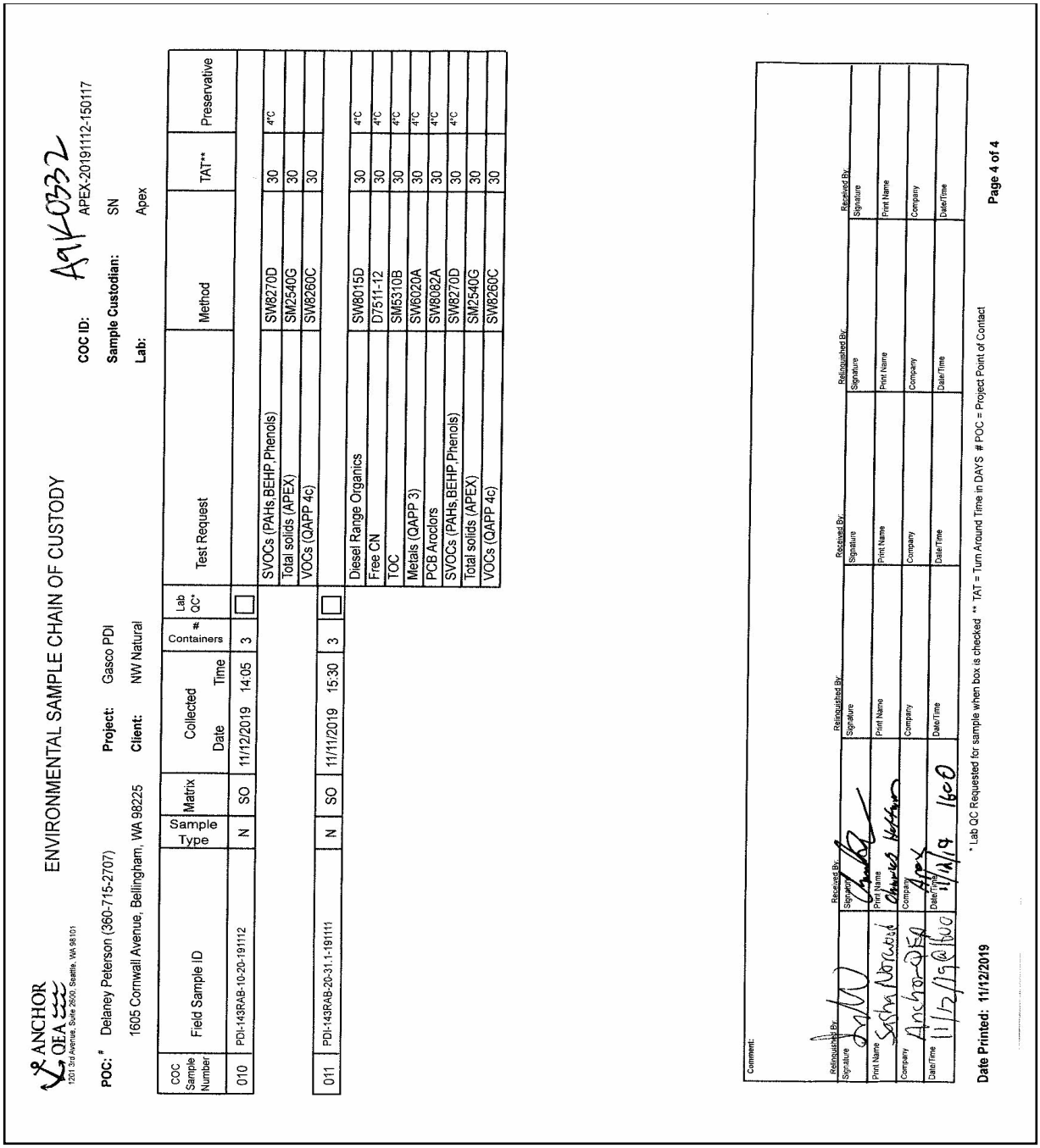
Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

COC ID: A9K0332 APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
010	PDI-143RAB-10-20-191112	N	SO	11/12/2019	14:05	3	☐	SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
011	PDI-143RAB-20-31.1-191111	N	SO	11/11/2019	15:30	3	☐	Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	

Comment:

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

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

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

Date Printed: 11/12/2019

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

Page 4 of 4

Apex Laboratories

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Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 3. Riverbank Angled Borings**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9K0332 - 01 06 20 1231**

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A9 K0332

Project/Project #: Gasco PDI - Riverbank Angled Borings

Delivery Info:

Date/time received: 11/12/19 @ 1600 By: CFH

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

Cooler Inspection Date/time inspected: 11/12/19 @ 1649 By: CFH

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)	5.4	5.8					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	Real	Real					
Condition:	Good	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: 11/13/19 @ 1220 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 X NA

Comments

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

Comments:

Additional information: TB #2169

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

Apex Laboratories

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Darwin Thomas, Business Development Director

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

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

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Report To:

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

Invoice To:

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

Date Due:	11/26/19 17:00 (10 day TAT)		
Received By:	Charles F. Hoffman	Date Received:	11/12/19 16:00
Logged In By:	Cameron L O'Brien	Date Logged In:	11/13/19 12:28

Cooler #1 received at 5.4°C

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

Cooler #2 received at 5.8°C

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

Analysis	Due	TAT	Expires	Comments
A9K0332-01 PDI-FB-1911121146 [Water] Sampled 11/12/19 11:46				
(GMT-08:00) Pacific Time (US & Canada) 8 Containers				
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/10/19 11:46	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/10/20 11:46	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Project Mgmt				
Data Package	01/13/20 17:00	10	02/19/20 11:46	
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	11/25/19 17:00	10	11/11/20 11:46	+62/68
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/19/19 11:46	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/26/19 11:46	Custom List from 4C
A9K0332-02 PDI-RB-1911120944 [Water] Sampled 11/12/19 09:44				
(GMT-08:00) Pacific Time (US & Canada) 8 Containers				
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/10/19 09:44	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/10/20 09:44	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	11/25/19 17:00	10	11/11/20 09:44	+62/68
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/19/19 09:44	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/26/19 09:44	Custom List from 4C

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments

Analysis	Due	TAT	Expires	Comments

A9K0332-03 PDI-TB-1911071515 [Water] Sampled 11/07/19 15:15

TB #2169

(GMT-08:00) Pacific Time (US & Canada) 2 Containers

Volatiles				
8260C Full List	11/25/19 17:00	10	11/21/19 15:15	Custom List from 4C

A9K0332-04 PDI-140RAB-00-10-191108 [Soil] Sampled 11/08/19 11:40

(GMT-08:00) Pacific Time (US & Canada) 9 Containers

Dry Weight				
Dry Weight	11/15/19 17:00	3	05/06/20 11:40	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/22/19 11:40	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/06/19 11:40	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/06/20 11:40	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/09/19 11:40	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/07/20 11:40	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/22/19 11:40	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/10/19 11:40	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/22/19 11:40	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/06/20 11:40	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/06/19 11:40	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9K0332-05 PDI-140RAB-10-12.7-191108 [Soil] Sampled 11/08/19 12:15 (GMT-08:00) Pacific Time (US & Canada) 9 Containers				
Dry Weight				
Dry Weight	11/15/19 17:00	3	05/06/20 12:15	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/22/19 12:15	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/06/19 12:15	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/06/20 12:15	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/09/19 12:15	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/07/20 12:15	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/22/19 12:15	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/10/19 12:15	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/22/19 12:15	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/06/20 12:15	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/06/19 12:15	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**

A9K0332-06 PDI-141RAB-00-10-191107 [Soil] Sampled 11/07/19 15:15
(GMT-08:00) Pacific Time (US & Canada) 9 Containers

Dry Weight				
Dry Weight	11/15/19 17:00	3	05/05/20 15:15	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/21/19 15:15	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/05/19 15:15	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/05/20 15:15	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/08/19 15:15	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/06/20 15:15	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/21/19 15:15	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/09/19 15:15	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/21/19 15:15	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/05/20 15:15	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/05/19 15:15	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9K0332-07 PDI-141RAB-10-17.7-191107 [Soil] Sampled 11/07/19 16:45 (GMT-08:00) Pacific Time (US & Canada) 9 Containers				
Dry Weight				
Dry Weight	11/15/19 17:00	3	05/05/20 16:45	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/21/19 16:45	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/05/19 16:45	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/05/20 16:45	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/08/19 16:45	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/06/20 16:45	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/21/19 16:45	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/09/19 16:45	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/21/19 16:45	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/05/20 16:45	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/05/19 16:45	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9K0332-08 PDI-143RAB-00-10-191111 [Soil] Sampled 11/11/19 12:30 (GMT-08:00) Pacific Time (US & Canada) 9 Containers				
Dry Weight				
Dry Weight	11/15/19 17:00	3	05/09/20 12:30	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/25/19 12:30	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/09/19 12:30	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/09/20 12:30	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/12/19 12:30	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/10/20 12:30	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/25/19 12:30	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/13/19 12:30	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/25/19 12:30	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/09/20 12:30	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/09/19 12:30	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9K0332-09 PDI-143RAB-10-20-191112 [Soil] Sampled 11/12/19 14:05 (GMT-08:00) Pacific Time (US & Canada) 9 Containers				
Dry Weight				
Dry Weight	11/15/19 17:00	3	05/10/20 14:05	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/26/19 14:05	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/10/19 14:05	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/10/20 14:05	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/13/19 14:05	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/11/20 14:05	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/26/19 14:05	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/14/19 14:05	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/26/19 14:05	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/10/20 14:05	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/10/19 14:05	

A9K0332

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 3. Riverbank Angled Borings**	**Project Number:**	**[none]**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**

A9K0332-10 PDI-143RAB-20-31.1-191111 [Soil] Sampled 11/11/19 15:30
(GMT-08:00) Pacific Time (US & Canada) 9 Containers

Dry Weight				
Dry Weight	11/15/19 17:00	3	05/09/20 15:30	Use Results from TS. Make NR once completed.
Fuels				
NWTPH-Dx (Diesel/Oil)	11/19/19 17:00	5	11/25/19 15:30	
Metals				
Hg (Mercury) - 6020 - Total	12/23/19 17:00	10	12/09/19 15:30	Missing. Needs Data added from 9110769
Metals, Select 1	11/25/19 17:00	10	05/09/20 15:30	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
Sample Control				
Archive Samples - Frozen	02/13/20 17:00	1	11/12/19 15:30	
Semivols (ECD)				
8082 PCBs - Low Level (30g/2mL)	11/25/19 17:00	10	11/10/20 15:30	+1262,1268
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	11/25/19 17:00	10	11/25/19 15:30	PAHs,Bis2EHP,245TCP,PCP
Volatiles				
8260C Full List	11/25/19 17:00	10	11/13/19 15:30	Custom List from 4C
Wet Chem				
Cyanide, Total (ASTM D7511, OIA)	11/25/19 17:00	10	11/25/19 15:30	
Solids, Total (SM 2540 G,B)	11/25/19 17:00	10	05/09/20 15:30	Use Results for Dry Weight.
Total Organic Carbon - Soil (5310 B)	11/25/19 17:00	10	12/09/19 15:30	

Analysis groups included in this work order

Metals, Select 1

As (Arsenic) - 6020 - Total	Cd (Cadmium) - 6020 - Total	Cr (Chromium) - 6020 - Total	Cu (Copper) - 6020 - Total
Mn (Manganese) - 6020 - Total	Pb (Lead) - 6020 - Total	V (Vanadium) - 6020 - Total	Zn (Zinc) - 6020 - Total

Reviewed By

Date

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: APKO332 APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	PDI-FB-1911121146	FB	WQ	11/12/2019	11:46	8	☐				
								Metals (QAPP 3)	SW6020A	30	HNO3(pH<2)/4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	
002	PDI-RB-1911120944	RB	WQ	11/12/2019	9:44	8	☐				
								Metals (QAPP 3)	SW6020A	30	HNO3(pH<2)/4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	
003	PDI-TB-1911071515	TB	WQ	11/07/2019	15:15	2	☐				
								VOCs (QAPP 4c)	SW8260C	30	
004	PDI-140RAB-00-10-191108	N	SO	11/08/2019	11:40	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
005	PDI-140RAB-10-12.7-191108	N	SO	11/08/2019	12:15	3	☐				
								Diesel Range Organics	SW8015D	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Print Name: Sasha Norwood	Print Name: Charles Heffron	Print Name:	Print Name:	Print Name:	Print Name:
Company: Anchor QEA	Company: Apex	Company:	Company:	Company:	Company:
Date/Time: 11/12/19 @ 1600	Date/Time: 11/12/19 1600	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Date Printed: 11/12/2019

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

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9K0332

COC ID: APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
005	PDI-140RAB-10-12.7-191108	N	SO	11/08/2019	12:15	3	☐				
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
006	PDI-140RAB-C-00-12.7-191108	N	SE	11/08/2019	12:15	~~3~~ 2	☐				
						SV12Nov19		TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
007	PDI-141RAB-00-10-191107	N	SO	11/07/2019	15:15	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
008	PDI-141RAB-10-17.7-191107	N	SO	11/07/2019	16:45	3	☐				

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Sasha Norwood	Print Name: Charles Hoffman	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: Apex	Company	Company	Company	Company
Date/Time: 11/12/19 @1600	Date/Time: 11/12/19 1600	Date/Time	Date/Time	Date/Time	Date/Time

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

Date Printed: 11/12/2019

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9K0332

COC ID: APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
008	PDI-141RAB-10-17.7-191107	N	SO	11/07/2019	16:45	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
009	PDI-143RAB-00-10-191111	N	SO	11/11/2019	12:30	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
010	PDI-143RAB-10-20-191112	N	SO	11/12/2019	14:05	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Sasha Norwood	Print Name: Charles Hoffman	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: Apex	Company	Company	Company	Company
Date/Time: 11/12/19 @1600	Date/Time: 11/12/19 1600	Date/Time	Date/Time	Date/Time	Date/Time

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

Date Printed: 11/12/2019

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: A9K0332 APEX-20191112-150117

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: SN
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
010	PDI-143RAB-10-20-191112	N	SO	11/12/2019	14:05	3	☐				
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	
011	PDI-143RAB-20-31.1-191111	N	SO	11/11/2019	15:30	3	☐				
								Diesel Range Organics	SW8015D	30	4°C
								Free CN	D7511-12	30	4°C
								TOC	SM5310B	30	4°C
								Metals (QAPP 3)	SW6020A	30	4°C
								PCB Aroclors	SW8082A	30	4°C
								SVOCs (PAHs,BEHP,Phenols)	SW8270D	30	4°C
								Total solids (APEX)	SM2540G	30	
								VOCs (QAPP 4c)	SW8260C	30	

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name Sasha Norwood	Print Name Charles Hoffman	Print Name	Print Name	Print Name	Print Name
Company Anchor QEA	Company Apex	Company	Company	Company	Company
Date/Time 11/12/19 @ 1600	Date/Time 11/12/19 1600	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 11/12/2019

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

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A9 K0332

Project/Project #: Gasco PDI - Riverbank Angled Borings

Delivery Info:

Date/time received: 11/12/19 @ 1600 By: CFH

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

Cooler Inspection Date/time inspected: 11/12/19 @ 1649 By: CFH

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)	5.4	5.8					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	Real	Real					
Condition:	Good	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: 11/13/19 @ 1220 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 X NA ___

Comments ___

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

Comments: ___

Additional information: TB #2169

Labeled by: [illegible] Witness: [illegible] Cooler Inspected by: [illegible] 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 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank Ang

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Diesel	10.0	20.0	mg/kg
Oil	20.0	40.0	mg/kg
Mineral 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-140RAB-00-10-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-04	File ID:	4F111408.D
Sampled:	11/08/19 11:40	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 19:55
Solids:	81.01	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.55 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	18.3	J

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	29.3	25.3	87	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-140RAB-10-12.7-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-05	File ID:	4F111411.D
Sampled:	11/08/19 12:15	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 20:58
Solids:	79.57	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.63 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	11.8	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	29.6	21.2	72	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-141RAB-00-10-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-06	File ID:	4F111412.D
Sampled:	11/07/19 15:15	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 21:20
Solids:	87.86	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.8 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	10.5	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	26.3	21.3	81	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-141RAB-10-17.7-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-07	File ID:	4F111413.D
Sampled:	11/07/19 16:45	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 21:41
Solids:	82.86	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.7 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	100	6980	D

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	28.2	ND		50 - 150	D

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-143RAB-00-10-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-08	File ID:	4F111415.D
Sampled:	11/11/19 12:30	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 22:24
Solids:	92.62	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.21 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	10.6	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	26.4	24.5	93	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-143RAB-10-20-191112

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-09	File ID:	4F111416.D
Sampled:	11/12/19 14:05	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 22:46
Solids:	91.60	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.34 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	10.6	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	26.4	22.7	86	50 - 150	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

NWTPH-Dx

PDI-143RAB-20-31.1-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-10	File ID:	4F111417.D
Sampled:	11/11/19 15:30	Prepared:	11/14/19 11:45	Analyzed:	11/14/19 23:07
Solids:	90.19	Preparation:	EPA 3546 (Fuels)	Initial/Final:	10.85 g / 5 mL
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401
Instrument:	DUALFID4F				

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
68334-30-5	Diesel	1	10.2	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	25.5	24.4	96	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 - 3. Riverbank Angled Borin
Batch: 9110803 Batch Matrix: Soil Preparation: EPA 3546 (Fuels)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110803-BLK1	4F111406.D	11/14/19 11:45	
LCS	9110803-BS1	4F111407.D	11/14/19 11:45	
PDI-140RAB-00-10-191108 (Dup)	9110803-DUP1	4F111409.D	11/14/19 11:45	
PDI-140RAB-00-10-191108	A9K0332-04	4F111408.D	11/14/19 11:45	
PDI-140RAB-10-12.7-191108	A9K0332-05	4F111411.D	11/14/19 11:45	
PDI-141RAB-00-10-191107	A9K0332-06	4F111412.D	11/14/19 11:45	
PDI-141RAB-10-17.7-191107	A9K0332-07	4F111413.D	11/14/19 11:45	
PDI-143RAB-00-10-191111	A9K0332-08	4F111415.D	11/14/19 11:45	
PDI-143RAB-10-20-191112	A9K0332-09	4F111416.D	11/14/19 11:45	
PDI-143RAB-20-31.1-191111	A9K0332-10	4F111417.D	11/14/19 11:45	

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 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110803-BLK1	File ID:	4F111406.D
Prepared:	11/14/19 11:45	Preparation:	EPA 3546 (Fuels)	Initial/Final:	11 g / 5 mL
Analyzed:	11/14/19 19:13	Instrument:	DUALFID4F		
Batch:	9110803	Sequence:	9K14026	Calibration:	A9K1401

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

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
o-Terphenyl (Surr)	22.7	21.3	94	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 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110803	Laboratory ID:	9110803-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	116	93	76 - 115

* = Values outside of QC limits

PDI-140RAB-00-10-191108

DUPLICATES

NWTPH-Dx

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9110803
Preparation: EPA 3546 (Fuels)
Source Sample Name: PDI-140RAB-00-10-191108

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110803-DUP1
Lab Source ID: A9K0332-04
Initial/Final: 10.59 g / 5 mL
% Solids: 81.01

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/kg dry)	C	DUPLICATE CONCENTRATION (mg/kg dry)	C	RPD %	Q	METHOD
Diesel	30	18.3		15.6		16		NWTPH-Dx
Oil	30	21.8		ND				NWTPH-Dx
Mineral Oil	30	36.6		30.8		17		NWTPH-Dx

* 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 - 3. Riverbank Angled Borin
Sequence:	9K13037	Instrument:	DUALFID4F
Matrix:	Soil	Calibration:	A9K1401

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9K13037-ICB1	4F111303.D	11/13/19 10:39
Cal Standard	9K13037-CAL1	4F111304.D	11/13/19 10:59
Cal Standard	9K13037-CAL2	4F111305.D	11/13/19 11:21
Cal Standard	9K13037-CAL3	4F111306.D	11/13/19 11:41
Cal Standard	9K13037-CAL4	4F111307.D	11/13/19 12:01
Cal Standard	9K13037-CAL5	4F111308.D	11/13/19 12:22
Cal Standard	9K13037-CAL6	4F111309.D	11/13/19 12:43
Cal Standard	9K13037-CAL7	4F111310.D	11/13/19 13:04
Cal Standard	9K13037-CAL8	4F111311.D	11/13/19 13:26
Cal Standard	9K13037-CAL9	4F111312.D	11/13/19 13:47
Cal Standard	9K13037-CALA	4F111313.D	11/13/19 14:09
Cal Standard	9K13037-CALB	4F111314.D	11/13/19 14:30
Cal Standard	9K13037-CALC	4F111315.D	11/13/19 14:52
Cal Standard	9K13037-CALD	4F111316.D	11/13/19 15:12
Cal Standard	9K13037-CALE	4F111317.D	11/13/19 15:34
Cal Standard	9K13037-CALF	4F111318.D	11/13/19 15:54
Cal Standard	9K13037-CALG	4F111319.D	11/13/19 16:16
Cal Standard	9K13037-CALH	4F111320.D	11/13/19 16:37
Cal Standard	9K13037-CALI	4F111321.D	11/13/19 16:59
Cal Standard	9K13037-CALJ	4F111322.D	11/13/19 17:21
Cal Standard	9K13037-CALK	4F111324.D	11/13/19 18:03
Initial Cal Check	9K13037-ICV1	4F111326.D	11/13/19 18:44
Initial Cal Check	9K13037-ICV2	4F111327.D	11/13/19 19:05

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 - 3. Riverbank Angled Borin
Sequence:	9K14026	Instrument:	DUALFID4F
Matrix:	Soil	Calibration:	A9K1401

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K14026-CCV1	4F111403.D	11/14/19 17:01
Calibration Check	9K14026-CCV2	4F111404.D	11/14/19 17:23
Calibration Blank	9K14026-CCB1	4F111405.D	11/14/19 18:52
Blank	9110803-BLK1	4F111406.D	11/14/19 19:13
LCS	9110803-BS1	4F111407.D	11/14/19 19:35
PDI-140RAB-00-10-191108	A9K0332-04	4F111408.D	11/14/19 19:55
PDI-140RAB-00-10-191108 (Dup)	9110803-DUP1	4F111409.D	11/14/19 20:16
PDI-140RAB-10-12.7-191108	A9K0332-05	4F111411.D	11/14/19 20:58
PDI-141RAB-00-10-191107	A9K0332-06	4F111412.D	11/14/19 21:20
PDI-141RAB-10-17.7-191107	A9K0332-07	4F111413.D	11/14/19 21:41
PDI-143RAB-00-10-191111	A9K0332-08	4F111415.D	11/14/19 22:24
PDI-143RAB-10-20-191112	A9K0332-09	4F111416.D	11/14/19 22:46
PDI-143RAB-20-31.1-191111	A9K0332-10	4F111417.D	11/14/19 23:07
Calibration Check	9K14026-CCV3	4F111422.D	11/15/19 00:55
Calibration Check	9K14026-CCV4	4F111423.D	11/15/19 01:17

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 - 3. Riverbank Angled Bor

Calibration: A9K1401 Date: 11/14/19 08:33 Instrument: DUALFID4F

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Diesel	1085429	Ave	3.571843	6	0			15	
o-Terphenyl (Surr)	1237164	Ave	3.702446	6.414	8.325586E-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

Client: Anchor QEA, LLC

Calibration: A9K1401

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: DUALFID4F

Calibration Date: 11/14/19 08:33

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	1161210	40	1108678	100	1057895	250	1042958	500	1045268	1000	1092944
Diesel Range Organics (C12-C24)	25	1161210	40	1108678	100	1057895	250	1042958	500	1045268	1000	1092944

INITIAL CALIBRATION DATA (Continued)

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A9K1401	Instrument:	DUALFID4F
Matrix:		Calibration Date:	11/14/19 08:33

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	1087833	5000	1086649								
Diesel Range Organics (C12-C24)	2500	1087833	5000	1086649								
o-Terphenyl (Surr)					10	1213994	25	1183540	50	1252963	100	1229779

INITIAL CALIBRATION DATA (Continued)

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A9K1401	Instrument:	DUALFID4F
Matrix:		Calibration Date:	11/14/19 08:33

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	1352175	80	1102731	250	1045279	500	996817.2	1000	995652.5
o-Terphenyl (Surr)	200	1305546										
Residual Range Organics (>C24-C			40	1352175	80	1102731	250	1045279	500	996817.2	1000	995652.5

SECOND-SOURCE CALIBRATION VERIFICATION

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111326.D		
Sequence:	9K13037	Inject Date:	11/13/19
Lab Sample ID:	9K13037-ICV1	Inject Time:	18:44

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Diesel	1000	955	-4.5	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 - 3. Riverbank Ang
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111327.D		
Sequence:	9K13037	Inject Date:	11/13/19
Lab Sample ID:	9K13037-ICV2	Inject Time:	19:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Oil	1000	847	-15.3	85 - 115

CONTINUING CALIBRATION CHECK

NWTPH-Dx

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111403.D	Calibration Date:	11/14/19 08:33
Sequence:	9K14026	Injection Date:	11/14/19
Lab Sample ID:	9K14026-CCV1	Injection Time:	17:01

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Diesel	Ave	1000	962		1085429	1044300	-3.8	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 - 3. Riverbank Angled Borir
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111404.D	Calibration Date:	11/14/19 08:33
Sequence:	9K14026	Injection Date:	11/14/19
Lab Sample ID:	9K14026-CCV2	Injection Time:	17:23

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Oil	Ave	500	428		1069031	915196.8	-14.4	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 - 3. Riverbank Angled Borir
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111422.D	Calibration Date:	11/14/19 08:33
Sequence:	9K14026	Injection Date:	11/15/19
Lab Sample ID:	9K14026-CCV3	Injection Time:	00:55

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Diesel	Ave	1000	997		1085429	1082612	-0.3	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 - 3. Riverbank Angled Borir
Instrument ID:	DUALFID4F	Calibration:	A9K1401
Lab File ID:	4F111423.D	Calibration Date:	11/14/19 08:33
Sequence:	9K14026	Injection Date:	11/15/19
Lab Sample ID:	9K14026-CCV4	Injection Time:	01:17

COMPOUND	Curve Fit	Calculated Concentration (ug/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Oil	Ave	500	449		1069031	959350.8	-10.3	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 - 3. Riverbank Angled Borin
Sequence:	9K14026	Instrument:	DUALFID4F
Matrix:	Soil	Calibration:	A9K1401

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K14026-CCV1)			Lab File ID: 4F111403.D		Analyzed: 11/14/19 17:01			
o-Terphenyl (Surr)	50.0	99	80 - 120	6.42	6.414	0.0060	+/-1.0	
Calibration Check (9K14026-CCV2)			Lab File ID: 4F111404.D		Analyzed: 11/14/19 17:23			
o-Terphenyl (Surr)	50.0	98	80 - 120	6.41	6.414	-0.0040	+/-1.0	
Calibration Blank (9K14026-CCB1)			Lab File ID: 4F111405.D		Analyzed: 11/14/19 18:52			
o-Terphenyl (Surr)			50 - 150	0	6.414	-6.4140	+/-1.0	
Blank (9110803-BLK1)			Lab File ID: 4F111406.D		Analyzed: 11/14/19 19:13			
o-Terphenyl (Surr)	22.7	94	50 - 150	6.41	6.414	-0.0040	+/-1.0	
LCS (9110803-BS1)			Lab File ID: 4F111407.D		Analyzed: 11/14/19 19:35			
o-Terphenyl (Surr)	25.0	95	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: 4F111408.D		Analyzed: 11/14/19 19:55			
o-Terphenyl (Surr)	29.3	87	50 - 150	6.41	6.414	-0.0040	+/-1.0	
Duplicate (9110803-DUP1)			Lab File ID: 4F111409.D		Analyzed: 11/14/19 20:16			
o-Terphenyl (Surr)	29.1	80	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-140RAB-10-12.7-191108 (A9K0332-05)			Lab File ID: 4F111411.D		Analyzed: 11/14/19 20:58			
o-Terphenyl (Surr)	29.6	72	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: 4F111412.D		Analyzed: 11/14/19 21:20			
o-Terphenyl (Surr)	26.3	81	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-141RAB-10-17.7-191107 (A9K0332-07)			Lab File ID: 4F111413.D		Analyzed: 11/14/19 21:41			
o-Terphenyl (Surr)	28.2		50 - 150	0	6.414	-6.4140	+/-1.0	*
PDI-143RAB-00-10-191111 (A9K0332-08)			Lab File ID: 4F111415.D		Analyzed: 11/14/19 22:24			
o-Terphenyl (Surr)	26.4	93	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-143RAB-10-20-191112 (A9K0332-09)			Lab File ID: 4F111416.D		Analyzed: 11/14/19 22:46			
o-Terphenyl (Surr)	26.4	86	50 - 150	6.41	6.414	-0.0040	+/-1.0	
PDI-143RAB-20-31.1-191111 (A9K0332-10)			Lab File ID: 4F111417.D		Analyzed: 11/14/19 23:07			
o-Terphenyl (Surr)	25.5	96	50 - 150	6.41	6.414	-0.0040	+/-1.0	
Calibration Check (9K14026-CCV3)			Lab File ID: 4F111422.D		Analyzed: 11/15/19 00:55			
o-Terphenyl (Surr)	50.0	103	80 - 120	6.41	6.414	-0.0040	+/-1.0	
Calibration Check (9K14026-CCV4)			Lab File ID: 4F111423.D		Analyzed: 11/15/19 01:17			
o-Terphenyl (Surr)	50.0	99	80 - 120	6.41	6.414	-0.0040	+/-1.0	

HOLDING TIME SUMMARY

NWTPH-Dx

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bori

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-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/14/19 11:45	6.00	14.00	11/14/19 19:55	0.34	40.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/14/19 11:45	5.98	14.00	11/14/19 20:58	0.38	40.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/14/19 11:45	6.85	14.00	11/14/19 21:20	0.40	40.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/14/19 11:45	6.79	14.00	11/14/19 21:41	0.41	40.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/14/19 11:45	2.97	14.00	11/14/19 22:24	0.44	40.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/14/19 11:45	1.90	14.00	11/14/19 22:46	0.46	40.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/14/19 11:45	2.84	14.00	11/14/19 23:07	0.47	40.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: 5035A/8260C

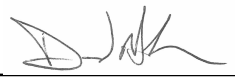
ANALYSES DATA PACKAGE COVER PAGE

5035A/8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank An

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 - 3. Riverbank Ang

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	125	250	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-140RAB-00-10-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-04	File ID:	VJ19111325.D
Sampled:	11/08/19 11:40	Prepared:	11/08/19 11:40	Analyzed:	11/13/19 20:41
Solids:	81.01	Preparation:	EPA 5035A	Initial/Final:	5.83 g / 5 mL
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	6.47	U
78-93-3	2-Butanone (MEK)	50	323	U
56-23-5	Carbon tetrachloride	50	32.3	U
108-90-7	Chlorobenzene	50	16.2	U
67-66-3	Chloroform	50	32.3	U
106-46-7	1,4-Dichlorobenzene	50	16.2	U
107-06-2	1,2-Dichloroethane (EDC)	50	16.2	U
75-35-4	1,1-Dichloroethene	50	16.2	U
156-59-2	cis-1,2-Dichloroethene	50	16.2	U
156-60-5	trans-1,2-Dichloroethene	50	16.2	U
100-41-4	Ethylbenzene	50	16.2	U
127-18-4	Tetrachloroethene (PCE)	50	16.2	U
108-88-3	Toluene	50	32.3	U
79-01-6	Trichloroethene (TCE)	50	16.2	U
75-01-4	Vinyl chloride	50	16.2	U
179601-23-1	m,p-Xylene	50	32.3	U
95-47-6	o-Xylene	50	16.2	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	50.5	101	80 - 120	
Toluene-d8 (Surr)	50.0	49.7	99	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	48.7	97	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	122963	6.089	117373	6.089	
Chlorobenzene-d5 (ISTD)	341819	9.806	309319	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	148538	11.765	130775	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-140RAB-10-12.7-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-05	File ID:	VJ19111326.D
Sampled:	11/08/19 12:15	Prepared:	11/08/19 12:15	Analyzed:	11/13/19 21:07
Solids:	79.57	Preparation:	EPA 5035A	Initial/Final:	3.02 g / 5 mL
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	11.7	U
78-93-3	2-Butanone (MEK)	50	584	U
56-23-5	Carbon tetrachloride	50	58.4	U
108-90-7	Chlorobenzene	50	29.2	U
67-66-3	Chloroform	50	58.4	U
106-46-7	1,4-Dichlorobenzene	50	29.2	U
107-06-2	1,2-Dichloroethane (EDC)	50	29.2	U
75-35-4	1,1-Dichloroethene	50	29.2	U
156-59-2	cis-1,2-Dichloroethene	50	29.2	U
156-60-5	trans-1,2-Dichloroethene	50	29.2	U
100-41-4	Ethylbenzene	50	29.2	U
127-18-4	Tetrachloroethene (PCE)	50	29.2	U
108-88-3	Toluene	50	58.4	U
79-01-6	Trichloroethene (TCE)	50	29.2	U
75-01-4	Vinyl chloride	50	29.2	U
179601-23-1	m,p-Xylene	50	58.4	U
95-47-6	o-Xylene	50	29.2	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	50.2	100	80 - 120	
Toluene-d8 (Surr)	50.0	49.6	99	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.4	99	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	128078	6.089	117373	6.089	
Chlorobenzene-d5 (ISTD)	354735	9.806	309319	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	151123	11.765	130775	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-141RAB-00-10-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-06	File ID:	VJ19111327.D
Sampled:	11/07/19 15:15	Prepared:	11/07/19 15:15	Analyzed:	11/13/19 21:34
Solids:	87.86	Preparation:	EPA 5035A	Initial/Final:	4.04 g / 5 mL
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	7.73	U
78-93-3	2-Butanone (MEK)	50	387	U
56-23-5	Carbon tetrachloride	50	38.7	U
108-90-7	Chlorobenzene	50	19.3	U
67-66-3	Chloroform	50	38.7	U
106-46-7	1,4-Dichlorobenzene	50	19.3	U
107-06-2	1,2-Dichloroethane (EDC)	50	19.3	U
75-35-4	1,1-Dichloroethene	50	19.3	U
156-59-2	cis-1,2-Dichloroethene	50	19.3	U
156-60-5	trans-1,2-Dichloroethene	50	19.3	U
100-41-4	Ethylbenzene	50	19.3	U
127-18-4	Tetrachloroethene (PCE)	50	19.3	U
108-88-3	Toluene	50	38.7	U
79-01-6	Trichloroethene (TCE)	50	19.3	U
75-01-4	Vinyl chloride	50	19.3	U
179601-23-1	m,p-Xylene	50	38.7	U
95-47-6	o-Xylene	50	19.3	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	49.6	99	80 - 120	
Toluene-d8 (Surr)	50.0	49.6	99	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.3	99	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	128339	6.089	117373	6.089	
Chlorobenzene-d5 (ISTD)	350482	9.806	309319	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	148503	11.765	130775	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-141RAB-10-17.7-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-07	File ID:	VJ19111411.D
Sampled:	11/07/19 16:45	Prepared:	11/07/19 16:45	Analyzed:	11/14/19 14:16
Solids:	82.86	Preparation:	EPA 5035A	Initial/Final:	5.63 g / 5 mL
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	10000	36300	D
78-93-3	2-Butanone (MEK)	10000	63900	U
56-23-5	Carbon tetrachloride	10000	6390	U
108-90-7	Chlorobenzene	10000	3200	U
67-66-3	Chloroform	10000	6390	U
106-46-7	1,4-Dichlorobenzene	10000	3200	U
107-06-2	1,2-Dichloroethane (EDC)	10000	3200	U
75-35-4	1,1-Dichloroethene	10000	3200	U
156-59-2	cis-1,2-Dichloroethene	10000	3200	U
156-60-5	trans-1,2-Dichloroethene	10000	3200	U
100-41-4	Ethylbenzene	10000	36400	D
127-18-4	Tetrachloroethene (PCE)	10000	3200	U
108-88-3	Toluene	10000	10500	JD
79-01-6	Trichloroethene (TCE)	10000	3200	U
75-01-4	Vinyl chloride	10000	3200	U
179601-23-1	m,p-Xylene	10000	51100	D
95-47-6	o-Xylene	10000	21500	D

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	47.9	96	80 - 120	
Toluene-d8 (Surr)	50.0	49.1	98	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.7	99	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	113971	6.089	132852	6.089	
Chlorobenzene-d5 (ISTD)	311668	9.806	356702	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	132461	11.765	151124	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-143RAB-00-10-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-08	File ID:	VJ19111407.D
Sampled:	11/11/19 12:30	Prepared:	11/11/19 12:30	Analyzed:	11/14/19 12:28
Solids:	92.62	Preparation:	EPA 5035A	Initial/Final:	5.19 g / 5 mL
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	5.60	U
78-93-3	2-Butanone (MEK)	50	280	U
56-23-5	Carbon tetrachloride	50	28.0	U
108-90-7	Chlorobenzene	50	14.0	U
67-66-3	Chloroform	50	28.0	U
106-46-7	1,4-Dichlorobenzene	50	14.0	U
107-06-2	1,2-Dichloroethane (EDC)	50	14.0	U
75-35-4	1,1-Dichloroethene	50	14.0	U
156-59-2	cis-1,2-Dichloroethene	50	14.0	U
156-60-5	trans-1,2-Dichloroethene	50	14.0	U
100-41-4	Ethylbenzene	50	14.0	U
127-18-4	Tetrachloroethene (PCE)	50	14.0	U
108-88-3	Toluene	50	28.0	U
79-01-6	Trichloroethene (TCE)	50	14.0	U
75-01-4	Vinyl chloride	50	14.0	U
179601-23-1	m,p-Xylene	50	28.0	U
95-47-6	o-Xylene	50	14.0	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	48.6	97	80 - 120	
Toluene-d8 (Surr)	50.0	49.9	100	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.1	98	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	114620	6.089	132852	6.089	
Chlorobenzene-d5 (ISTD)	310552	9.806	356702	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	132086	11.765	151124	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-143RAB-10-20-191112

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-09	File ID:	VJ19111409.D
Sampled:	11/12/19 14:05	Prepared:	11/12/19 14:05	Analyzed:	11/14/19 13:22
Solids:	91.60	Preparation:	EPA 5035A	Initial/Final:	6.36 g / 5 mL
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	4.75	U
78-93-3	2-Butanone (MEK)	50	238	U
56-23-5	Carbon tetrachloride	50	23.8	U
108-90-7	Chlorobenzene	50	11.9	U
67-66-3	Chloroform	50	23.8	U
106-46-7	1,4-Dichlorobenzene	50	11.9	U
107-06-2	1,2-Dichloroethane (EDC)	50	11.9	U
75-35-4	1,1-Dichloroethene	50	11.9	U
156-59-2	cis-1,2-Dichloroethene	50	11.9	U
156-60-5	trans-1,2-Dichloroethene	50	11.9	U
100-41-4	Ethylbenzene	50	11.9	U
127-18-4	Tetrachloroethene (PCE)	50	11.9	U
108-88-3	Toluene	50	23.8	U
79-01-6	Trichloroethene (TCE)	50	11.9	U
75-01-4	Vinyl chloride	50	11.9	U
179601-23-1	m,p-Xylene	50	23.8	U
95-47-6	o-Xylene	50	11.9	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	48.5	97	80 - 120	
Toluene-d8 (Surr)	50.0	50.4	101	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.0	98	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	109599	6.089	132852	6.089	
Chlorobenzene-d5 (ISTD)	296077	9.806	356702	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	125496	11.765	151124	11.765	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

5035A/8260C

PDI-143RAB-20-31.1-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-10	File ID:	VJ19111410.D
Sampled:	11/11/19 15:30	Prepared:	11/11/19 15:30	Analyzed:	11/14/19 13:49
Solids:	90.19	Preparation:	EPA 5035A	Initial/Final:	6.16 g / 5 mL
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404
Instrument:	VOA-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-43-2	Benzene	50	7.11	J
78-93-3	2-Butanone (MEK)	50	252	U
56-23-5	Carbon tetrachloride	50	25.2	U
108-90-7	Chlorobenzene	50	12.6	U
67-66-3	Chloroform	50	25.2	U
106-46-7	1,4-Dichlorobenzene	50	12.6	U
107-06-2	1,2-Dichloroethane (EDC)	50	12.6	U
75-35-4	1,1-Dichloroethene	50	12.6	U
156-59-2	cis-1,2-Dichloroethene	50	12.6	U
156-60-5	trans-1,2-Dichloroethene	50	12.6	U
100-41-4	Ethylbenzene	50	12.6	U
127-18-4	Tetrachloroethene (PCE)	50	12.6	U
108-88-3	Toluene	50	25.2	U
79-01-6	Trichloroethene (TCE)	50	12.6	U
75-01-4	Vinyl chloride	50	12.6	U
179601-23-1	m,p-Xylene	50	25.2	U
95-47-6	o-Xylene	50	12.6	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	47.4	95	80 - 120	
Toluene-d8 (Surr)	50.0	50.5	101	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	49.4	99	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	103565	6.089	132852	6.089	
Chlorobenzene-d5 (ISTD)	274558	9.806	356702	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	115552	11.765	151124	11.765	

* 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 - 3. Riverbank Angled Borin
Batch: 9110745 Batch Matrix: Soil
Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110745-BLK1	VJ19111305.D	11/13/19 09:30	
LCS	9110745-BS1	VJ19111303.D	11/13/19 09:30	
PDI-140RAB-00-10-191108	A9K0332-04	VJ19111325.D	11/08/19 11:40	
PDI-140RAB-10-12.7-191108	A9K0332-05	VJ19111326.D	11/08/19 12:15	
PDI-141RAB-00-10-191107	A9K0332-06	VJ19111327.D	11/07/19 15:15	

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

PREPARATION BATCH SUMMARY

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110788 Batch Matrix: Soil
Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110788-BLK1	VJ19111405.D	11/14/19 09:30	
LCS	9110788-BS1	VJ19111403.D	11/14/19 09:30	
PDI-143RAB-00-10-191111 (Dup)	9110788-DUP1	VJ19111408.D	11/11/19 12:30	
PDI-141RAB-10-17.7-191107	A9K0332-07	VJ19111411.D	11/07/19 16:45	
PDI-143RAB-00-10-191111	A9K0332-08	VJ19111407.D	11/11/19 12:30	
PDI-143RAB-10-20-191112	A9K0332-09	VJ19111409.D	11/12/19 14:05	
PDI-143RAB-20-31.1-191111	A9K0332-10	VJ19111410.D	11/11/19 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.

METHOD BLANK DATA SHEET

5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110745-BLK1	File ID:	VJ19111305.D
Prepared:	11/13/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/13/19 11:41	Instrument:	VOA-GCMS10		
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404

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 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110745-BLK1	File ID:	VJ19111305.D
Prepared:	11/13/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/13/19 11:41	Instrument:	VOA-GCMS10		
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404

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	48.2	96	80 - 120	
Toluene-d8 (Surr)	50.0	51.3	103	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 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110745-BLK1	File ID:	VJ19111305.D
Prepared:	11/13/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/13/19 11:41	Instrument:	VOA-GCMS10		
Batch:	9110745	Sequence:	9K13043	Calibration:	A9J2404

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Surr)	50.0	48.2	96	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	109880	6.089	117373	6.089	
Chlorobenzene-d5 (ISTD)	288450	9.806	309319	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	121422	11.765	130775	11.765	

METHOD BLANK DATA SHEET
5035A/8260C

Laboratory:	Apex Laboratories			SDG:	Gasco PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110788-BLK1	File ID:	VJ19111405.D
Prepared:	11/14/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/14/19 11:34	Instrument:	VOA-GCMS10		
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404

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 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110788-BLK1	File ID:	VJ19111405.D
Prepared:	11/14/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/14/19 11:34	Instrument:	VOA-GCMS10		
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404

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	49.1	98	80 - 120	
Toluene-d8 (Surr)	50.0	49.7	99	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 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110788-BLK1	File ID:	VJ19111405.D
Prepared:	11/14/19 09:30	Preparation:	EPA 5035A	Initial/Final:	7.5 g / 5 mL
Analyzed:	11/14/19 11:34	Instrument:	VOA-GCMS10		
Batch:	9110788	Sequence:	9K14020	Calibration:	A9J2404

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
4-Bromofluorobenzene (Surr)	50.0	48.8	98	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	120512	6.089	132852	6.089	
Chlorobenzene-d5 (ISTD)	325895	9.806	356702	9.806	
1,4-Dichlorobenzene-d4 (ISTD)	138933	11.765	151124	11.765	

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix: Soil
Batch: 9110745
Laboratory ID: 9110745-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	1840	92	80 - 120
Acrylonitrile	1000	1060	106	80 - 120
Benzene	1000	906	91	80 - 120
Bromobenzene	1000	955	95	80 - 120
Bromochloromethane	1000	1010	101	80 - 120
Bromodichloromethane	1000	1050	105	80 - 120
Bromoform	1000	909	91	80 - 120
Bromomethane	1000	1290	129 *	80 - 120
2-Butanone (MEK)	2000	1770	89	80 - 120
n-Butylbenzene	1000	1120	112	80 - 120
sec-Butylbenzene	1000	1050	105	80 - 120
tert-Butylbenzene	1000	1030	103	80 - 120
Carbon disulfide	1000	876	88	80 - 120
Carbon tetrachloride	1000	1060	106	80 - 120
Chlorobenzene	1000	957	96	80 - 120
Chloroethane	1000	1340	134 *	80 - 120
Chloroform	1000	985	99	80 - 120
Chloromethane	1000	902	90	80 - 120
2-Chlorotoluene	1000	989	99	80 - 120
4-Chlorotoluene	1000	1030	103	80 - 120
Dibromochloromethane	1000	1030	103	80 - 120
1,2-Dibromo-3-chloropropane	1000	896	90	80 - 120
1,2-Dibromoethane (EDB)	1000	992	99	80 - 120
Dibromomethane	1000	995	100	80 - 120
1,2-Dichlorobenzene	1000	952	95	80 - 120
1,3-Dichlorobenzene	1000	990	99	80 - 120
1,4-Dichlorobenzene	1000	927	93	80 - 120
Dichlorodifluoromethane	1000	930	93	80 - 120
1,1-Dichloroethane	1000	1020	102	80 - 120
1,2-Dichloroethane (EDC)	1000	1020	102	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 - 3. Riverbank Angled Borin
Matrix: Soil
Batch: 9110745
Laboratory ID: 9110745-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	965	97	80 - 120
cis-1,2-Dichloroethene	1000	935	93	80 - 120
trans-1,2-Dichloroethene	1000	962	96	80 - 120
1,2-Dichloropropane	1000	947	95	80 - 120
1,3-Dichloropropane	1000	994	99	80 - 120
2,2-Dichloropropane	1000	1060	106	80 - 120
1,1-Dichloropropene	1000	915	92	80 - 120
cis-1,3-Dichloropropene	1000	1000	100	80 - 120
trans-1,3-Dichloropropene	1000	1140	114	80 - 120
Ethylbenzene	1000	995	100	80 - 120
Hexachlorobutadiene	1000	1060	106	80 - 120
2-Hexanone	2000	1820	91	80 - 120
Isopropylbenzene	1000	998	100	80 - 120
4-Isopropyltoluene	1000	1100	110	80 - 120
Methylene chloride	1000	966	97	80 - 120
4-Methyl-2-pentanone (MiBK)	2000	1950	98	80 - 120
Methyl tert-butyl ether (MTBE)	1000	960	96	80 - 120
Naphthalene	1000	949	95	80 - 120
n-Propylbenzene	1000	1010	101	80 - 120
Styrene	1000	878	88	80 - 120
1,1,1,2-Tetrachloroethane	1000	1030	103	80 - 120
1,1,2,2-Tetrachloroethane	1000	905	91	80 - 120
Tetrachloroethene (PCE)	1000	957	96	80 - 120
Toluene	1000	923	92	80 - 120
1,2,3-Trichlorobenzene	1000	940	94	80 - 120
1,2,4-Trichlorobenzene	1000	904	90	80 - 120
1,1,1-Trichloroethane	1000	1010	101	80 - 120
1,1,2-Trichloroethane	1000	1020	102	80 - 120
Trichloroethene (TCE)	1000	955	95	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 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110745	Laboratory ID:	9110745-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	997	100	80 - 120
1,2,4-Trimethylbenzene	1000	1190	119	80 - 120
1,3,5-Trimethylbenzene	1000	1160	116	80 - 120
Vinyl chloride	1000	899	90	80 - 120
m,p-Xylene	2000	2050	102	80 - 120
o-Xylene	1000	969	97	80 - 120

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix: Soil
Batch: 9110788
Laboratory ID: 9110788-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	1770	89	80 - 120
Acrylonitrile	1000	1030	103	80 - 120
Benzene	1000	901	90	80 - 120
Bromobenzene	1000	948	95	80 - 120
Bromochloromethane	1000	948	95	80 - 120
Bromodichloromethane	1000	1030	103	80 - 120
Bromoform	1000	895	89	80 - 120
Bromomethane	1000	1190	119	80 - 120
2-Butanone (MEK)	2000	1700	85	80 - 120
n-Butylbenzene	1000	1080	108	80 - 120
sec-Butylbenzene	1000	1020	102	80 - 120
tert-Butylbenzene	1000	982	98	80 - 120
Carbon disulfide	1000	878	88	80 - 120
Carbon tetrachloride	1000	1020	102	80 - 120
Chlorobenzene	1000	935	93	80 - 120
Chloroethane	1000	1200	120	80 - 120
Chloroform	1000	959	96	80 - 120
Chloromethane	1000	855	85	80 - 120
2-Chlorotoluene	1000	968	97	80 - 120
4-Chlorotoluene	1000	997	100	80 - 120
Dibromochloromethane	1000	1010	101	80 - 120
1,2-Dibromo-3-chloropropane	1000	869	87	80 - 120
1,2-Dibromoethane (EDB)	1000	979	98	80 - 120
Dibromomethane	1000	966	97	80 - 120
1,2-Dichlorobenzene	1000	925	92	80 - 120
1,3-Dichlorobenzene	1000	954	95	80 - 120
1,4-Dichlorobenzene	1000	911	91	80 - 120
Dichlorodifluoromethane	1000	879	88	80 - 120
1,1-Dichloroethane	1000	999	100	80 - 120
1,2-Dichloroethane (EDC)	1000	966	97	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 - 3. Riverbank Angled Borin
Matrix: Soil
Batch: 9110788
Laboratory ID: 9110788-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	925	93	80 - 120
cis-1,2-Dichloroethene	1000	927	93	80 - 120
trans-1,2-Dichloroethene	1000	939	94	80 - 120
1,2-Dichloropropane	1000	953	95	80 - 120
1,3-Dichloropropane	1000	964	96	80 - 120
2,2-Dichloropropane	1000	1030	103	80 - 120
1,1-Dichloropropene	1000	929	93	80 - 120
cis-1,3-Dichloropropene	1000	1010	101	80 - 120
trans-1,3-Dichloropropene	1000	1080	108	80 - 120
Ethylbenzene	1000	963	96	80 - 120
Hexachlorobutadiene	1000	1040	104	80 - 120
2-Hexanone	2000	1760	88	80 - 120
Isopropylbenzene	1000	993	99	80 - 120
4-Isopropyltoluene	1000	1090	109	80 - 120
Methylene chloride	1000	970	97	80 - 120
4-Methyl-2-pentanone (MiBK)	2000	1860	93	80 - 120
Methyl tert-butyl ether (MTBE)	1000	952	95	80 - 120
Naphthalene	1000	948	95	80 - 120
n-Propylbenzene	1000	978	98	80 - 120
Styrene	1000	873	87	80 - 120
1,1,1,2-Tetrachloroethane	1000	1010	101	80 - 120
1,1,2,2-Tetrachloroethane	1000	876	88	80 - 120
Tetrachloroethene (PCE)	1000	965	96	80 - 120
Toluene	1000	906	91	80 - 120
1,2,3-Trichlorobenzene	1000	937	94	80 - 120
1,2,4-Trichlorobenzene	1000	916	92	80 - 120
1,1,1-Trichloroethane	1000	978	98	80 - 120
1,1,2-Trichloroethane	1000	974	97	80 - 120
Trichloroethene (TCE)	1000	982	98	80 - 120
Trichlorofluoromethane	1000	956	96	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 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110788	Laboratory ID:	9110788-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	944	94	80 - 120
1,2,4-Trimethylbenzene	1000	1160	116	80 - 120
1,3,5-Trimethylbenzene	1000	1140	114	80 - 120
Vinyl chloride	1000	860	86	80 - 120
m,p-Xylene	2000	1990	99	80 - 120
o-Xylene	1000	967	97	80 - 120

* = Values outside of QC limits

DUPLICATES

5035A/8260C

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9110788
Preparation: EPA 5035A
Source Sample Name: PDI-143RAB-00-10-191111

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110788-DUP1
Lab Source ID: A9K0332-08
Initial/Final: 4.93 g / 5 mL
% Solids: 92.62

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
Acetone	30	109		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	0.00		ND				5035A/8260C
sec-Butylbenzene	30	5.60		ND				5035A/8260C
tert-Butylbenzene	30	0.00		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	117		ND				5035A/8260C
Chloroform	30	0.00		ND				5035A/8260C
Chloromethane	30	13.2		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-143RAB-00-10-191111

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9110788
Preparation: EPA 5035A
Source Sample Name: PDI-143RAB-00-10-191111

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110788-DUP1
Lab Source ID: A9K0332-08
Initial/Final: 4.93 g / 5 mL
% Solids: 92.62

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	0.00		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	0.00		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	17.5		ND				5035A/8260C
n-Propylbenzene	30	0.00		ND				5035A/8260C
Styrene	30	0.00		ND				5035A/8260C
1,1,1,2-Tetrachloroethane	30	0.00		ND				5035A/8260C
1,1,2,2-Tetrachloroethane	30	0.00		ND				5035A/8260C
Tetrachloroethene (PCE)	30	0.00		ND				5035A/8260C
Toluene	30	4.81		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	7.05		ND				5035A/8260C
1,3,5-Trimethylbenzene	30	0.00		ND				5035A/8260C
Vinyl chloride	30	0.00		ND				5035A/8260C

DUPLICATES

5035A/8260C

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9110788
Preparation: EPA 5035A
Source Sample Name: PDI-143RAB-00-10-191111

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110788-DUP1
Lab Source ID: A9K0332-08
Initial/Final: 4.93 g / 5 mL
% Solids: 92.62

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 - 3. Riverbank Angled Borin
Sequence:	9J23072	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J23072-TUN1	VJ19102321.D	10/23/19 21:24
Initial Cal Blank	9J23072-ICB1	VJ19102322.D	10/23/19 21:51
Cal Standard	9J23072-CAL1	VJ19102323.D	10/23/19 22:18
Cal Standard	9J23072-CAL2	VJ19102324.D	10/23/19 22:45
Cal Standard	9J23072-CAL3	VJ19102325.D	10/23/19 23:12
Cal Standard	9J23072-CAL4	VJ19102326.D	10/23/19 23:38
Cal Standard	9J23072-CAL5	VJ19102327.D	10/24/19 00:05
Cal Standard	9J23072-CAL6	VJ19102328.D	10/24/19 00:32
Cal Standard	9J23072-CAL7	VJ19102329.D	10/24/19 00:59
Cal Standard	9J23072-CAL8	VJ19102330.D	10/24/19 01:26
Cal Standard	9J23072-CAL9	VJ19102331.D	10/24/19 01:53
Cal Standard	9J23072-CALA	VJ19102333.D	10/24/19 02:46
Cal Standard	9J23072-CALB	VJ19102335.D	10/24/19 03:40
Initial Cal Check	9J23072-ICV1	VJ19102338.D	10/24/19 05:00

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 - 3. Riverbank Angled Borin
Sequence:	9K13043	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K13043-TUN1	VJ19111302.D	11/13/19 10:21
Calibration Check	9K13043-CCV1	VJ19111303.D	11/13/19 10:47
Blank	9110745-BLK1	VJ19111305.D	11/13/19 11:41
PDI-140RAB-00-10-191108	A9K0332-04	VJ19111325.D	11/13/19 20:41
PDI-140RAB-10-12.7-191108	A9K0332-05	VJ19111326.D	11/13/19 21:07
PDI-141RAB-00-10-191107	A9K0332-06	VJ19111327.D	11/13/19 21:34

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 - 3. Riverbank Angled Borin
Sequence:	9K14020	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K14020-TUN1	VJ19111402.D	11/14/19 10:14
Calibration Check	9K14020-CCV1	VJ19111403.D	11/14/19 10:41
Blank	9110788-BLK1	VJ19111405.D	11/14/19 11:34
PDI-143RAB-00-10-191111	A9K0332-08	VJ19111407.D	11/14/19 12:28
PDI-143RAB-00-10-191111 (Dup)	9110788-DUP1	VJ19111408.D	11/14/19 12:55
PDI-143RAB-10-20-191112	A9K0332-09	VJ19111409.D	11/14/19 13:22
PDI-143RAB-20-31.1-191111	A9K0332-10	VJ19111410.D	11/14/19 13:49
PDI-141RAB-10-17.7-191107	A9K0332-07	VJ19111411.D	11/14/19 14:16

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 - 3. Riverbank Angled Borin
Lab File ID:	VJ19102321.D	Injection Date:	10/23/19
Instrument ID:	VOA-GCMS10	Injection Time:	21:24
Sequence:	9J23072	Lab Sample ID:	9J23072-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	147.78	PASS
m/z 96	5 - 9% of m/z 95	7.15	PASS
m/z 173	Less than 2% of m/z 174	0.74	PASS
m/z 174	50 - 200% of m/z 95	67.67	PASS
m/z 175	5 - 9% of m/z 174	7.13	PASS
m/z 176	95 - 105% of m/z 174	95.30	PASS
m/z 177	5 - 10% of m/z 176	6.81	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 - 3. Riverbank Angled Borin
Lab File ID:	VJ19111302.D	Injection Date:	11/13/19
Instrument ID:	VOA-GCMS10	Injection Time:	10:21
Sequence:	9K13043	Lab Sample ID:	9K13043-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	148.79	PASS
m/z 96	5 - 9% of m/z 95	7.20	PASS
m/z 173	Less than 2% of m/z 174	0.78	PASS
m/z 174	50 - 200% of m/z 95	67.21	PASS
m/z 175	5 - 9% of m/z 174	7.12	PASS
m/z 176	95 - 105% of m/z 174	95.78	PASS
m/z 177	5 - 10% of m/z 176	6.45	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 - 3. Riverbank Angled Borin
Lab File ID:	VJ19111402.D	Injection Date:	11/14/19
Instrument ID:	VOA-GCMS10	Injection Time:	10:14
Sequence:	9K14020	Lab Sample ID:	9K14020-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	146.70	PASS
m/z 96	5 - 9% of m/z 95	7.12	PASS
m/z 173	Less than 2% of m/z 174	0.00	PASS
m/z 174	50 - 200% of m/z 95	68.17	PASS
m/z 175	5 - 9% of m/z 174	7.32	PASS
m/z 176	95 - 105% of m/z 174	95.62	PASS
m/z 177	5 - 10% of m/z 176	6.75	PASS

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2404 Date: 10/24/19 13:40 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.7630346	Ave	7.780488	3.87	0.1174603			20	
Acrylonitrile	0.8637499	Ave	14.08609	4.636333	0.1079403			20	
Benzene	6.42084	Ave	5.626462	6.003455	3.501531E-02			20	
Bromobenzene	1.034598	Ave	5.113731	10.9638	2.955328E-02			20	
Bromochloromethane	1.16812	Ave	5.545978	5.329667	6.725774E-02			20	
Bromodichloromethane	1.552772	Ave	14.23023	7.2486	4.352734E-02			20	
Bromoform	0.2352265	XXX	23.91278	10.43833	2.183329E-02				
Bromomethane	3.24174	XXX	139.3167	2.343636	0.2584869				
2-Butanone (MEK)	1.343962	Ave	9.587451	5.73475	5.073369E-02			20	
n-Butylbenzene	3.154063	Ave	6.836626	11.972	2.119512E-02			20	
sec-Butylbenzene	4.267558	Ave	10.9799	11.546	7.675565E-03			20	
tert-Butylbenzene	1.979189	Ave	8.928197	11.4054	1.578147E-02			20	
Carbon disulfide	3.47021	Ave	14.56079	3.154273	0.1780623			20	
Carbon tetrachloride	1.448803	Ave	14.03004	5.5552	6.695901E-02			20	
Chlorobenzene	1.332881	Ave	3.799445	9.823545	3.088718E-02			20	
Chloroethane	0.1761344	XXX	20.51192	2.476714	0.4375376				
Chloroform	2.193058	Ave	5.725423	5.417	0.0557908			20	
Chloromethane	1.96101	Ave	9.832503	1.897143	0.2846326			20	
2-Chlorotoluene	0.9730858	Ave	5.990234	11.1164	0.0275477			20	
4-Chlorotoluene	3.159392	Ave	6.281659	11.2486	2.183889E-02			20	
Dibromochloromethane	0.3827769	Ave	12.60893	9.0655	2.783921E-02			20	
1,2-Dibromo-3-chloropropane	0.29905	Ave	13.90432	12.696	1.471367E-02			20	
1,2-Dibromoethane (EDB)	0.4544982	Ave	8.564783	9.3011	1.969881E-02			20	
Dibromomethane	0.8058568	Ave	3.431989	7.062889	4.081123E-02			20	
1,2-Dichlorobenzene	1.715567	Ave	5.398752	12.094	9.240268E-03			20	
1,3-Dichlorobenzene	1.872399	Ave	6.378968	11.71091	1.892805E-02			20	
1,4-Dichlorobenzene	1.990469	Ave	5.960029	11.77655	1.616477E-02			20	
Dichlorodifluoromethane	1.157153	Ave	4.195397	1.6925	0.3142671			20	
1,1-Dichloroethane	2.052362	Ave	5.505869	4.5817	5.918088E-02			20	
1,2-Dichloroethane (EDC)	1.977653	Ave	4.926241	6.208	5.092493E-02			20	
1,1-Dichloroethene	1.860368	Ave	5.025398	3.143	0.1662785			20	
cis-1,2-Dichloroethene	1.918395	Ave	4.009481	5.131333	6.008354E-02			20	
trans-1,2-Dichloroethene	1.944826	Ave	4.048457	3.9486	0.1115212			20	

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2404 Date: 10/24/19 13:40 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,2-Dichloropropane	1.589063	Ave	2.168724	7.172667	0.0316026			20	
1,3-Dichloropropane	0.8908941	Ave	5.289103	9.162	2.645202E-02			20	
2,2-Dichloropropane	1.942855	Ave	5.980428	5.24	6.162833E-02			20	
1,1-Dichloropropene	1.959344	Ave	3.5152	5.749222	3.222457E-02			20	
cis-1,3-Dichloropropene	0.7450675	Ave	12.78409	7.9522	2.889974E-02			20	
trans-1,3-Dichloropropene	0.7224957	Ave	12.37483	8.7026	0.0353098			20	
Ethylbenzene	2.270775	Ave	5.558898	9.861	0.0194846			20	
Hexachlorobutadiene	0.2169599	Ave	11.77189	13.21833	1.673503E-02			20	
2-Hexanone	0.5388921	Ave	13.20295	9.545857	2.121464E-02			20	
Isopropylbenzene	1.859592	Ave	13.30658	9.683637	33.16624			20	
4-Isopropyltoluene	3.252949	Ave	13.6313	11.656	1.807841E-02			20	
Methylene chloride	2.908984	XXX	109.5029	2.749455	64.22624				
4-Methyl-2-pentanone (MiBK)	0.7241524	Ave	10.14834	8.671	3.957963E-02			20	
Methyl tert-butyl ether (MTBE)	4.652114	Ave	3.100733	4.10675	0.1452521			20	
Naphthalene	3.717873	Ave	11.6002	13.5158	1.410608E-02			20	
n-Propylbenzene	5.453597	Ave	4.607677	10.99682	2.197048E-02			20	
Styrene	1.02724	XXX	22.42696	10.421	1.478796E-02				
1,1,1,2-Tetrachloroethane	0.4128544	Ave	8.288025	9.886	1.505389E-02			20	
1,1,2,2-Tetrachloroethane	1.579054	Ave	6.865902	11.0464	2.011701E-02			20	
Tetrachloroethene (PCE)	0.4335888	Ave	9.463738	8.6792	3.437289E-02			20	
Toluene	2.336687	Ave	4.658904	8.231455	1.982802E-02			20	
1,2,3-Trichlorobenzene	1.008478	Ave	8.02173	13.6754	1.213214E-02			20	
1,2,4-Trichlorobenzene	1.036127	Ave	6.021869	13.243	1.607057E-02			20	
1,1,1-Trichloroethane	2.015569	Ave	6.578792	5.6222	4.343642E-02			20	
1,1,2-Trichloroethane	0.474218	Ave	6.909803	8.8762	0.0257095			20	
Trichloroethene (TCE)	1.275798	Ave	8.060541	6.623	6.264117E-02			20	
Trichlorofluoromethane	0.3375145	Ave	7.881205	2.604625	0.2428395			20	
1,2,3-Trichloropropane	0.5070411	Ave	6.919488	11.151	1.103529E-02			20	
1,2,4-Trimethylbenzene	3.371687	Ave	11.05569	11.461	2.389959E-02			20	
1,3,5-Trimethylbenzene	3.338074	Ave	12.70043	10.14273	33.16624			20	
Vinyl chloride	1.512511	Ave	5.395119	1.993	0.425789			20	
m,p-Xylene	1.616709	Ave	9.72333	9.995	1.368862E-02			20	
o-Xylene	1.543364	Ave	10.87211	9.434546	33.16624			20	

INITIAL CALIBRATION DATA (Summary)

5035A/8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2404 Date: 10/24/19 13:40 Instrument: VOA-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Difluorobenzene (Surr)	3.07597	Ave	1.030422	6.655	9.65307E-03			20	
Toluene-d8 (Surr)	1.394366	Ave	0.6353862	8.17	4.457054E-03			20	
4-Bromofluorobenzene (Surr)	0.7219473	Ave	2.275187	10.883	3.456173E-03			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: A9J2404

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS10

Calibration Date: 10/24/19 13:40

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	~~0~~	2	~~1.393237~~	4	~~0~~	10	0.8460466
Acrylonitrile	0.1	~~0~~	0.2	~~0~~	0.4	0.5484338	1	0.8692497	2	0.9222922	5	0.8895916
Benzene	0.1	7.293099	0.2	6.723948	0.4	6.327773	1	6.33767	2	6.676794	5	6.285538
Bromobenzene	0.1	~~0~~	0.2	0.9505703	0.4	1.003151	1	1.030487	2	1.143625	5	1.043803
Bromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	1.082118	1	1.253236	2	1.261723	5	1.17612
Bromodichloromethane	0.1	~~0~~	0.2	1.148247	0.4	1.346278	1	1.406506	2	1.52889	5	1.504779
Bromoform	0.1	~~0~~	0.2	~~0~~	0.4	0.1517548	1	0.1766516	2	0.2035704	5	0.2059341
Bromomethane	0.1	14.76445	0.2	8.366178	0.4	4.529607	1	2.498348	2	1.37012	5	0.9456647
2-Butanone (MEK)	0.2	~~0~~	0.4	~~0~~	0.8	~~0~~	2	1.620704	4	1.438823	10	1.273313
n-Butylbenzene	0.1	~~0~~	0.2	2.998823	0.4	2.871048	1	2.856318	2	3.056434	5	3.02701
sec-Butylbenzene	0.1	~~0~~	0.2	3.686855	0.4	3.573727	1	3.668494	2	4.164478	5	4.270418
tert-Butylbenzene	0.1	~~0~~	0.2	1.799294	0.4	1.641951	1	1.803712	2	1.951733	5	1.986955
Carbon disulfide	0.1	4.82302	0.2	3.938725	0.4	3.346921	1	3.249532	2	3.389826	5	3.078361
Carbon tetrachloride	0.1	~~0~~	0.2	0.9643176	0.4	1.252414	1	1.476912	2	1.510692	5	1.44911
Chlorobenzene	0.1	1.321464	0.2	1.354265	0.4	1.367771	1	1.311498	2	1.445458	5	1.325432
Chloroethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	~~0~~	2	0.1471659	5	0.1398291
Chloroform	0.1	~~0~~	0.2	1.944401	0.4	2.034167	1	2.275214	2	2.367313	5	2.24171
Chloromethane	0.1	~~12.13649~~	0.2	~~7.288875~~	0.4	~~4.404902~~	1	~~2.874211~~	2	2.358874	5	2.024389
2-Chlorotoluene	0.1	~~0~~	0.2	0.8283542	0.4	0.952284	1	0.9679746	2	0.9867321	5	0.9443121
4-Chlorotoluene	0.1	~~0~~	0.2	2.998823	0.4	2.7563	1	2.951529	2	3.283057	5	3.136226
Dibromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0.2580326~~	1	0.3037449	2	0.3557808	5	0.352008
1,2-Dibromo-3-chloropropane	0.1	~~0~~	0.2	~~0~~	0.4	~~8.280731E-02~~	1	~~0.2389883~~	2	0.2739065	5	0.2419894
1,2-Dibromoethane (EDB)	0.1	~~0~~	0.2	0.4057081	0.4	0.3895205	1	0.4116542	2	0.4621412	5	0.4533185
Dibromomethane	0.1	~~0~~	0.2	~~0~~	0.4	0.7576164	1	0.779346	2	0.845017	5	0.8095738
1,2-Dichlorobenzene	0.1	1.516905	0.2	1.640865	0.4	1.680988	1	1.702731	2	1.867675	5	1.743716
1,3-Dichlorobenzene	0.1	1.580678	0.2	1.82419	0.4	1.860798	1	1.881131	2	2.057045	5	1.912627
1,4-Dichlorobenzene	0.1	2.177419	0.2	1.959985	0.4	2.113952	1	2.018657	2	2.170238	5	1.942519
Dichlorodifluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	1.102133	2	1.175217	5	1.126008
1,1-Dichloroethane	0.1	~~0~~	0.2	1.891849	0.4	1.955053	1	2.172853	2	2.237027	5	2.13401
1,2-Dichloroethane (EDC)	0.1	~~0~~	0.2	1.862946	0.4	1.812916	1	2.037456	2	2.150521	5	1.992059
1,1-Dichloroethene	0.1	~~0~~	0.2	~~0~~	0.4	2.02478	1	1.926972	2	1.951662	5	1.828386

INITIAL CALIBRATION DATA

5035A/8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2404

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS10

Calibration Date: 10/24/19 13:40

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	~~0~~	0.4	2.01003	1	1.993046	2	2.01786	5	1.896684
trans-1,2-Dichloroethene	0.1	~~0~~	0.2	1.876084	0.4	1.991257	1	2.014168	2	2.086432	5	1.969326
1,2-Dichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	1.576915	1	1.560317	2	1.644935	5	1.5753
1,3-Dichloropropane	0.1	~~0~~	0.2	0.8104638	0.4	0.8492338	1	0.8776628	2	0.9797748	5	0.905244
2,2-Dichloropropane	0.1	~~0~~	0.2	1.99958	0.4	2.199099	1	1.997379	2	2.031311	5	1.873144
1,1-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	1.86253	1	1.950261	2	2.038432	5	1.88941
cis-1,3-Dichloropropene	0.1	~~0~~	0.2	0.5676104	0.4	0.6653485	1	0.667839	2	0.7395046	5	0.7286
trans-1,3-Dichloropropene	0.1	~~0~~	0.2	0.5523725	0.4	0.688087	1	0.6176811	2	0.6948352	5	0.6966369
Ethylbenzene	0.1	2.101032	0.2	2.083778	0.4	2.174493	1	2.151793	2	2.318676	5	2.255298
Hexachlorobutadiene	0.1	~~0~~	0.2	~~0~~	0.4	0.1644317	1	0.18417	2	0.2173103	5	0.2393126
n-Hexane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.2410069	2	0.3003977	5	0.2818808
2-Hexanone	0.2	~~0~~	0.4	~~0~~	0.8	~~0.3732081~~	2	~~0.3828784~~	4	0.4649453	10	0.4417417
Isopropylbenzene	0.1	1.515405	0.2	1.607594	0.4	1.581809	1	1.67839	2	1.795729	5	1.800812
4-Isopropyltoluene	0.1	~~0~~	0.2	2.786076	0.4	2.6522	1	2.651471	2	3.100135	5	3.135423
Methylene chloride	0.1	11.2605	0.2	6.24573	0.4	3.644604	1	2.051538	2	1.638341	5	1.313221
4-Methyl-2-pentanone (MiBK)	0.2	~~0~~	0.4	~~0~~	0.8	0.7261493	2	0.5882059	4	0.6757475	10	0.6615114
Methyl tert-butyl ether (MTBE)	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	4.762188	2	4.807946	5	4.601932
Naphthalene	0.1	~~0~~	0.2	3.526163	0.4	3.367892	1	3.115022	2	3.558158	5	3.259809
n-Propylbenzene	0.1	5.038128	0.2	5.253033	0.4	5.136419	1	5.237065	2	5.606606	5	5.39533
Styrene	0.1	~~0~~	0.2	0.8495108	0.4	0.7760751	1	0.770153	2	0.8546218	5	0.9128865
1,1,1,2-Tetrachloroethane	0.1	~~0~~	0.2	~~0~~	0.4	0.3519526	1	0.3772831	2	0.3987776	5	0.4050915
1,1,2,2-Tetrachloroethane	0.1	~~1.389357~~	0.2	1.514123	0.4	1.406541	1	1.543566	2	1.794601	5	1.602823
Tetrachloroethene (PCE)	0.1	~~0~~	0.2	0.3333282	0.4	0.3979239	1	0.4312378	2	0.4579104	5	0.4398782
Toluene	0.1	2.570675	0.2	2.42282	0.4	2.355907	1	2.325646	2	2.441172	5	2.246488
1,2,3-Trichlorobenzene	0.1	~~0~~	0.2	0.9845193	0.4	0.8706597	1	0.8929602	2	1.118312	5	0.9561796
1,2,4-Trichlorobenzene	0.1	~~0~~	0.2	0.9415173	0.4	0.9511011	1	0.9920177	2	1.093954	5	0.9825022
1,1,1-Trichloroethane	0.1	~~0~~	0.2	1.802512	0.4	1.788779	1	1.984381	2	2.166873	5	2.025096
1,1,2-Trichloroethane	0.1	~~0~~	0.2	0.3971368	0.4	0.4611962	1	0.4604132	2	0.5133044	5	0.4911546
Trichloroethene (TCE)	0.1	~~0~~	0.2	1.001104	0.4	1.265823	1	1.291689	2	1.347965	5	1.294126
Trichlorofluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.2794597	2	0.3299364	5	0.3437127
1,2,3-Trichloropropane	0.1	~~0~~	0.2	~~0.3010139~~	0.4	0.4459765	1	0.4890364	2	0.5685889	5	0.4963818

INITIAL CALIBRATION DATA

5035A/8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2404

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS10

Calibration Date: 10/24/19 13:40

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	ϴ	0.2	ϴ	0.4	1.020436	1	1.16604	2	1.216888	5	1.119441
1,2,4-Trimethylbenzene	0.1	3.161357	0.2	2.824552	0.4	2.809534	1	2.978938	2	3.419175	5	3.360459
1,3,5-Trimethylbenzene	0.1	2.560061	0.2	2.937715	0.4	2.906537	1	3.005867	2	3.371653	5	3.353678
Vinyl chloride	0.1	ϴ	0.2	ϴ	0.4	1.488415	1	1.643721	2	1.6481	5	1.476692
m,p-Xylene	0.2	1.455511	0.4	1.462359	0.8	1.401878	2	1.456876	4	1.581532	10	1.60094
o-Xylene	0.1	1.374702	0.2	1.371408	0.4	1.298566	1	1.423804	2	1.515611	5	1.494735
Xylenes, total	0.3	1.428575	0.6	1.432042	1.2	1.367441	3	1.445852	6	1.559559	15	1.565538
trans-1,4-Dichloro-2-butene	0.1	ϴ	0.2	ϴ	0.4	ϴ	1	0.1610887	2	0.1745647	5	0.1941626
1,4-Difluorobenzene (Surr)	50	3.053547	50	3.111787	50	3.060223	50	3.077198	50	3.052157	50	3.067298
Toluene-d8 (Surr)	50	1.398268	50	1.384592	50	1.394982	50	1.399337	50	1.41034	50	1.391583
4-Bromofluorobenzene (Surr)	50	0.7394386	50	0.7276299	50	0.7292248	50	0.7295153	50	0.7296469	50	0.7284757

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2404
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 10/24/19 13:40

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	0.7704426	40	0.8196669	100	0.7179921	200	0.7011265	400	0.722933		
Acrylonitrile	10	0.8846229	20	0.9676948	50	0.8921181	100	0.8893462	200	0.9104001		
Benzene	10	6.268415	20	6.398041	50	5.96031	100	6.18341	200	6.17424		
Bromobenzene	10	1.084041	20	1.062417	50	1.0065	100	1.011853	200	1.009528		
Bromochloromethane	10	1.160219	20	1.220333	50	1.113129	100	1.134116	200	1.112087		
Bromodichloromethane	10	1.535414	20	1.690776	50	1.671574	100	1.81995	200	1.875309		
Bromoform	10	0.2257765	20	0.2605292	50	0.2767994	100	0.3078937	200	0.3081286		
Bromomethane	10	0.7557151	20	0.6771658	50	0.6031349	100	0.5619599	200	0.5867984		
2-Butanone (MEK)	20	1.246483	40	1.348087	100	1.248917	200	1.268235	400	1.307138		
n-Butylbenzene	10	3.275568	20	3.327664	50	3.310543	100	3.430676	200	3.386545		
sec-Butylbenzene	10	4.712718	20	4.655265	50	4.592545	100	4.696977	200	4.654103		
tert-Butylbenzene	10	2.106716	20	2.13866	50	2.092078	100	2.141971	200	2.128824		
Carbon disulfide	10	3.114498	20	3.206447	50	3.192014	100	3.402267	200	3.430695		
Carbon tetrachloride	10	1.477335	20	1.564802	50	1.509346	100	1.612337	200	1.670761		
Chlorobenzene	10	1.324865	20	1.36281	50	1.253518	100	1.318105	200	1.276507		
Chloroethane	10	0.140338	20	0.1644223	50	0.2162399	100	0.214263	200	0.2106827		
Chloroform	10	2.254298	20	2.29046	50	2.159513	100	2.20067	200	2.162838		
Chloromethane	10	1.891999	20	1.940225	50	1.91641	100	1.806484	200	1.788688		
2-Chlorotoluene	10	1.018519	20	1.024009	50	0.979414	100	1.016897	200	1.012362		
4-Chlorotoluene	10	3.337416	20	3.376022	50	3.209198	100	3.287084	200	3.258265		
Dibromochloromethane	10	0.3637582	20	0.3967142	50	0.4040584	100	0.435874	200	0.4502767		
1,2-Dibromo-3-chloropropane	10	0.2722788	20	0.2983265	50	0.3067301	100	0.3341598	200	0.3659589		
1,2-Dibromoethane (EDB)	10	0.4647707	20	0.4972282	50	0.4811634	100	0.4923362	200	0.4871409		
Dibromomethane	10	0.8028038	20	0.8431292	50	0.7975679	100	0.8141702	200	0.8034864		
1,2-Dichlorobenzene	10	1.796471	20	1.803673	50	1.682297	100	1.714781	200	1.721131		
1,3-Dichlorobenzene	10	1.971429	20	1.959346	50	1.836262	100	1.864453	200	1.848432		
1,4-Dichlorobenzene	10	1.977422	20	1.958226	50	1.837155	100	1.883156	200	1.856428		
Dichlorodifluoromethane	10	1.115866	20	1.135359	50	1.253988	100	1.178053	200	1.1706		
1,1-Dichloroethane	10	2.067116	20	2.135231	50	1.97587	100	1.987307	200	1.967308		
1,2-Dichloroethane (EDC)	10	1.990133	20	2.070344	50	1.93098	100	1.974405	200	1.954766		
1,1-Dichloroethene	10	1.836411	20	1.871459	50	1.728738	100	1.802328	200	1.772576		

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2404
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 10/24/19 13:40

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	1.883988	20	1.948542	50	1.807081	100	1.865584	200	1.84274		
trans-1,2-Dichloroethene	10	1.960092	20	1.962625	50	1.822384	100	1.894149	200	1.871744		
1,2-Dichloropropane	10	1.584164	20	1.621265	50	1.530049	100	1.594122	200	1.6145		
1,3-Dichloropropane	10	0.904238	20	0.9434526	50	0.8778929	100	0.8897502	200	0.8712284		
2,2-Dichloropropane	10	1.8877	20	1.917321	50	1.804996	100	1.86919	200	1.848827		
1,1-Dichloropropene	10	1.925606	20	2.004421	50	1.899489	100	2.027169	200	2.036775		
cis-1,3-Dichloropropene	10	0.7415738	20	0.798058	50	0.8007985	100	0.8651065	200	0.8762361		
trans-1,3-Dichloropropene	10	0.7500995	20	0.8076237	50	0.7871404	100	0.8171114	200	0.8133689		
Ethylbenzene	10	2.331868	20	2.430161	50	2.319054	100	2.433189	200	2.379186		
Hexachlorobutadiene	10	0.2365435	20	0.2298232	50	0.2314252	100	0.2259866	200	0.2236363		
n-Hexane	10	0.3032435	20	0.2950195	50	0.2994201	100	0.316144	200	0.3196709		
2-Hexanone	20	0.4898732	40	0.584645	100	0.5736532	200	0.6117288	400	0.6056573		
Isopropylbenzene	10	1.958032	20	2.092879	50	2.071861	100	2.213732	200	2.139271		
4-Isopropyltoluene	10	3.510712	20	3.595201	50	3.61704	100	3.740005	200	3.741223		
Methylene chloride	10	1.220545	20	1.23617	50	1.130679	100	1.136281	200	1.12121		
4-Methyl-2-pentanone (MiBK)	20	0.7051341	40	0.7978057	100	0.7748014	200	0.8070795	400	0.7809366		
Methyl tert-butyl ether (MTBE)	10	4.432151	20	4.699507	50	4.468885	100	4.642389	200	4.801916		
Naphthalene	10	3.645298	20	4.050344	50	4.08639	100	4.18105	200	4.388605		
n-Propylbenzene	10	5.736137	20	5.728057	50	5.557824	100	5.66991	200	5.631053		
Styrene	10	1.022192	20	1.147616	50	1.215335	100	1.36181	200	1.362199		
1,1,1,2-Tetrachloroethane	10	0.409819	20	0.4363619	50	0.4296797	100	0.4552636	200	0.451461		
1,1,2,2-Tetrachloroethane	10	1.658823	20	1.67572	50	1.55644	100	1.525316	200	1.512583		
Tetrachloroethene (PCE)	10	0.4475002	20	0.458728	50	0.4333921	100	0.4678521	200	0.468137		
Toluene	10	2.27918	20	2.348898	50	2.193585	100	2.281718	200	2.237469		
1,2,3-Trichlorobenzene	10	1.036234	20	1.067952	50	1.038823	100	1.040333	200	1.078803		
1,2,4-Trichlorobenzene	10	1.05911	20	1.095291	50	1.072908	100	1.075275	200	1.09759		
1,1,1-Trichloroethane	10	2.019734	20	2.124789	50	1.989601	100	2.123597	200	2.130331		
1,1,2-Trichloroethane	10	0.4877737	20	0.5101671	50	0.4722353	100	0.4801892	200	0.4686095		
Trichloroethene (TCE)	10	1.281311	20	1.325077	50	1.255292	100	1.330793	200	1.364798		
Trichlorofluoromethane	10	0.35551	20	0.3355405	50	0.3682497	100	0.3520402	200	0.3356668		
1,2,3-Trichloropropane	10	0.5348473	20	0.5360824	50	0.497828	100	0.496329	200	0.4982992		

INITIAL CALIBRATION DATA (Continued)

5035A/8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2404
Instrument: VOA-GCMS10
Matrix:
Calibration Date: 10/24/19 13:40

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	1.139947	20	1.148007	50	1.080838	100	1.141179	200	1.139769		
1,2,4-Trimethylbenzene	10	3.739688	20	3.757664	50	3.620708	100	3.721132	200	3.695345		
1,3,5-Trimethylbenzene	10	3.668043	20	3.762482	50	3.628045	100	3.744308	200	3.780424		
Vinyl chloride	10	1.46312	20	1.537673	50	1.483016	100	1.427716	200	1.444146		
m,p-Xylene	20	1.692649	40	1.77691	100	1.715154	200	1.83315	400	1.806838		
o-Xylene	10	1.585402	20	1.703732	50	1.673018	100	1.789868	200	1.746158		
Xylenes, total	30	1.656899	60	1.752517	150	1.701109	300	1.818722	600	1.786612		
trans-1,4-Dichloro-2-butene	10	0.1997148	20	0.218955	50	0.2227853	100	0.2280774	200	0.2279923		
1,4-Difluorobenzene (Surr)	50	3.060766	50	3.037965	50	3.082637	50	3.081134	50	3.150953		
Toluene-d8 (Surr)	50	1.399	50	1.384472	50	1.399445	50	1.396945	50	1.379057		
4-Bromofluorobenzene (Surr)	50	0.7404932	50	0.7164049	50	0.7152718	50	0.6951936	50	0.6901251		

SECOND-SOURCE CALIBRATION VERIFICATION

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS10	Calibration:	A9J2404
Lab File ID:	VJ19102338.D		
Sequence:	9J23072	Inject Date:	10/24/19
Lab Sample ID:	9J23072-ICV1	Inject Time:	05:00

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acetone	40.0	41.3	3.3	70 - 130
Acrylonitrile	20.0	20.9	4.4	70 - 130
Benzene	20.0	19.9	-0.5	70 - 130
Bromobenzene	20.0	21.5	7.7	70 - 130
Bromochloromethane	20.0	20.5	2.6	70 - 130
Bromodichloromethane	20.0	21.4	7.0	70 - 130
Bromoform	20.0	19.7	-1.4	70 - 130
Bromomethane	20.0	25.7	28.7	70 - 130
2-Butanone (MEK)	40.0	38.0	-5.0	70 - 130
n-Butylbenzene	20.0	22.4	12.0	70 - 130
sec-Butylbenzene	20.0	22.6	13.0	70 - 130
tert-Butylbenzene	20.0	22.3	11.3	70 - 130
Carbon disulfide	20.0	18.1	-9.4	70 - 130
Carbon tetrachloride	20.0	21.5	7.7	70 - 130
Chlorobenzene	20.0	20.8	4.1	70 - 130
Chloroethane	20.0	18.1	-9.7	70 - 130
Chloroform	20.0	21.4	6.9	70 - 130
Chloromethane	20.0	21.9	9.5	70 - 130
2-Chlorotoluene	20.0	21.8	9.1	70 - 130
4-Chlorotoluene	20.0	22.0	10.0	70 - 130
Dibromochloromethane	20.0	21.6	8.0	70 - 130
1,2-Dibromo-3-chloropropane	20.0	19.7	-1.6	70 - 130
1,2-Dibromoethane (EDB)	20.0	22.1	10.3	70 - 130
Dibromomethane	20.0	20.8	4.2	70 - 130
1,2-Dichlorobenzene	20.0	22.1	10.7	70 - 130
1,3-Dichlorobenzene	20.0	21.7	8.5	70 - 130
1,4-Dichlorobenzene	20.0	20.6	3.2	70 - 130
Dichlorodifluoromethane	20.0	24.2	21.1	70 - 130
1,1-Dichloroethane	20.0	21.5	7.7	70 - 130
1,2-Dichloroethane (EDC)	20.0	20.8	3.9	70 - 130
1,1-Dichloroethene	20.0	18.9	-5.5	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 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS10	Calibration:	A9J2404
Lab File ID:	VJ19102338.D		
Sequence:	9J23072	Inject Date:	10/24/19
Lab Sample ID:	9J23072-ICV1	Inject Time:	05:00

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
cis-1,2-Dichloroethene	20.0	20.2	1.1	70 - 130
trans-1,2-Dichloroethene	20.0	20.8	4.1	70 - 130
1,2-Dichloropropane	20.0	20.5	2.6	70 - 130
1,3-Dichloropropane	20.0	21.4	6.9	70 - 130
2,2-Dichloropropane	20.0	18.2	-9.2	70 - 130
1,1-Dichloropropene	20.0	20.2	0.9	70 - 130
cis-1,3-Dichloropropene	20.0	21.2	6.0	70 - 130
trans-1,3-Dichloropropene	20.0	22.8	13.9	70 - 130
Ethylbenzene	20.0	21.7	8.3	70 - 130
Hexachlorobutadiene	20.0	23.1	15.6	70 - 130
2-Hexanone	40.0	42.2	5.5	70 - 130
Isopropylbenzene	20.0	22.7	13.4	70 - 130
4-Isopropyltoluene	20.0	23.5	17.3	70 - 130
Methylene chloride	20.0	21.8	9.1	70 - 130
4-Methyl-2-pentanone (MiBK)	40.0	42.8	6.9	70 - 130
Methyl tert-butyl ether (MTBE)	20.0	20.4	2.1	70 - 130
Naphthalene	20.0	22.6	12.8	70 - 130
n-Propylbenzene	20.0	21.6	7.9	70 - 130
Styrene	20.0	19.4	-2.8	70 - 130
1,1,1,2-Tetrachloroethane	20.0	22.0	10.1	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.4	7.0	70 - 130
Tetrachloroethene (PCE)	20.0	21.8	9.2	70 - 130
Toluene	20.0	20.2	1.1	70 - 130
1,2,3-Trichlorobenzene	20.0	23.1	15.5	70 - 130
1,2,4-Trichlorobenzene	20.0	22.7	13.4	70 - 130
1,1,1-Trichloroethane	20.0	21.0	4.9	70 - 130
1,1,2-Trichloroethane	20.0	21.9	9.3	70 - 130
Trichloroethene (TCE)	20.0	21.7	8.7	70 - 130
Trichlorofluoromethane	20.0	19.8	-0.8	70 - 130
1,2,3-Trichloropropane	20.0	21.8	9.0	70 - 130
1,2,4-Trimethylbenzene	20.0	23.2	16.1	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 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS10	Calibration:	A9J2404
Lab File ID:	VJ19102338.D		
Sequence:	9J23072	Inject Date:	10/24/19
Lab Sample ID:	9J23072-ICV1	Inject Time:	05:00

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
1,3,5-Trimethylbenzene	20.0	23.5	17.3	70 - 130
Vinyl chloride	20.0	22.5	12.7	70 - 130
m,p-Xylene	40.0	44.4	10.9	70 - 130
o-Xylene	20.0	22.4	12.2	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 - 3. Riverbank Angled Borin
Sequence:	9J23072	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9J23072-ICV1)				Lab File ID: VJ19102338.D		Analyzed: 10/24/19 05:00		
1,4-Difluorobenzene (Surr)	50.0	101	70 - 130	6.655	6.655	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	101	70 - 130	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	100	70 - 130	10.883	10.883	0.0000	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

5035A/8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K13043	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (9110745-BS1)			Lab File ID: VJ19111303.D		Analyzed: 11/13/19 10:47			
1,4-Difluorobenzene (Surr)	50.0	96	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	101	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.877	10.883	-0.0060	+/-1.0	
Blank (9110745-BLK1)			Lab File ID: VJ19111305.D		Analyzed: 11/13/19 11:41			
1,4-Difluorobenzene (Surr)	50.0	96	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	103	80 - 120	8.164	8.17	-0.0060	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	96	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: VJ19111325.D		Analyzed: 11/13/19 20:41			
1,4-Difluorobenzene (Surr)	50.0	101	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	97	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-140RAB-10-12.7-191108 (A9K0332-05)			Lab File ID: VJ19111326.D		Analyzed: 11/13/19 21:07			
1,4-Difluorobenzene (Surr)	50.0	100	80 - 120	6.655	6.655	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: VJ19111327.D		Analyzed: 11/13/19 21:34			
1,4-Difluorobenzene (Surr)	50.0	99	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	80 - 120	10.877	10.883	-0.0060	+/-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 - 3. Riverbank Angled Borin
Sequence: 9K14020
Instrument: VOA-GCMS10
Matrix: Soil
Calibration: A9J2404

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (9110788-BS1)				Lab File ID: VJ19111403.D		Analyzed: 11/14/19 10:41		
1,4-Difluorobenzene (Surr)	50.0	99	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.164	8.17	-0.0060	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	100	80 - 120	10.877	10.883	-0.0060	+/-1.0	
Blank (9110788-BLK1)				Lab File ID: VJ19111405.D		Analyzed: 11/14/19 11:34		
1,4-Difluorobenzene (Surr)	50.0	98	80 - 120	6.655	6.655	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-143RAB-00-10-191111 (A9K0332-08)				Lab File ID: VJ19111407.D		Analyzed: 11/14/19 12:28		
1,4-Difluorobenzene (Surr)	50.0	97	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.877	10.883	-0.0060	+/-1.0	
Duplicate (9110788-DUP1)				Lab File ID: VJ19111408.D		Analyzed: 11/14/19 12:55		
1,4-Difluorobenzene (Surr)	50.0	96	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-143RAB-10-20-191112 (A9K0332-09)				Lab File ID: VJ19111409.D		Analyzed: 11/14/19 13:22		
1,4-Difluorobenzene (Surr)	50.0	97	80 - 120	6.649	6.655	-0.0060	+/-1.0	
Toluene-d8 (Surr)	50.0	101	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-143RAB-20-31.1-191111 (A9K0332-10)				Lab File ID: VJ19111410.D		Analyzed: 11/14/19 13:49		
1,4-Difluorobenzene (Surr)	50.0	95	80 - 120	6.655	6.655	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	101	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	80 - 120	10.877	10.883	-0.0060	+/-1.0	
PDI-141RAB-10-17.7-191107 (A9K0332-07)				Lab File ID: VJ19111411.D		Analyzed: 11/14/19 14:16		
1,4-Difluorobenzene (Surr)	50.0	96	80 - 120	6.655	6.655	0.0000	+/-1.0	
Toluene-d8 (Surr)	50.0	98	80 - 120	8.17	8.17	0.0000	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	80 - 120	10.877	10.883	-0.0060	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K13043	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (9110745-BS1)			Lab File ID: VJ19111303.D			Analyzed: 11/13/19 10:47			
Pentafluorobenzene (ISTD)	117373	6.089	117373	6.089	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	309319	9.806	309319	9.806	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	130775	11.765	130775	11.765	100	50 - 200	0.0000	+/-0.50	
Calibration Check (9K13043-CCV1)			Lab File ID: VJ19111303.D			Analyzed: 11/13/19 10:47			
Pentafluorobenzene (ISTD)	117373	6.089	94087	6.089	125	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	309319	9.806	252726	9.806	122	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	130775	11.765	111564	11.765	117	50 - 200	0.0000	+/-0.50	
Blank (9110745-BLK1)			Lab File ID: VJ19111305.D			Analyzed: 11/13/19 11:41			
Pentafluorobenzene (ISTD)	109880	6.089	117373	6.089	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	288450	9.806	309319	9.806	93	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	121422	11.765	130775	11.765	93	50 - 200	0.0000	+/-0.50	
Duplicate (9110745-DUP1)			Lab File ID: VJ19111309.D			Analyzed: 11/13/19 13:29			
Pentafluorobenzene (ISTD)	126454	6.089	117373	6.089	108	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	373337	9.806	309319	9.806	121	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	155904	11.765	130775	11.765	119	50 - 200	0.0000	+/-0.50	
Matrix Spike (9110745-MS1)			Lab File ID: VJ19111323.D			Analyzed: 11/13/19 19:47			
Pentafluorobenzene (ISTD)	145736	6.089	117373	6.089	124	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	399242	9.806	309319	9.806	129	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	164142	11.765	130775	11.765	126	50 - 200	0.0000	+/-0.50	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: VJ19111325.D			Analyzed: 11/13/19 20:41			
Pentafluorobenzene (ISTD)	122963	6.089	117373	6.089	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	341819	9.806	309319	9.806	111	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	148538	11.765	130775	11.765	114	50 - 200	0.0000	+/-0.50	
PDI-140RAB-10-12.7-191108 (A9K0332-05)			Lab File ID: VJ19111326.D			Analyzed: 11/13/19 21:07			
Pentafluorobenzene (ISTD)	128078	6.089	117373	6.089	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	354735	9.806	309319	9.806	115	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	151123	11.765	130775	11.765	116	50 - 200	0.0000	+/-0.50	
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: VJ19111327.D			Analyzed: 11/13/19 21:34			
Pentafluorobenzene (ISTD)	128339	6.089	117373	6.089	109	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	350482	9.806	309319	9.806	113	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	148503	11.765	130775	11.765	114	50 - 200	0.0000	+/-0.50	

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 - 3. Riverbank Angled Borin
Sequence:	9K14020	Instrument:	VOA-GCMS10
Matrix:	Soil	Calibration:	A9J2404

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (9110788-BS1)			Lab File ID: VJ19111403.D			Analyzed: 11/14/19 10:41			
Pentafluorobenzene (ISTD)	132852	6.089	132852	6.089	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	356702	9.806	356702	9.806	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	151124	11.765	151124	11.765	100	50 - 200	0.0000	+/-0.50	
Calibration Check (9K14020-CCV1)			Lab File ID: VJ19111403.D			Analyzed: 11/14/19 10:41			
Pentafluorobenzene (ISTD)	132852	6.089	94087	6.089	141	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	356702	9.806	252726	9.806	141	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	151124	11.765	111564	11.765	135	50 - 200	0.0000	+/-0.50	
Blank (9110788-BLK1)			Lab File ID: VJ19111405.D			Analyzed: 11/14/19 11:34			
Pentafluorobenzene (ISTD)	120512	6.089	132852	6.089	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	325895	9.806	356702	9.806	91	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	138933	11.765	151124	11.765	92	50 - 200	0.0000	+/-0.50	
PDI-143RAB-00-10-191111 (A9K0332-08)			Lab File ID: VJ19111407.D			Analyzed: 11/14/19 12:28			
Pentafluorobenzene (ISTD)	114620	6.089	132852	6.089	86	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	310552	9.806	356702	9.806	87	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	132086	11.765	151124	11.765	87	50 - 200	0.0000	+/-0.50	
Duplicate (9110788-DUP1)			Lab File ID: VJ19111408.D			Analyzed: 11/14/19 12:55			
Pentafluorobenzene (ISTD)	111574	6.089	132852	6.089	84	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	302872	9.806	356702	9.806	85	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	126354	11.765	151124	11.765	84	50 - 200	0.0000	+/-0.50	
PDI-143RAB-10-20-191112 (A9K0332-09)			Lab File ID: VJ19111409.D			Analyzed: 11/14/19 13:22			
Pentafluorobenzene (ISTD)	109599	6.089	132852	6.089	82	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	296077	9.806	356702	9.806	83	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	125496	11.765	151124	11.765	83	50 - 200	0.0000	+/-0.50	
PDI-143RAB-20-31.1-191111 (A9K0332-10)			Lab File ID: VJ19111410.D			Analyzed: 11/14/19 13:49			
Pentafluorobenzene (ISTD)	103565	6.089	132852	6.089	78	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	274558	9.806	356702	9.806	77	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	115552	11.765	151124	11.765	76	50 - 200	0.0000	+/-0.50	
PDI-141RAB-10-17.7-191107 (A9K0332-07)			Lab File ID: VJ19111411.D			Analyzed: 11/14/19 14:16			
Pentafluorobenzene (ISTD)	113971	6.089	132852	6.089	86	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	311668	9.806	356702	9.806	87	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	132461	11.765	151124	11.765	88	50 - 200	0.0000	+/-0.50	
Matrix Spike (9110788-MS1)			Lab File ID: VJ19111425.D			Analyzed: 11/14/19 20:34			
Pentafluorobenzene (ISTD)	140897	6.089	132852	6.089	106	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	401978	9.806	356702	9.806	113	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	173736	11.765	151124	11.765	115	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 - 3. Riverbank Angled Bori

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-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/08/19 11:40	0.00	2.00	11/13/19 20:41	5.38	14.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/08/19 12:15	0.00	2.00	11/13/19 21:07	5.37	14.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/07/19 15:15	0.00	2.00	11/13/19 21:34	6.26	14.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/07/19 16:45	0.00	2.00	11/14/19 14:16	6.90	14.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/11/19 12:30	0.00	2.00	11/14/19 12:28	3.00	14.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/12/19 14:05	0.00	2.00	11/14/19 13:22	1.97	14.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/11/19 15:30	0.00	2.00	11/14/19 13:49	2.93	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: EPA 8260C

ANALYSES DATA PACKAGE COVER PAGE

EPA 8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-FB-1911121146	A9K0332-01	WQ
PDI-RB-1911120944	A9K0332-02	WQ
PDI-TB-1911071515	A9K0332-03	WQ

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been autorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: 

Name: David G. Jack

Forms Created: 1/7/2020 3:49PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

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

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 3. Riverbank An

Batch Matrix: Water

Analyte	MDL	MRL	Units
Acetone	10.0	20.0	ug/L
Acrylonitrile	1.00	2.00	ug/L
Benzene	0.100	0.200	ug/L
Bromobenzene	0.250	0.500	ug/L
Bromochloromethane	0.500	1.00	ug/L
Bromodichloromethane	0.500	1.00	ug/L
Bromoform	0.500	1.00	ug/L
Bromomethane	5.00	5.00	ug/L
2-Butanone (MEK)	5.00	10.0	ug/L
n-Butylbenzene	0.500	1.00	ug/L
sec-Butylbenzene	0.500	1.00	ug/L
tert-Butylbenzene	0.500	1.00	ug/L
Carbon tetrachloride	0.500	1.00	ug/L
Chlorobenzene	0.250	0.500	ug/L
Chloroethane	5.00	5.00	ug/L
Chloroform	0.500	1.00	ug/L
Chloromethane	2.50	5.00	ug/L
2-Chlorotoluene	0.500	1.00	ug/L
4-Chlorotoluene	0.500	1.00	ug/L
Dibromochloromethane	0.500	1.00	ug/L
1,2-Dibromo-3-chloropropane	2.50	5.00	ug/L
1,2-Dibromoethane (EDB)	0.250	0.500	ug/L
Dibromomethane	0.500	1.00	ug/L
1,2-Dichlorobenzene	0.250	0.500	ug/L
1,3-Dichlorobenzene	0.250	0.500	ug/L
1,4-Dichlorobenzene	0.250	0.500	ug/L
Dichlorodifluoromethane	0.500	1.00	ug/L
1,1-Dichloroethane	0.200	0.400	ug/L
1,2-Dichloroethane (EDC)	0.200	0.400	ug/L
1,1-Dichloroethene	0.200	0.400	ug/L
cis-1,2-Dichloroethene	0.200	0.400	ug/L
trans-1,2-Dichloroethene	0.200	0.400	ug/L
1,2-Dichloropropane	0.250	0.500	ug/L
1,3-Dichloropropane	0.500	1.00	ug/L
2,2-Dichloropropane	0.500	1.00	ug/L
1,1-Dichloropropene	0.500	1.00	ug/L
trans-1,3-Dichloropropene	0.500	1.00	ug/L

METHOD DETECTION AND REPORTING LIMITS

EPA 8260C

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

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 3. Riverbank Ang

Batch Matrix: Water

Analyte	MDL	MRL	Units
Ethylbenzene	0.250	0.500	ug/L
Hexachlorobutadiene	2.50	5.00	ug/L
2-Hexanone	5.00	10.0	ug/L
Methylene chloride	1.50	3.00	ug/L
4-Methyl-2-pentanone (MiBK)	5.00	10.0	ug/L
Methyl tert-butyl ether (MTBE)	0.500	1.00	ug/L
Naphthalene	1.00	2.00	ug/L
n-Propylbenzene	0.250	0.500	ug/L
Styrene	0.500	1.00	ug/L
1,1,1,2-Tetrachloroethane	0.200	0.400	ug/L
1,1,2,2-Tetrachloroethane	0.250	0.500	ug/L
Tetrachloroethene (PCE)	0.200	0.400	ug/L
Toluene	0.500	1.00	ug/L
1,2,3-Trichlorobenzene	1.00	2.00	ug/L
1,2,4-Trichlorobenzene	1.00	2.00	ug/L
1,1,1-Trichloroethane	0.200	0.400	ug/L
1,1,2-Trichloroethane	0.250	0.500	ug/L
Trichloroethene (TCE)	0.200	0.400	ug/L
Trichlorofluoromethane	1.00	2.00	ug/L
1,2,3-Trichloropropane	0.500	1.00	ug/L
1,2,4-Trimethylbenzene	0.500	1.00	ug/L
1,3,5-Trimethylbenzene	0.500	1.00	ug/L
Vinyl chloride	0.200	0.400	ug/L
m,p-Xylene	0.500	1.00	ug/L
o-Xylene	0.250	0.500	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

PDI-FB-1911121146

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-01	File ID:	VI19111314.D
Sampled:	11/12/19 11:46	Prepared:	11/13/19 10:44	Analyzed:	11/13/19 14:30
		Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

Batch: 9110473 Sequence: 9K13033 Calibration: A9J2503 Instrument: VOA-GCMS9

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-43-2	Benzene	1	0.100	U
78-93-3	2-Butanone (MEK)	1	5.00	U
56-23-5	Carbon tetrachloride	1	0.500	U
108-90-7	Chlorobenzene	1	0.250	U
67-66-3	Chloroform	1	0.500	U
106-46-7	1,4-Dichlorobenzene	1	0.250	U
107-06-2	1,2-Dichloroethane (EDC)	1	0.200	U
75-35-4	1,1-Dichloroethene	1	0.200	U
156-59-2	cis-1,2-Dichloroethene	1	0.200	U
156-60-5	trans-1,2-Dichloroethene	1	0.200	U
100-41-4	Ethylbenzene	1	0.250	U
127-18-4	Tetrachloroethene (PCE)	1	0.200	U
79-01-6	Trichloroethene (TCE)	1	0.200	U
108-88-3	Toluene	1	0.500	U
75-01-4	Vinyl chloride	1	0.200	U
179601-23-1	m,p-Xylene	1	0.500	U
95-47-6	o-Xylene	1	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	53.6	107	80 - 120	
Toluene-d8 (Surr)	50.0	49.9	100	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	50.9	102	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	110650	6.217	107283	6.217	
Chlorobenzene-d5 (ISTD)	314007	9.916	309137	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	141567	11.85	147766	11.85	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

PDI-RB-1911120944

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-02	File ID:	VI19111315.D
Sampled:	11/12/19 09:44	Prepared:	11/13/19 10:44	Analyzed:	11/13/19 14:57
		Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

Batch: 9110473 Sequence: 9K13033 Calibration: A9J2503 Instrument: VOA-GCMS9

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-43-2	Benzene	1	0.100	U
78-93-3	2-Butanone (MEK)	1	5.00	U
56-23-5	Carbon tetrachloride	1	0.500	U
108-90-7	Chlorobenzene	1	0.250	U
67-66-3	Chloroform	1	0.500	U
106-46-7	1,4-Dichlorobenzene	1	0.250	U
107-06-2	1,2-Dichloroethane (EDC)	1	0.200	U
75-35-4	1,1-Dichloroethene	1	0.200	U
156-59-2	cis-1,2-Dichloroethene	1	0.200	U
156-60-5	trans-1,2-Dichloroethene	1	0.200	U
100-41-4	Ethylbenzene	1	0.250	U
127-18-4	Tetrachloroethene (PCE)	1	0.200	U
79-01-6	Trichloroethene (TCE)	1	0.200	U
108-88-3	Toluene	1	0.500	U
75-01-4	Vinyl chloride	1	0.200	U
179601-23-1	m,p-Xylene	1	0.500	U
95-47-6	o-Xylene	1	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	53.9	108	80 - 120	
Toluene-d8 (Surr)	50.0	50.9	102	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	51.5	103	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	105580	6.217	107283	6.217	
Chlorobenzene-d5 (ISTD)	299080	9.916	309137	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	133161	11.85	147766	11.85	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260C

PDI-TB-1911071515

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-03	File ID:	VI19111316.D
Sampled:	11/07/19 15:15	Prepared:	11/13/19 10:44	Analyzed:	11/13/19 15:24
		Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

Batch: 9110473 Sequence: 9K13033 Calibration: A9J2503 Instrument: VOA-GCMS9

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-43-2	Benzene	1	0.100	U
78-93-3	2-Butanone (MEK)	1	5.00	U
56-23-5	Carbon tetrachloride	1	0.500	U
108-90-7	Chlorobenzene	1	0.250	U
67-66-3	Chloroform	1	0.500	U
106-46-7	1,4-Dichlorobenzene	1	0.250	U
107-06-2	1,2-Dichloroethane (EDC)	1	0.200	U
75-35-4	1,1-Dichloroethene	1	0.200	U
156-59-2	cis-1,2-Dichloroethene	1	0.200	U
156-60-5	trans-1,2-Dichloroethene	1	0.200	U
100-41-4	Ethylbenzene	1	0.250	U
127-18-4	Tetrachloroethene (PCE)	1	0.200	U
79-01-6	Trichloroethene (TCE)	1	0.200	U
108-88-3	Toluene	1	0.500	U
75-01-4	Vinyl chloride	1	0.200	U
179601-23-1	m,p-Xylene	1	0.500	U
95-47-6	o-Xylene	1	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	54.4	109	80 - 120	
Toluene-d8 (Surr)	50.0	51.1	102	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	50.8	102	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	103486	6.217	107283	6.217	
Chlorobenzene-d5 (ISTD)	292341	9.91	309137	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	132149	11.85	147766	11.85	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110473 Batch Matrix: Water
Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110473-BLK1	VI19111306.D	11/13/19 09:00	
LCS	9110473-BS1	VI19111304.D	11/13/19 09:00	
PDI-FB-1911121146	A9K0332-01	VI19111314.D	11/13/19 10:44	
PDI-RB-1911120944	A9K0332-02	VI19111315.D	11/13/19 10:44	
PDI-TB-1911071515	A9K0332-03	VI19111316.D	11/13/19 10:44	

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

METHOD BLANK DATA SHEET

EPA 8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water	Laboratory ID:	9110473-BLK1	File ID:	VI19111306.D
Prepared:	11/13/19 09:00	Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL
Analyzed:	11/13/19 10:55	Instrument:	VOA-GCMS9		
Batch:	9110473	Sequence:	9K13033	Calibration:	A9J2503

CAS NO.	COMPOUND	CONC. (ug/L)	Q
71-43-2	Benzene	0.100	U
78-93-3	2-Butanone (MEK)	5.00	U
56-23-5	Carbon tetrachloride	0.500	U
108-90-7	Chlorobenzene	0.250	U
67-66-3	Chloroform	0.500	U
106-46-7	1,4-Dichlorobenzene	0.250	U
107-06-2	1,2-Dichloroethane (EDC)	0.200	U
75-35-4	1,1-Dichloroethene	0.200	U
156-59-2	cis-1,2-Dichloroethene	0.200	U
156-60-5	trans-1,2-Dichloroethene	0.200	U
100-41-4	Ethylbenzene	0.250	U
127-18-4	Tetrachloroethene (PCE)	0.200	U
79-01-6	Trichloroethene (TCE)	0.200	U
108-88-3	Toluene	0.500	U
75-01-4	Vinyl chloride	0.200	U
179601-23-1	m,p-Xylene	0.500	U
95-47-6	o-Xylene	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	53.4	107	80 - 120	
Toluene-d8 (Surr)	50.0	50.4	101	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	51.4	103	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	105869	6.217	107283	6.217	
Chlorobenzene-d5 (ISTD)	297900	9.91	309137	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	131750	11.85	147766	11.85	

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water		
Batch:	9110473	Laboratory ID:	9110473-BS1
Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Benzene	20.0	20.7	104	80 - 120
2-Butanone (MEK)	40.0	39.8	99	80 - 120
Carbon tetrachloride	20.0	22.0	110	80 - 120
Chlorobenzene	20.0	20.3	101	80 - 120
Chloroform	20.0	21.0	105	80 - 120
1,4-Dichlorobenzene	20.0	20.2	101	80 - 120
1,2-Dichloroethane (EDC)	20.0	19.2	96	80 - 120
1,1-Dichloroethene	20.0	19.3	96	80 - 120
cis-1,2-Dichloroethene	20.0	20.0	100	80 - 120
trans-1,2-Dichloroethene	20.0	20.6	103	80 - 120
Ethylbenzene	20.0	19.1	96	80 - 120
Tetrachloroethene (PCE)	20.0	20.6	103	80 - 120
Trichloroethene (TCE)	20.0	21.8	109	80 - 120
Toluene	20.0	18.9	95	80 - 120
Vinyl chloride	20.0	19.7	98	80 - 120
m,p-Xylene	40.0	38.5	96	80 - 120
o-Xylene	20.0	18.9	94	80 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9J24043	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J24043-TUN1	VI19102415.D	10/24/19 15:01
Initial Cal Blank	9J24043-ICB1	VI19102416.D	10/24/19 15:28
Cal Standard	9J24043-CAL1	VI19102417.D	10/24/19 15:55
Cal Standard	9J24043-CAL2	VI19102418.D	10/24/19 16:21
Cal Standard	9J24043-CAL3	VI19102419.D	10/24/19 16:48
Cal Standard	9J24043-CAL4	VI19102420.D	10/24/19 17:15
Cal Standard	9J24043-CAL5	VI19102421.D	10/24/19 17:42
Cal Standard	9J24043-CAL6	VI19102422.D	10/24/19 18:09
Cal Standard	9J24043-CAL7	VI19102423.D	10/24/19 18:36
Cal Standard	9J24043-CAL8	VI19102424.D	10/24/19 19:03
Cal Standard	9J24043-CAL9	VI19102425.D	10/24/19 19:30
Cal Standard	9J24043-CALA	VI19102427.D	10/24/19 20:24
Cal Standard	9J24043-CALB	VI19102429.D	10/24/19 21:17
Initial Cal Check	9J24043-ICV1	VI19102432.D	10/24/19 22:38
Initial Cal Check	9J24043-ICV2	VI19102433.D	10/24/19 23:05

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K13033	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K13033-TUN1	VI19111303.D	11/13/19 09:34
Calibration Check	9K13033-CCV1	VI19111304.D	11/13/19 10:01
Blank	9110473-BLK1	VI19111306.D	11/13/19 10:55
PDI-FB-1911121146	A9K0332-01	VI19111314.D	11/13/19 14:30
PDI-RB-1911120944	A9K0332-02	VI19111315.D	11/13/19 14:57
PDI-TB-1911071515	A9K0332-03	VI19111316.D	11/13/19 15:24

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.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Lab File ID:	VI19102415.D	Injection Date:	10/24/19
Instrument ID:	VOA-GCMS9	Injection Time:	15:01
Sequence:	9J24043	Lab Sample ID:	9J24043-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	117.89	PASS
m/z 96	5 - 9% of m/z 95	6.78	PASS
m/z 173	Less than 2% of m/z 174	0.39	PASS
m/z 174	50 - 200% of m/z 95	84.82	PASS
m/z 175	5 - 9% of m/z 174	7.17	PASS
m/z 176	95 - 105% of m/z 174	96.98	PASS
m/z 177	5 - 10% of m/z 176	6.50	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Lab File ID:	VI19111303.D	Injection Date:	11/13/19
Instrument ID:	VOA-GCMS9	Injection Time:	09:34
Sequence:	9K13033	Lab Sample ID:	9K13033-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	110.59	PASS
m/z 96	5 - 9% of m/z 95	6.55	PASS
m/z 173	Less than 2% of m/z 174	0.15	PASS
m/z 174	50 - 200% of m/z 95	90.43	PASS
m/z 175	5 - 9% of m/z 174	7.43	PASS
m/z 176	95 - 105% of m/z 174	96.05	PASS
m/z 177	5 - 10% of m/z 176	6.65	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2503 Date: 10/25/19 11:16 Instrument: VOA-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.4381557	Ave	8.726481	3.941	0.1038258			20	
Acrylonitrile	0.4849865	Ave	11.08293	4.750125	0.1281226			20	
Benzene	3.820688	Ave	4.855279	6.122454	7.160173E-02			20	
Bromobenzene	0.7749402	Ave	14.31895	10.05382	33.16625			20	
Bromochloromethane	0.6103182	Ave	13.73188	5.448	7.661655E-02			20	
Bromodichloromethane	1.098802	Ave	11.01114	7.379667	2.037338E-02			20	
Bromoform	0.182038	XXX	24.41413	10.536	1.629623E-03				
Bromomethane	0.6401472	Ave	11.51384	2.36225	0.232942			20	
2-Butanone (MEK)	0.6946318	Ave	5.120943	5.8565	0.1061664			20	
n-Butylbenzene	1.881239	Ave	14.34203	10.95	33.16625			20	
sec-Butylbenzene	2.797882	Ave	6.314986	11.619	1.773395E-02			20	
tert-Butylbenzene	1.267951	Ave	6.052616	11.4814	2.127617E-02			20	
Carbon disulfide	2.187166	Ave	5.635077	3.2495	0.1633375			20	
Carbon tetrachloride	0.958096	Ave	12.51546	5.66	5.110175E-02			20	
Chlorobenzene	0.9385266	Ave	6.796258	9.928546	1.897513E-02			20	
Chloroethane	0.4990649	Ave	11.22963	2.5024	0.5517427			20	
Chloroform	1.575216	Ave	8.981395	5.5286	0.067176			20	
Chloromethane	1.083839	Ave	14.44663	1.8957	0.2651835			20	
2-Chlorotoluene	0.7160324	Ave	4.343511	11.20522	7.542282E-03			20	
4-Chlorotoluene	2.045294	Ave	4.371039	11.3384	2.743013E-02			20	
Dibromochloromethane	0.2635059	Ave	14.58007	9.187714	2.999687E-02			20	
1,2-Dibromo-3-chloropropane	0.213378	Ave	16.5588	12.799	1.549583E-02			20	
1,2-Dibromoethane (EDB)	0.3548813	Ave	11.70069	9.423667	2.718156E-02			20	
Dibromomethane	0.613177	Ave	13.36088	7.197333	0.035724			20	
1,2-Dichlorobenzene	1.311055	Ave	6.282742	12.1838	9.168253E-03			20	
1,3-Dichlorobenzene	1.350049	Ave	5.926199	11.7975	1.944351E-02			20	
1,4-Dichlorobenzene	1.407811	Ave	7.702776	10.78391	33.16626			20	
Dichlorodifluoromethane	0.8173215	Ave	13.91607	1.68	0.3532017			20	
1,1-Dichloroethane	1.611254	Ave	4.087724	4.684	6.282645E-02			20	
1,2-Dichloroethane (EDC)	1.251571	Ave	4.756875	6.338556	5.089469E-02			20	
1,1-Dichloroethene	1.185277	Ave	4.829149	3.232	0.1325109			20	
cis-1,2-Dichloroethene	1.243807	Ave	4.983881	5.243	6.806309E-02			20	
trans-1,2-Dichloroethene	1.160081	Ave	12.53727	4.0402	0.1157964			20	

INITIAL CALIBRATION DATA (Summary)

EPA 8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2503 Date: 10/25/19 11:16 Instrument: VOA-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,2-Dichloropropane	0.9529922	Ave	6.181257	7.309333	4.176568E-02			20	
1,3-Dichloropropane	0.5622635	Ave	6.984495	9.289	1.625701E-02			20	
2,2-Dichloropropane	1.051426	Ave	5.306826	5.351	5.789193E-02			20	
1,1-Dichloropropene	1.276879	Ave	5.297634	5.864	7.149465E-02			20	
cis-1,3-Dichloropropene	0.4943363	Ave	9.88405	8.090778	1.687355E-02			20	
trans-1,3-Dichloropropene	0.4384672	Ave	14.34003	8.8375	2.503515E-02			20	
Ethylbenzene	1.541948	Ave	3.605451	9.952	2.233646E-03			20	
Hexachlorobutadiene	0.183193	Ave	7.660033	13.30475	1.768887E-02			20	
2-Hexanone	0.3270741	Ave	8.407905	9.655333	4.249128E-02			20	
Isopropylbenzene	1.373353	Ave	9.366214	10.7316	1.248468E-02			20	
4-Isopropyltoluene	2.213644	Ave	12.8808	11.72809	1.621363E-02			20	
Methylene chloride	2.303504	XXX	106.1101	2.111364	95.74276				
4-Methyl-2-pentanone (MiBK)	0.4463673	Ave	9.088647	8.7997	0.0581443			20	
Methyl tert-butyl ether (MTBE)	2.696465	Ave	4.583572	4.167666	4.929023E-02			20	
Naphthalene	2.402403	Ave	14.83266	13.62756	2.239306E-02			20	
n-Propylbenzene	3.322886	Ave	4.437601	11.07445	2.757102E-02			20	
Styrene	0.9048037	Ave	11.92922	10.514	2.753921E-02			20	
1,1,1,2-Tetrachloroethane	0.2737028	Ave	14.89731	9.988889	9.127631E-03			20	
1,1,2,2-Tetrachloroethane	0.6542208	Ave	7.065101	11.1386	1.610871E-02			20	
Tetrachloroethene (PCE)	0.3422483	Ave	13.47971	8.7972	4.042701E-02			20	
1,2,3-Trichlorobenzene	0.7173915	Ave	14.15743	13.785	1.406697E-02			20	
1,2,4-Trichlorobenzene	0.7556	Ave	12.49162	13.34567	1.673266E-02			20	
1,1,1-Trichloroethane	1.329679	Ave	7.371644	5.732667	5.450977E-02			20	
1,1,2-Trichloroethane	0.3259471	Ave	10.621	9.0054	3.795045E-02			20	
Trichloroethene (TCE)	0.9844716	Ave	10.55293	6.743	6.329732E-02			20	
Trichlorofluoromethane	1.229565	Ave	5.615088	2.664667	0.2626576			20	
1,2,3-Trichloropropane	0.3181506	Ave	9.473753	11.248	0.0139849			20	
1,2,4-Trimethylbenzene	2.284364	Ave	8.297743	11.53618	0.0334269			20	
1,3,5-Trimethylbenzene	2.270723	Ave	6.723342	11.23	1.456535E-02			20	
Toluene	1.470311	Ave	3.413471	8.356909	3.263244E-02			20	
Vinyl chloride	1.085853	Ave	7.669225	1.9992	0.2472262			20	
m,p-Xylene	1.135467	Ave	6.122052	10.086	1.858078E-02			20	
o-Xylene	1.125697	Ave	7.834778	10.46518	2.767706E-02			20	

INITIAL CALIBRATION DATA (Summary)

EPA 8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2503 Date: 10/25/19 11:16 Instrument: VOA-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Difluorobenzene (Surr)	3.158849	Ave	0.8371465	6.780727	4.460955E-02			20	
Toluene-d8 (Surr)	1.312366	Ave	1.829616	8.297273	1.899629E-02			20	
4-Bromofluorobenzene (Surr)	0.8078842	Ave	3.581646	10.974	1.572481E-02			20	

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

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2503

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS9

Calibration Date: 10/25/19 11:16

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	~~1.27191~~	0.8	~~0.9019065~~	2	~~0.6333859~~	4	0.5103123	10	0.4663994
Acrylonitrile	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.3774463	2	0.439796	5	0.4887848
Benzene	0.1	3.949114	0.2	3.449838	0.4	3.773943	1	3.582293	2	4.047071	5	3.909918
Bromobenzene	0.1	0.4438685	0.2	0.7998756	0.4	0.813191	1	0.7709458	2	0.829978	5	0.8194271
Bromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.4364424	1	0.5118792	2	0.6045221	5	0.6460679
Bromodichloromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.8929768	1	0.9733461	2	1.056278	5	1.082875
Bromoform	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.127897	2	0.1486966	5	0.1561683
Bromomethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0.9365094~~	1	0.7596322	2	0.7085477	5	0.7010179
2-Butanone (MEK)	0.2	~~0~~	0.4	~~0~~	0.8	~~0~~	2	0.6247684	4	0.7043731	10	0.704351
n-Butylbenzene	0.1	1.356663	0.2	1.490509	0.4	1.735117	1	1.735322	2	1.903182	5	2.011097
sec-Butylbenzene	0.1	~~0~~	0.2	2.408885	0.4	2.77879	1	2.587183	2	2.821997	5	2.836939
tert-Butylbenzene	0.1	~~0~~	0.2	1.114641	0.4	1.159843	1	1.233166	2	1.32449	5	1.325973
Carbon disulfide	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	1.97039	2	2.201688	5	2.167372
Carbon tetrachloride	0.1	~~0~~	0.2	~~0~~	0.4	~~0.6898245~~	1	0.7716967	2	0.9028342	5	0.8969462
Chlorobenzene	0.1	0.7802924	0.2	0.8622852	0.4	0.9452326	1	0.9282586	2	0.9824385	5	0.9841268
Chloroethane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	~~0~~	2	0.5731564	5	0.5313936
Chloroform	0.1	~~0~~	0.2	1.278444	0.4	1.442157	1	1.439553	2	1.642071	5	1.638231
Chloromethane	0.1	~~2.062841~~	0.2	1.457034	0.4	1.268027	1	1.037116	2	1.070268	5	1.024232
2-Chlorotoluene	0.1	~~0~~	0.2	~~0~~	0.4	0.6682106	1	0.6632912	2	0.747231	5	0.7155799
4-Chlorotoluene	0.1	~~0~~	0.2	1.888595	0.4	2.024148	1	1.896457	2	2.098766	5	2.131864
Dibromochloromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.2144395	1	0.2170227	2	0.2550763	5	0.2669179
1,2-Dibromo-3-chloropropane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.155231	2	0.1801808	5	0.1923253
1,2-Dibromoethane (EDB)	0.1	~~0~~	0.2	~~0.2302178~~	0.4	0.2611491	1	0.3101703	2	0.3777447	5	0.3752701
Dibromomethane	0.1	~~0~~	0.2	~~0~~	0.4	0.4219315	1	0.5536741	2	0.6216716	5	0.6326457
1,2-Dichlorobenzene	0.1	~~0~~	0.2	1.155376	0.4	1.1933	1	1.267546	2	1.4067	5	1.371939
1,3-Dichlorobenzene	0.1	~~0~~	0.2	1.164634	0.4	1.312258	1	1.267546	2	1.382342	5	1.389706
1,4-Dichlorobenzene	0.1	1.113251	0.2	1.342384	0.4	1.453521	1	1.450559	2	1.531358	5	1.43969
Dichlorodifluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	0.6273162	1	0.6820747	2	0.8419081	5	0.8116386
1,1-Dichloroethane	0.1	~~0~~	0.2	~~0~~	0.4	1.47676	1	1.582172	2	1.630788	5	1.649131
1,2-Dichloroethane (EDC)	0.1	~~0~~	0.2	~~0~~	0.4	1.197705	1	1.130185	2	1.292084	5	1.293487
1,1-Dichloroethene	0.1	~~0~~	0.2	~~0~~	0.4	1.158637	1	1.066846	2	1.187607	5	1.199982

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2503

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS9

Calibration Date: 10/25/19 11:16

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	~~0~~	0.4	1.125151	1	1.18232	2	1.256431	5	1.257454
trans-1,2-Dichloroethene	0.1	~~0~~	0.2	0.7840541	0.4	1.074921	1	1.144834	2	1.241764	5	1.232772
1,2-Dichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	0.8896281	1	0.8376206	2	0.9867768	5	0.9816233
1,3-Dichloropropane	0.1	~~0~~	0.2	0.4686871	0.4	0.5320649	1	0.5407066	2	0.5784137	5	0.5844158
2,2-Dichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	0.9521365	1	0.9979059	2	1.077715	5	1.062337
1,1-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	1.170916	1	1.184475	2	1.291633	5	1.299252
cis-1,3-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	0.4305776	1	0.4290582	2	0.4683396	5	0.4737993
trans-1,3-Dichloropropene	0.1	~~0~~	0.2	~~0~~	0.4	~~0.259026~~	1	0.3413804	2	0.3778287	5	0.4039065
Ethylbenzene	0.1	1.531324	0.2	1.514156	0.4	1.521884	1	1.409441	2	1.608459	5	1.560351
Hexachlorobutadiene	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.1538419	2	0.1724793	5	0.1914088
n-Hexane	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.1538223	2	0.1599874	5	0.1653905
2-Hexanone	0.2	~~0~~	0.4	~~0~~	0.8	0.2857779	2	0.2836256	4	0.3194751	10	0.3283863
Isopropylbenzene	0.1	~~0~~	0.2	1.111482	0.4	1.302349	1	1.232637	2	1.370678	5	1.391896
4-Isopropyltoluene	0.1	1.72178	0.2	1.701587	0.4	2.078051	1	2.113503	2	2.242947	5	2.338924
Methylene chloride	0.1	8.716474	0.2	4.79362	0.4	2.953521	1	1.697216	2	1.387986	5	1.130439
4-Methyl-2-pentanone (MiBK)	0.2	~~0~~	0.4	0.3671932	0.8	0.4059489	2	0.4055702	4	0.463008	10	0.4692208
Methyl tert-butyl ether (MTBE)	0.1	~~0~~	0.2	~~0~~	0.4	2.577354	1	2.494334	2	2.698123	5	2.694172
Naphthalene	0.1	~~0~~	0.2	~~1.710845~~	0.4	1.867086	1	1.856174	2	2.278947	5	2.318902
n-Propylbenzene	0.1	3.124978	0.2	3.053229	0.4	3.293656	1	3.18102	2	3.455317	5	3.384023
Styrene	0.1	~~0~~	0.2	~~0.6221656~~	0.4	0.7031919	1	0.7847566	2	0.8700975	5	0.8903592
1,1,1,2-Tetrachloroethane	0.1	~~0~~	0.2	~~0.1064448~~	0.4	0.1995774	1	0.237454	2	0.2506264	5	0.2657525
1,1,2,2-Tetrachloroethane	0.1	~~0~~	0.2	0.564727	0.4	0.6236013	1	0.6514839	2	0.7178576	5	0.6939363
Tetrachloroethene (PCE)	0.1	~~0~~	0.2	0.2203159	0.4	0.334186	1	0.3207882	2	0.363807	5	0.361185
Tetrahydrofuran	0.1	~~0~~	0.2	~~0~~	0.4	~~0~~	1	0.4071766	2	0.4614586	5	0.460499
1,2,3-Trichlorobenzene	0.1	~~0~~	0.2	0.4832581	0.4	0.6384711	1	0.6525257	2	0.7294995	5	0.733346
1,2,4-Trichlorobenzene	0.1	~~0~~	0.2	~~0.4517815~~	0.4	0.571557	1	0.6365512	2	0.7241263	5	0.7835424
1,1,1-Trichloroethane	0.1	~~0~~	0.2	~~0~~	0.4	1.129616	1	1.250829	2	1.339697	5	1.347356
1,1,2-Trichloroethane	0.1	~~0~~	0.2	0.2376442	0.4	0.3044617	1	0.3127443	2	0.3470986	5	0.3441696
Trichloroethene (TCE)	0.1	~~0~~	0.2	0.8101892	0.4	0.8014466	1	0.9332747	2	1.032584	5	1.02153
Trichlorofluoromethane	0.1	~~0~~	0.2	~~0~~	0.4	1.06934	1	1.199555	2	1.278771	5	1.282407
1,2,3-Trichloropropane	0.1	~~0~~	0.2	~~0~~	0.4	0.2518569	1	0.308031	2	0.3465705	5	0.3427733

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2503

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: VOA-GCMS9

Calibration Date: 10/25/19 11:16

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	1	0.739812	2	0.8581551	5	0.8597423
1,2,4-Trimethylbenzene	0.1	1.918657	0.2	1.973767	0.4	2.218385	1	2.194417	2	2.323724	5	2.412245
1,3,5-Trimethylbenzene	0.1	1.990249	0.2	2.086712	0.4	2.127307	1	2.15205	2	2.344321	5	2.348653
Isobutyl alcohol	2.5	0	5	0	10	5.232844E-02	25	5.377317E-02	50	7.191985E-02	125	7.462391E-02
Toluene	0.1	1.589846	0.2	1.439067	0.4	1.488338	1	1.454325	2	1.498804	5	1.474176
Vinyl chloride	0.1	0	0.2	0.8842388	0.4	1.079386	1	1.012987	2	1.13503	5	1.139807
m,p-Xylene	0.2	1.111917	0.4	1.019064	0.8	1.103408	2	1.028726	4	1.137348	10	1.146239
o-Xylene	0.1	0.9509814	0.2	1.007512	0.4	1.106168	1	1.066613	2	1.142302	5	1.147321
trans-1,4-Dichloro-2-butene	0.1	0	0.2	0	0.4	0	1	0.1844019	2	0.2351664	5	0.2321581
Xylenes, total	0.3	1.058272	0.6	1.015214	1.2	1.104328	3	1.041355	6	1.139	15	1.1466
1,4-Difluorobenzene (Surr)	50	3.139024	50	3.131529	50	3.145975	50	3.159536	50	3.133965	50	3.188163
Toluene-d8 (Surr)	50	1.320931	50	1.332765	50	1.345328	50	1.320856	50	1.326656	50	1.321953
4-Bromofluorobenzene (Surr)	50	0.831108	50	0.83824	50	0.8349678	50	0.8234743	50	0.8250562	50	0.8153522

INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2503
Instrument: VOA-GCMS9
Matrix:
Calibration Date: 10/25/19 11:16

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	0.4208047	40	0.4379215	100	0.4062135	200	0.4214387	400	0.4040001		
Acrylonitrile	10	0.4839382	20	0.510938	50	0.5073464	100	0.5472144	200	0.5244282		
Benzene	10	3.71399	20	3.910312	50	3.758482	100	4.021863	200	3.910748		
Bromobenzene	10	0.8116476	20	0.8248016	50	0.7979914	100	0.8125525	200	0.8000635		
Bromochloromethane	10	0.6360537	20	0.6880193	50	0.670835	100	0.6770888	200	0.6219556		
Bromodichloromethane	10	1.065191	20	1.149694	50	1.154771	100	1.259583	200	1.254501		
Bromoform	10	0.1710337	20	0.1941106	50	0.2213234	100	0.2550363	200	~~0.2652962~~		
Bromomethane	10	0.6240222	20	0.613824	50	0.5786916	100	0.559171	200	0.5762707		
2-Butanone (MEK)	20	0.6623274	40	0.7169769	100	0.7014442	200	0.7409523	400	0.7018611		
n-Butylbenzene	10	1.99427	20	2.159924	50	2.059682	100	2.128511	200	2.119352		
sec-Butylbenzene	10	2.81396	20	2.983258	50	2.858129	100	2.970663	200	2.919011		
tert-Butylbenzene	10	1.287102	20	1.348068	50	1.277748	100	1.320476	200	1.288007		
Carbon disulfide	10	2.083659	20	2.199571	50	2.200441	100	2.374055	200	2.300151		
Carbon tetrachloride	10	0.8859942	20	0.9772165	50	0.9911705	100	1.10568	200	1.13323		
Chlorobenzene	10	0.964716	20	0.9849133	50	0.9397401	100	0.9805969	200	0.9711928		
Chloroethane	10	0.5022193	20	0.4415022	50	0.4470532	100	~~0.2401397~~	200	~~0.1149038~~		
Chloroform	10	1.606991	20	1.695617	50	1.617019	100	1.719146	200	1.672928		
Chloromethane	10	0.9543993	20	1.002215	50	1.02872	100	1.012394	200	0.9839853		
2-Chlorotoluene	10	0.7246255	20	0.753079	50	0.7192168	100	0.7296301	200	0.7234272		
4-Chlorotoluene	10	2.068894	20	2.142822	50	2.055647	100	2.109797	200	2.035946		
Dibromochloromethane	10	0.2750349	20	0.3006581	50	0.3153921	100	~~0.3498031~~	200	~~0.3577943~~		
1,2-Dibromo-3-chloropropane	10	0.2088932	20	0.2265966	50	0.2430718	100	0.2500107	200	0.2507144		
1,2-Dibromoethane (EDB)	10	0.3657542	20	0.3809676	50	0.3656071	100	0.3823937	200	0.374875		
Dibromomethane	10	0.620451	20	0.6564151	50	0.6422796	100	0.6921751	200	0.6773489		
1,2-Dichlorobenzene	10	1.344536	20	1.383179	50	1.337138	100	1.34539	200	1.305442		
1,3-Dichlorobenzene	10	1.383876	20	1.422364	50	1.383071	100	1.412214	200	1.382476		
1,4-Dichlorobenzene	10	1.4332	20	1.477561	50	1.40642	100	1.43615	200	1.401823		
Dichlorodifluoromethane	10	0.7702707	20	0.8002687	50	0.9462965	100	0.9472046	200	0.9289152		
1,1-Dichloroethane	10	1.57298	20	1.670729	50	1.581787	100	1.69618	200	1.640758		
1,2-Dichloroethane (EDC)	10	1.230146	20	1.306225	50	1.244865	100	1.313294	200	1.256151		
1,1-Dichloroethene	10	1.158212	20	1.202649	50	1.192087	100	1.279045	200	1.222424		

INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2503
Instrument: VOA-GCMS9
Matrix:
Calibration Date: 10/25/19 11:16

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	1.221133	20	1.297951	50	1.237722	100	1.328041	200	1.288062		
trans-1,2-Dichloroethene	10	1.163696	20	1.246953	50	1.187512	100	1.276224	200	1.248076		
1,2-Dichloropropane	10	0.9316968	20	0.9879811	50	0.9436935	100	1.023882	200	0.9940276		
1,3-Dichloropropane	10	0.5810448	20	0.5999811	50	0.5714957	100	0.5947856	200	0.5710394		
2,2-Dichloropropane	10	1.006011	20	1.073208	50	1.060734	100	1.128816	200	1.103972		
1,1-Dichloropropene	10	1.245451	20	1.31263	50	1.271224	100	1.375599	200	1.340734		
cis-1,3-Dichloropropene	10	0.4871928	20	0.5248817	50	0.5196585	100	0.5592496	200	0.5562698		
trans-1,3-Dichloropropene	10	0.420384	20	0.4647208	50	0.4732454	100	0.5133554	200	0.5129165		
Ethylbenzene	10	1.534653	20	1.591212	50	1.51604	100	1.593904	200	1.579999		
Hexachlorobutadiene	10	0.1832255	20	0.1987915	50	0.1886455	100	0.1899254	200	0.1872258		
n-Hexane	10	0.1715019	20	0.1847766	50	0.1830155	100	0.1960907	200	0.1983837		
2-Hexanone	20	0.3346914	40	0.3562764	100	0.3495076	200	0.3584297	400	0.3274972		
Isopropylbenzene	10	1.385292	20	1.48775	50	1.427172	100	1.52791	200	1.496359		
4-Isopropyltoluene	10	2.299635	20	2.496553	50	2.392121	100	2.488563	200	2.476425		
Methylene chloride	10	0.9651129	20	0.9696546	50	0.8867644	100	0.9336364	200	0.9041251		
4-Methyl-2-pentanone (MiBK)	20	0.463578	40	0.4905843	100	0.4738401	200	0.4839134	400	0.440816		
Methyl tert-butyl ether (MTBE)	10	2.617041	20	2.750498	50	2.706966	100	2.888391	200	2.841303		
Naphthalene	10	2.423483	20	2.669354	50	2.689107	100	2.754697	200	2.76388		
n-Propylbenzene	10	3.317662	20	3.47486	50	3.358109	100	3.500901	200	3.407993		
Styrene	10	0.9113808	20	0.9785717	50	0.9560498	100	1.026099	200	1.022727		
1,1,1,2-Tetrachloroethane	10	0.2716306	20	0.2958062	50	0.2960372	100	0.3236666	200	0.3227747		
1,1,2,2-Tetrachloroethane	10	0.6734578	20	0.6896682	50	0.6735685	100	0.6510233	200	0.6028843		
Tetrachloroethene (PCE)	10	0.3532076	20	0.3701403	50	0.3520966	100	0.3717106	200	0.3750457		
Tetrahydrofuran	10	0.4410839	20	0.4743964	50	0.4676093	100	0.4995178	200	0.4766965		
1,2,3-Trichlorobenzene	10	0.7470093	20	0.7972934	50	0.7789871	100	0.7980403	200	0.8154843		
1,2,4-Trichlorobenzene	10	0.7751567	20	0.8404523	50	0.8118984	100	0.8232022	200	0.8339134		
1,1,1-Trichloroethane	10	1.284351	20	1.37893	50	1.353967	100	1.452812	200	1.429553		
1,1,2-Trichloroethane	10	0.3420675	20	0.3514489	50	0.3350179	100	0.34682	200	0.3379984		
Trichloroethene (TCE)	10	0.9969135	20	1.053302	50	1.025866	100	1.095246	200	1.074364		
Trichlorofluoromethane	10	1.234525	20	1.29357	50	1.258953	100	1.250083	200	1.198884		
1,2,3-Trichloropropane	10	0.3405154	20	0.3331167	50	0.3272536	100	0.3185251	200	0.2947126		

INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2503
Instrument: VOA-GCMS9
Matrix:
Calibration Date: 10/25/19 11:16

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	0.8337868	20	0.8832046	50	0.8458685	100	0.9115538	200	0.8858524		
1,2,4-Trimethylbenzene	10	2.375163	20	2.49055	50	2.370189	100	2.445452	200	2.405457		
1,3,5-Trimethylbenzene	10	2.34199	20	2.452223	50	2.344405	100	2.400473	200	2.389567		
Isobutyl alcohol	250	6.680838E-02	500	7.430831E-02	1250	0.0777889	2500	8.037486E-02	5000	7.439707E-02		
Toluene	10	1.44486	20	1.492292	50	1.390623	100	1.461836	200	1.439258		
Vinyl chloride	10	1.069188	20	1.110172	50	1.15024	100	1.154176	200	1.123309		
m,p-Xylene	20	1.134823	40	1.209186	100	1.149737	200	1.230376	400	1.219314		
o-Xylene	10	1.141456	20	1.216423	50	1.157582	100	1.23274	200	1.213571		
trans-1,4-Dichloro-2-butene	10	0.2340582	20	0.2393777	50	0.2430465	100	0.2342091	200	0.2188557		
Xylenes, total	30	1.137034	60	1.211598	150	1.152352	300	1.231164	600	1.2174		
1,4-Difluorobenzene (Surr)	50	3.124014	50	3.157501	50	3.200969	50	3.186536	50	3.180128		
Toluene-d8 (Surr)	50	1.327143	50	1.301918	50	1.292388	50	1.274013	50	1.27207		
4-Bromofluorobenzene (Surr)	50	0.8117213	50	0.7980421	50	0.7955945	50	0.7620051	50	0.7511646		

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS9	Calibration:	A9J2503
Lab File ID:	VI19102432.D		
Sequence:	9J24043	Inject Date:	10/24/19
Lab Sample ID:	9J24043-ICV1	Inject Time:	22:38

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acetone	40.0	37.6	-6.0	70 - 130
Acrylonitrile	20.0	19.6	-2.1	70 - 130
Benzene	20.0	19.7	-1.6	70 - 130
Bromobenzene	20.0	21.0	4.9	70 - 130
Bromochloromethane	20.0	22.1	10.3	70 - 130
Bromodichloromethane	20.0	20.8	3.8	70 - 130
Bromoform	20.0	21.4	6.9	70 - 130
Bromomethane	20.0	22.6	13.2	70 - 130
2-Butanone (MEK)	40.0	37.9	-5.3	70 - 130
n-Butylbenzene	20.0	22.3	11.3	70 - 130
sec-Butylbenzene	20.0	20.5	2.3	70 - 130
tert-Butylbenzene	20.0	20.4	1.8	70 - 130
Carbon disulfide	20.0	18.4	-8.2	70 - 130
Carbon tetrachloride	20.0	20.7	3.5	70 - 130
Chlorobenzene	20.0	20.6	3.0	70 - 130
Chloroethane	20.0	17.5	-12.4	70 - 130
Chloroform	20.0	20.9	4.3	70 - 130
Chloromethane	20.0	20.7	3.6	70 - 130
2-Chlorotoluene	20.0	19.9	-0.3	70 - 130
4-Chlorotoluene	20.0	20.6	2.8	70 - 130
Dibromochloromethane	20.0	23.7	18.7	70 - 130
1,2-Dibromo-3-chloropropane	20.0	20.0	0.2	70 - 130
1,2-Dibromoethane (EDB)	20.0	20.7	3.3	70 - 130
Dibromomethane	20.0	21.1	5.6	70 - 130
1,2-Dichlorobenzene	20.0	20.8	4.1	70 - 130
1,3-Dichlorobenzene	20.0	20.8	4.2	70 - 130
1,4-Dichlorobenzene	20.0	20.5	2.4	70 - 130
Dichlorodifluoromethane	20.0	25.2	26.2	70 - 130
1,1-Dichloroethane	20.0	20.5	2.6	70 - 130
1,2-Dichloroethane (EDC)	20.0	20.2	0.8	70 - 130
1,1-Dichloroethene	20.0	19.7	-1.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS9	Calibration:	A9J2503
Lab File ID:	VI19102432.D		
Sequence:	9J24043	Inject Date:	10/24/19
Lab Sample ID:	9J24043-ICV1	Inject Time:	22:38

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
cis-1,2-Dichloroethene	20.0	20.0	0.2	70 - 130
trans-1,2-Dichloroethene	20.0	21.0	4.9	70 - 130
1,2-Dichloropropane	20.0	20.3	1.4	70 - 130
1,3-Dichloropropane	20.0	20.5	2.4	70 - 130
2,2-Dichloropropane	20.0	17.7	-11.4	70 - 130
1,1-Dichloropropene	20.0	19.6	-2.0	70 - 130
cis-1,3-Dichloropropene	20.0	19.9	-0.6	70 - 130
trans-1,3-Dichloropropene	20.0	20.7	3.5	70 - 130
Ethylbenzene	20.0	20.1	0.7	70 - 130
Hexachlorobutadiene	20.0	21.9	9.3	70 - 130
2-Hexanone	40.0	40.6	1.4	70 - 130
Isopropylbenzene	20.0	20.9	4.7	70 - 130
4-Isopropyltoluene	20.0	21.7	8.3	70 - 130
Methylene chloride	20.0	20.0	-0.2	70 - 130
4-Methyl-2-pentanone (MiBK)	40.0	41.0	2.6	70 - 130
Methyl tert-butyl ether (MTBE)	20.0	19.6	-2.1	70 - 130
Naphthalene	20.0	21.9	9.6	70 - 130
n-Propylbenzene	20.0	20.1	0.5	70 - 130
Styrene	20.0	20.9	4.3	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.8	8.9	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.3	1.7	70 - 130
Tetrachloroethene (PCE)	20.0	20.9	4.4	70 - 130
1,2,3-Trichlorobenzene	20.0	22.6	13.0	70 - 130
1,2,4-Trichlorobenzene	20.0	22.3	11.3	70 - 130
1,1,1-Trichloroethane	20.0	19.9	-0.3	70 - 130
1,1,2-Trichloroethane	20.0	21.2	6.2	70 - 130
Trichloroethene (TCE)	20.0	21.2	6.2	70 - 130
Trichlorofluoromethane	20.0	20.7	3.4	70 - 130
1,2,3-Trichloropropane	20.0	20.7	3.3	70 - 130
1,2,4-Trimethylbenzene	20.0	20.7	3.6	70 - 130
1,3,5-Trimethylbenzene	20.0	20.7	3.3	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	VOA-GCMS9	Calibration:	A9J2503
Lab File ID:	VI19102432.D		
Sequence:	9J24043	Inject Date:	10/24/19
Lab Sample ID:	9J24043-ICV1	Inject Time:	22:38

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Toluene	20.0	19.4	-3.1	70 - 130
Vinyl chloride	20.0	22.1	10.6	70 - 130
m,p-Xylene	40.0	40.9	2.3	70 - 130
o-Xylene	20.0	21.0	4.9	70 - 130

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9J24043	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9J24043-ICV1)			Lab File ID: VI19102432.D		Analyzed: 10/24/19 22:38			
1,4-Difluorobenzene (Surr)	50.0	101	70 - 130	6.782	6.780727	0.0013	+/-1.0	
Toluene-d8 (Surr)	50.0	99	70 - 130	8.297	8.297273	-0.0003	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	99	70 - 130	10.974	10.974	0.0000	+/-1.0	
Initial Cal Check (9J24043-ICV2)			Lab File ID: VI19102433.D		Analyzed: 10/24/19 23:05			
1,4-Difluorobenzene (Surr)	50.0	101	70 - 130	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	101	70 - 130	8.297	8.297273	-0.0003	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	102	70 - 130	10.974	10.974	0.0000	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K13033	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
LCS (9110473-BS1)			Lab File ID: VI19111304.D		Analyzed: 11/13/19 10:01			
1,4-Difluorobenzene (Surr)	50.0	106	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	99	80 - 120	8.298	8.297273	0.0007	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.974	10.974	0.0000	+/-1.0	
Blank (9110473-BLK1)			Lab File ID: VI19111306.D		Analyzed: 11/13/19 10:55			
1,4-Difluorobenzene (Surr)	50.0	107	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	101	80 - 120	8.297	8.297273	-0.0003	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	103	80 - 120	10.974	10.974	0.0000	+/-1.0	
PDI-FB-1911121146 (A9K0332-01)			Lab File ID: VI19111314.D		Analyzed: 11/13/19 14:30			
1,4-Difluorobenzene (Surr)	50.0	107	80 - 120	6.782	6.780727	0.0013	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.297	8.297273	-0.0003	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	102	80 - 120	10.974	10.974	0.0000	+/-1.0	
PDI-RB-1911120944 (A9K0332-02)			Lab File ID: VI19111315.D		Analyzed: 11/13/19 14:57			
1,4-Difluorobenzene (Surr)	50.0	108	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	102	80 - 120	8.298	8.297273	0.0007	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	103	80 - 120	10.974	10.974	0.0000	+/-1.0	
PDI-TB-1911071515 (A9K0332-03)			Lab File ID: VI19111316.D		Analyzed: 11/13/19 15:24			
1,4-Difluorobenzene (Surr)	50.0	109	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	102	80 - 120	8.298	8.297273	0.0007	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	102	80 - 120	10.974	10.974	0.0000	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K13033	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (9110473-BS1)			Lab File ID: VI19111304.D			Analyzed: 11/13/19 10:01			
Pentafluorobenzene (ISTD)	107283	6.217	107283	6.217	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	309137	9.916	309137	9.916	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	147766	11.85	147766	11.85	100	50 - 200	0.0000	+/-0.50	
Calibration Check (9K13033-CCV1)			Lab File ID: VI19111304.D			Analyzed: 11/13/19 10:01			
Pentafluorobenzene (ISTD)	107283	6.217	112406	6.211	95	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5 (ISTD)	309137	9.916	307093	9.91	101	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	147766	11.85	151591	11.85	97	50 - 200	0.0000	+/-0.50	
Blank (9110473-BLK1)			Lab File ID: VI19111306.D			Analyzed: 11/13/19 10:55			
Pentafluorobenzene (ISTD)	105869	6.217	107283	6.217	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	297900	9.91	309137	9.916	96	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	131750	11.85	147766	11.85	89	50 - 200	0.0000	+/-0.50	
Matrix Spike (9110473-MS1)			Lab File ID: VI19111312.D			Analyzed: 11/13/19 13:36			
Pentafluorobenzene (ISTD)	112381	6.217	107283	6.217	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	325598	9.91	309137	9.916	105	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	161883	11.85	147766	11.85	110	50 - 200	0.0000	+/-0.50	
PDI-FB-1911121146 (A9K0332-01)			Lab File ID: VI19111314.D			Analyzed: 11/13/19 14:30			
Pentafluorobenzene (ISTD)	110650	6.217	107283	6.217	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	314007	9.916	309137	9.916	102	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	141567	11.85	147766	11.85	96	50 - 200	0.0000	+/-0.50	
PDI-RB-1911120944 (A9K0332-02)			Lab File ID: VI19111315.D			Analyzed: 11/13/19 14:57			
Pentafluorobenzene (ISTD)	105580	6.217	107283	6.217	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	299080	9.916	309137	9.916	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	133161	11.85	147766	11.85	90	50 - 200	0.0000	+/-0.50	
PDI-TB-1911071515 (A9K0332-03)			Lab File ID: VI19111316.D			Analyzed: 11/13/19 15:24			
Pentafluorobenzene (ISTD)	103486	6.217	107283	6.217	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	292341	9.91	309137	9.916	95	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	132149	11.85	147766	11.85	89	50 - 200	0.0000	+/-0.50	
Duplicate (9110473-DUP1)			Lab File ID: VI19111318.D			Analyzed: 11/13/19 16:18			
Pentafluorobenzene (ISTD)	106635	6.217	107283	6.217	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	308316	9.909	309137	9.916	100	50 - 200	-0.0070	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	139132	11.85	147766	11.85	94	50 - 200	0.0000	+/-0.50	

HOLDING TIME SUMMARY

EPA 8260C

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bori

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-FB-1911121146	11/12/19 11:46	11/12/19 16:00	11/13/19 10:44	0.96	14.00	11/13/19 14:30	1.11	14.00	
PDI-RB-1911120944	11/12/19 09:44	11/12/19 16:00	11/13/19 10:44	1.04	14.00	11/13/19 14:57	1.22	14.00	
PDI-TB-1911071515	11/07/19 15:15	11/12/19 16:00	11/13/19 10:44	5.81	14.00	11/13/19 15:24	6.01	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GC

METHOD: EPA 8082A

ANALYSES DATA PACKAGE COVER PAGE

EPA 8082A

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-FB-1911121146	A9K0332-01	WQ
PDI-RB-1911120944	A9K0332-02	WQ
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Aroclor 1016	0.670	1.33	ug/kg
Aroclor 1221	0.670	1.33	ug/kg
Aroclor 1232	0.670	1.33	ug/kg
Aroclor 1242	0.670	1.33	ug/kg
Aroclor 1248	0.670	1.33	ug/kg
Aroclor 1254	0.670	1.33	ug/kg
Aroclor 1260	0.670	1.33	ug/kg
Aroclor 1262	0.670	1.33	ug/kg
Aroclor 1268	0.670	1.33	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 8082A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang

Batch Matrix: Water

Analyte	MDL	MRL	Units
Aroclor 1016	0.0200	0.0400	ug/L
Aroclor 1221	0.0200	0.0400	ug/L
Aroclor 1232	0.0200	0.0400	ug/L
Aroclor 1242	0.0200	0.0400	ug/L
Aroclor 1248	0.0200	0.0400	ug/L
Aroclor 1254	0.0200	0.0400	ug/L
Aroclor 1260	0.0200	0.0400	ug/L
Aroclor 1262	0.0200	0.0400	ug/L
Aroclor 1268	0.0200	0.0400	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-FB-1911121146

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-01	File ID:	ECD6R008.D
Sampled:	11/12/19 11:46	Prepared:	11/14/19 08:15	Analyzed:	11/15/19 09:51
		Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1040 mL / 2 mL

Batch: 9110782 Sequence: 9K15010 Calibration: A9G2702 Instrument: DUALECD6R

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
12674-11-2	Aroclor 1016	1	0.0192	U
11104-28-2	Aroclor 1221	1	0.0192	U
11141-16-5	Aroclor 1232	1	0.0192	U
53469-21-9	Aroclor 1242	1	0.0192	U
12672-29-6	Aroclor 1248	1	0.0192	U
11097-69-1	Aroclor 1254	1	0.0192	U
11096-82-5	Aroclor 1260	1	0.0192	U
37324-23-5	Aroclor 1262	1	0.0192	U
11100-14-4	Aroclor 1268	1	0.0192	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	0.481	0.309	64	40 - 135	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-RB-1911120944

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-02	File ID:	ECD6R009.D
Sampled:	11/12/19 09:44	Prepared:	11/14/19 08:15	Analyzed:	11/15/19 10:09
		Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1060 mL / 2 mL

Batch: 9110782 Sequence: 9K15010 Calibration: A9G2702 Instrument: DUALECD6R

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
12674-11-2	Aroclor 1016	1	0.0189	U
11104-28-2	Aroclor 1221	1	0.0189	U
11141-16-5	Aroclor 1232	1	0.0189	U
53469-21-9	Aroclor 1242	1	0.0189	U
12672-29-6	Aroclor 1248	1	0.0189	U
11097-69-1	Aroclor 1254	1	0.0189	U
11096-82-5	Aroclor 1260	1	0.0189	U
37324-23-5	Aroclor 1262	1	0.0189	U
11100-14-4	Aroclor 1268	1	0.0189	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	0.472	0.260	55	40 - 135	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-140RAB-00-10-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-04	File ID:	ECD2F008.D
Sampled:	11/08/19 11:40	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 13:48
Solids:	81.01	Preparation:	EPA 3546	Initial/Final:	30.71 g / 2 mL
Batch:	9110780	Sequence:	9K14009	Calibration:	A9K0701
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	0.808	U
11104-28-2	Aroclor 1221	1	0.808	U
11141-16-5	Aroclor 1232	1	0.808	U
53469-21-9	Aroclor 1242	1	0.808	U
12672-29-6	Aroclor 1248	1	0.808	U
11097-69-1	Aroclor 1254	1	0.808	U
11096-82-5	Aroclor 1260	1	0.808	U
37324-23-5	Aroclor 1262	1	0.808	U
11100-14-4	Aroclor 1268	1	0.808	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	20.1	13.4	67	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-140RAB-10-12.7-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-05	File ID:	ECD2F010.D
Sampled:	11/08/19 12:15	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 14:23
Solids:	79.57	Preparation:	EPA 3546	Initial/Final:	30.61 g / 2 mL
Batch:	9110780	Sequence:	9K14009	Calibration:	A9K0701
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	0.825	U
11104-28-2	Aroclor 1221	1	0.825	U
11141-16-5	Aroclor 1232	1	0.825	U
53469-21-9	Aroclor 1242	1	0.825	U
12672-29-6	Aroclor 1248	1	0.825	U
11097-69-1	Aroclor 1254	1	0.825	U
11096-82-5	Aroclor 1260	1	0.825	U
37324-23-5	Aroclor 1262	1	0.825	U
11100-14-4	Aroclor 1268	1	0.825	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	20.5	14.7	72	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-141RAB-00-10-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-06	File ID:	ECD2F012.D
Sampled:	11/07/19 15:15	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 14:59
Solids:	87.86	Preparation:	EPA 3546	Initial/Final:	30.41 g / 2 mL
Batch:	9110780	Sequence:	9K14009	Calibration:	A9K0701
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	0.752	U
11104-28-2	Aroclor 1221	1	0.752	U
11141-16-5	Aroclor 1232	1	0.752	U
53469-21-9	Aroclor 1242	1	4.93	
12672-29-6	Aroclor 1248	1	0.752	U
11097-69-1	Aroclor 1254	1	24.0	
11096-82-5	Aroclor 1260	1	22.2	
37324-23-5	Aroclor 1262	1	0.752	U
11100-14-4	Aroclor 1268	1	0.752	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	18.7	15.7	84	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-141RAB-10-17.7-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-07	File ID:	ECD2R005.D
Sampled:	11/07/19 16:45	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 12:55
Solids:	82.86	Preparation:	EPA 3546	Initial/Final:	30.18 g / 5 mL
Batch:	9110780	Sequence:	9K14010	Calibration:	A9J2803
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.01	U
11104-28-2	Aroclor 1221	1	2.01	U
11141-16-5	Aroclor 1232	1	2.01	U
53469-21-9	Aroclor 1242	1	2.01	U
12672-29-6	Aroclor 1248	1	2.01	U
11097-69-1	Aroclor 1254	1	2.01	U
11096-82-5	Aroclor 1260	1	2.01	U
37324-23-5	Aroclor 1262	1	2.01	U
11100-14-4	Aroclor 1268	1	2.01	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	20.0	9.75	49	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-143RAB-00-10-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-08	File ID:	ECD2R007.D
Sampled:	11/11/19 12:30	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 13:30
Solids:	92.62	Preparation:	EPA 3546	Initial/Final:	30.51 g / 2 mL
Batch:	9110780	Sequence:	9K14010	Calibration:	A9J2803
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	0.711	U
11104-28-2	Aroclor 1221	1	0.711	U
11141-16-5	Aroclor 1232	1	0.711	U
53469-21-9	Aroclor 1242	1	0.711	U
12672-29-6	Aroclor 1248	1	0.711	U
11097-69-1	Aroclor 1254	1	0.711	U
11096-82-5	Aroclor 1260	1	0.711	U
37324-23-5	Aroclor 1262	1	0.711	U
11100-14-4	Aroclor 1268	1	0.711	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	17.7	15.5	88	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-143RAB-10-20-191112

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-09	File ID:	ECD2R009.D
Sampled:	11/12/19 14:05	Prepared:	11/14/19 07:06	Analyzed:	11/14/19 14:05
Solids:	91.60	Preparation:	EPA 3546	Initial/Final:	30.05 g / 2 mL
Batch:	9110780	Sequence:	9K14010	Calibration:	A9J2803
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	0.730	U
11104-28-2	Aroclor 1221	1	0.730	U
11141-16-5	Aroclor 1232	1	0.730	U
53469-21-9	Aroclor 1242	1	0.730	U
12672-29-6	Aroclor 1248	1	0.730	U
11097-69-1	Aroclor 1254	1	0.963	J
11096-82-5	Aroclor 1260	1	1.38	J
37324-23-5	Aroclor 1262	1	0.730	U
11100-14-4	Aroclor 1268	1	0.730	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	18.2	15.6	86	43 - 120	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

PDI-143RAB-20-31.1-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-10RE1	File ID:	ECD1R009.D
Sampled:	11/11/19 15:30	Prepared:	11/14/19 07:06	Analyzed:	11/18/19 10:16
Solids:	90.19	Preparation:	EPA 3546	Initial/Final:	30.6 g / 2 mL
Batch:	9110780	Sequence:	9K18023	Calibration:	A9K1502
Instrument:	DUALECD1R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	5	3.64	U
11104-28-2	Aroclor 1221	5	3.64	U
11141-16-5	Aroclor 1232	5	3.64	U
53469-21-9	Aroclor 1242	5	176	D
12672-29-6	Aroclor 1248	5	3.64	U
11097-69-1	Aroclor 1254	5	178	D
11096-82-5	Aroclor 1260	5	74.8	D
37324-23-5	Aroclor 1262	5	3.64	U
11100-14-4	Aroclor 1268	5	3.64	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	18.1	16.8	93	43 - 120	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110780 Batch Matrix: Soil
Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110780-BLK1	ECD2F005.D	11/14/19 07:06	
LCS	9110780-BS1	ECD2F006.D	11/14/19 07:06	
LCS Dup	9110780-BSD1	ECD2F007.D	11/14/19 07:07	
PDI-140RAB-00-10-191108	A9K0332-04	ECD2F008.D	11/14/19 07:06	
PDI-140RAB-10-12.7-191108	A9K0332-05	ECD2F010.D	11/14/19 07:06	
PDI-141RAB-00-10-191107	A9K0332-06	ECD2F012.D	11/14/19 07:06	
PDI-141RAB-10-17.7-191107	A9K0332-07	ECD2R005.D	11/14/19 07:06	
PDI-143RAB-00-10-191111	A9K0332-08	ECD2R007.D	11/14/19 07:06	
PDI-143RAB-10-20-191112	A9K0332-09	ECD2R009.D	11/14/19 07:06	
PDI-143RAB-20-31.1-191111	A9K0332-10RE1	ECD1R009.D	11/14/19 07:06	

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.

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110782 Batch Matrix: Water
Preparation: EPA 3510C (Neutral pH)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110782-BLK1	ECD6R005.D	11/14/19 08:15	
LCS	9110782-BS1	ECD6R006.D	11/14/19 08:15	
LCS Dup	9110782-BSD1	ECD6R007.D	11/14/19 08:15	
PDI-FB-1911121146	A9K0332-01	ECD6R008.D	11/14/19 08:15	
PDI-RB-1911120944	A9K0332-02	ECD6R009.D	11/14/19 08:15	

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

METHOD BLANK DATA SHEET

EPA 8082A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110780-BLK1	File ID:	ECD2F005.D
Prepared:	11/14/19 07:06	Preparation:	EPA 3546	Initial/Final:	31 g / 2 mL
Analyzed:	11/14/19 12:55	Instrument:	DUALECD2F		
Batch:	9110780	Sequence:	9K14009	Calibration:	A9K0701

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
12674-11-2	Aroclor 1016	0.648	U
11104-28-2	Aroclor 1221	0.648	U
11141-16-5	Aroclor 1232	0.648	U
53469-21-9	Aroclor 1242	0.648	U
12672-29-6	Aroclor 1248	0.648	U
11097-69-1	Aroclor 1254	0.648	U
11096-82-5	Aroclor 1260	0.648	U
37324-23-5	Aroclor 1262	0.648	U
11100-14-4	Aroclor 1268	0.648	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	16.1	15.3	95	43 - 120	

METHOD BLANK DATA SHEET

EPA 8082A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water	Laboratory ID:	9110782-BLK1	File ID:	ECD6R005.D
Prepared:	11/14/19 08:15	Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1100 mL / 2 mL
Analyzed:	11/15/19 08:58	Instrument:	DUALECD6R		
Batch:	9110782	Sequence:	9K15010	Calibration:	A9G2702

CAS NO.	COMPOUND	CONC. (ug/L)	Q
12674-11-2	Aroclor 1016	0.0182	U
11104-28-2	Aroclor 1221	0.0182	U
11141-16-5	Aroclor 1232	0.0182	U
53469-21-9	Aroclor 1242	0.0182	U
12672-29-6	Aroclor 1248	0.0182	U
11097-69-1	Aroclor 1254	0.0182	U
11096-82-5	Aroclor 1260	0.0182	U
37324-23-5	Aroclor 1262	0.0182	U
11100-14-4	Aroclor 1268	0.0182	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	0.455	0.342	75	40 - 135	

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110780	Laboratory ID:	9110780-BS1
Preparation:	EPA 3546	Initial/Final:	30 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	83.3	59.3	71	47 - 134
Aroclor 1260	83.3	72.2	87	53 - 140

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110780	Laboratory ID:	9110780-BSD1
Preparation:	EPA 3546	Initial/Final:	30 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
Aroclor 1016	83.3	54.9	66	8	30	47 - 134
Aroclor 1260	83.3	69.9	84	3	30	53 - 140

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water		
Batch:	9110782	Laboratory ID:	9110782-BS1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 2 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	2.50	1.44	57	46 - 129
Aroclor 1260	2.50	1.69	67	45 - 134

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water		
Batch:	9110782	Laboratory ID:	9110782-BSD1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 2 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
Aroclor 1016	2.50	1.39	55	4	30	46 - 129
Aroclor 1260	2.50	1.71	68	2	30	45 - 134

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9G23022	Instrument:	DUALECD6R
Matrix:	Water	Calibration:	A9G2702

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9G23022-ICB1	ECD6R021.D	07/23/19 16:59
Cal Standard	9G23022-CAL1	ECD6R022.D	07/23/19 17:16
Cal Standard	9G23022-CAL2	ECD6R023.D	07/23/19 17:34
Cal Standard	9G23022-CAL3	ECD6R024.D	07/23/19 17:52
Cal Standard	9G23022-CAL4	ECD6R025.D	07/23/19 18:10
Cal Standard	9G23022-CAL5	ECD6R026.D	07/23/19 18:27
Cal Standard	9G23022-CAL6	ECD6R027.D	07/23/19 18:45
Cal Standard	9G23022-CAL7	ECD6R028.D	07/23/19 19:03
Initial Cal Check	9G23022-ICV1	ECD6R030.D	07/23/19 19:38
Cal Standard	9G23022-CAL8	ECD6R031.D	07/23/19 19:56
Cal Standard	9G23022-CAL9	ECD6R032.D	07/23/19 20:14
Cal Standard	9G23022-CALA	ECD6R033.D	07/23/19 20:31
Cal Standard	9G23022-CALB	ECD6R034.D	07/23/19 20:49
Cal Standard	9G23022-CALC	ECD6R035.D	07/23/19 21:07
Cal Standard	9G23022-CALD	ECD6R036.D	07/23/19 21:24
Cal Standard	9G23022-CALE	ECD6R037.D	07/23/19 21:42
Initial Cal Check	9G23022-ICV2	ECD6R038.D	07/23/19 22:00
Initial Cal Check	9G23022-ICV3	ECD6R039.D	07/23/19 22:17
Initial Cal Check	9G23022-ICV4	ECD6R040.D	07/23/19 22:35
Initial Cal Check	9G23022-ICV5	ECD6R041.D	07/23/19 22:53

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 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9J25014	Instrument:	DUALECD2R
Matrix:	Soil	Calibration:	A9J2803

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9J25014-ICB1	ECD2R003.D	10/25/19 08:01
Cal Standard	9J25014-CAL1	ECD2R004.D	10/25/19 08:19
Cal Standard	9J25014-CAL2	ECD2R005.D	10/25/19 08:37
Cal Standard	9J25014-CAL3	ECD2R006.D	10/25/19 08:54
Cal Standard	9J25014-CAL4	ECD2R007.D	10/25/19 09:12
Cal Standard	9J25014-CAL5	ECD2R008.D	10/25/19 09:29
Cal Standard	9J25014-CAL6	ECD2R009.D	10/25/19 09:47
Cal Standard	9J25014-CAL7	ECD2R010.D	10/25/19 10:05
Initial Cal Check	9J25014-ICV1	ECD2R012.D	10/25/19 10:40
Cal Standard	9J25014-CAL8	ECD2R013.D	10/25/19 10:58
Cal Standard	9J25014-CAL9	ECD2R014.D	10/25/19 11:15
Cal Standard	9J25014-CALA	ECD2R015.D	10/25/19 11:33
Cal Standard	9J25014-CALB	ECD2R016.D	10/25/19 11:50
Cal Standard	9J25014-CALC	ECD2R017.D	10/25/19 12:08
Cal Standard	9J25014-CALD	ECD2R018.D	10/25/19 12:26
Cal Standard	9J25014-CALE	ECD2R019.D	10/25/19 12:43
Initial Cal Check	9J25014-ICV2	ECD2R020.D	10/25/19 13:02
Initial Cal Check	9J25014-ICV3	ECD2R021.D	10/25/19 13:20
Initial Cal Check	9J25014-ICV4	ECD2R022.D	10/25/19 13:37
Initial Cal Check	9J25014-ICV5	ECD2R023.D	10/25/19 13:55

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

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K05021	Instrument:	DUALECD2F
Matrix:	Soil	Calibration:	A9K0701

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9K05021-ICB1	ECD2F006.D	11/05/19 16:09
Cal Standard	9K05021-CAL1	ECD2F007.D	11/05/19 16:27
Cal Standard	9K05021-CAL2	ECD2F008.D	11/05/19 16:45
Cal Standard	9K05021-CAL3	ECD2F009.D	11/05/19 17:02
Cal Standard	9K05021-CAL4	ECD2F010.D	11/05/19 17:20
Cal Standard	9K05021-CAL5	ECD2F011.D	11/05/19 17:37
Cal Standard	9K05021-CAL6	ECD2F012.D	11/05/19 17:55
Cal Standard	9K05021-CAL7	ECD2F013.D	11/05/19 18:13
Initial Cal Check	9K05021-ICV1	ECD2F015.D	11/05/19 18:48
Cal Standard	9K05021-CAL8	ECD2F016.D	11/05/19 19:06
Cal Standard	9K05021-CAL9	ECD2F017.D	11/05/19 19:23
Cal Standard	9K05021-CALA	ECD2F018.D	11/05/19 19:41
Cal Standard	9K05021-CALB	ECD2F019.D	11/05/19 19:58
Cal Standard	9K05021-CALC	ECD2F020.D	11/05/19 20:16
Cal Standard	9K05021-CALD	ECD2F021.D	11/05/19 20:34
Cal Standard	9K05021-CALE	ECD2F022.D	11/05/19 20:51
Initial Cal Check	9K05021-ICV2	ECD2F023.D	11/05/19 21:09
Initial Cal Check	9K05021-ICV3	ECD2F024.D	11/05/19 21:26
Initial Cal Check	9K05021-ICV4	ECD2F025.D	11/05/19 21:44
Initial Cal Check	9K05021-ICV5	ECD2F026.D	11/05/19 22:01

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 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14008	Instrument:	DUALECD1R
Matrix:	Soil	Calibration:	A9K1502

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9K14008-ICB1	ECD1R003.D	11/14/19 08:22
Cal Standard	9K14008-CAL1	ECD1R004.D	11/14/19 08:40
Cal Standard	9K14008-CAL2	ECD1R005.D	11/14/19 08:58
Cal Standard	9K14008-CAL3	ECD1R006.D	11/14/19 09:16
Cal Standard	9K14008-CAL4	ECD1R007.D	11/14/19 09:35
Cal Standard	9K14008-CAL5	ECD1R008.D	11/14/19 09:53
Cal Standard	9K14008-CAL6	ECD1R009.D	11/14/19 10:11
Cal Standard	9K14008-CAL7	ECD1R010.D	11/14/19 10:29
Initial Cal Check	9K14008-ICV1	ECD1R012.D	11/14/19 11:06
Cal Standard	9K14008-CAL8	ECD1R013.D	11/14/19 11:24
Cal Standard	9K14008-CAL9	ECD1R014.D	11/14/19 11:42
Cal Standard	9K14008-CALA	ECD1R015.D	11/14/19 12:00
Cal Standard	9K14008-CALB	ECD1R016.D	11/14/19 12:18
Cal Standard	9K14008-CALC	ECD1R017.D	11/14/19 12:37
Cal Standard	9K14008-CALD	ECD1R018.D	11/14/19 12:55
Cal Standard	9K14008-CALE	ECD1R019.D	11/14/19 13:13
Initial Cal Check	9K14008-ICV2	ECD1R020.D	11/14/19 13:31
Initial Cal Check	9K14008-ICV3	ECD1R021.D	11/14/19 13:50
Initial Cal Check	9K14008-ICV4	ECD1R022.D	11/14/19 14:08
Initial Cal Check	9K14008-ICV5	ECD1R023.D	11/14/19 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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14009	Instrument:	DUALECD2F
Matrix:	Soil	Calibration:	A9K0701

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K14009-CCV1	ECD2F003.D	11/14/19 12:19
Calibration Blank	9K14009-CCB1	ECD2F004.D	11/14/19 12:37
Blank	9110780-BLK1	ECD2F005.D	11/14/19 12:55
LCS	9110780-BS1	ECD2F006.D	11/14/19 13:13
LCS Dup	9110780-BSD1	ECD2F007.D	11/14/19 13:30
PDI-140RAB-00-10-191108	A9K0332-04	ECD2F008.D	11/14/19 13:48
PDI-140RAB-10-12.7-191108	A9K0332-05	ECD2F010.D	11/14/19 14:23
PDI-141RAB-00-10-191107	A9K0332-06	ECD2F012.D	11/14/19 14:59
Calibration Check	9K14009-CCV2	ECD2F014.D	11/14/19 15:34
Calibration Blank	9K14009-CCB2	ECD2F015.D	11/14/19 15:52

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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14010	Instrument:	DUALECD2R
Matrix:	Soil	Calibration:	A9J2803

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K14010-CCV1	ECD2R003.D	11/14/19 12:19
Calibration Blank	9K14010-CCB1	ECD2R004.D	11/14/19 12:37
PDI-141RAB-10-17.7-191107	A9K0332-07	ECD2R005.D	11/14/19 12:55
PDI-143RAB-00-10-191111	A9K0332-08	ECD2R007.D	11/14/19 13:30
PDI-143RAB-10-20-191112	A9K0332-09	ECD2R009.D	11/14/19 14:05
Calibration Check	9K14010-CCV2	ECD2R015.D	11/14/19 15:52
Calibration Blank	9K14010-CCB2	ECD2R016.D	11/14/19 16:09

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 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K15010	Instrument:	DUALECD6R
Matrix:	Water	Calibration:	A9G2702

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K15010-CCV1	ECD6R003.D	11/15/19 08:19
Calibration Blank	9K15010-CCB1	ECD6R004.D	11/15/19 08:37
Blank	9110782-BLK1	ECD6R005.D	11/15/19 08:58
LCS	9110782-BS1	ECD6R006.D	11/15/19 09:15
LCS Dup	9110782-BSD1	ECD6R007.D	11/15/19 09:33
PDI-FB-1911121146	A9K0332-01	ECD6R008.D	11/15/19 09:51
PDI-RB-1911120944	A9K0332-02	ECD6R009.D	11/15/19 10:09
Calibration Check	9K15010-CCV2	ECD6R010.D	11/15/19 10:26
Calibration Blank	9K15010-CCB2	ECD6R011.D	11/15/19 10:44

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 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K18023	Instrument:	DUALECD1R
Matrix:	Soil	Calibration:	A9K1502

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K18023-CCV1	ECD1R003.D	11/18/19 08:04
Calibration Blank	9K18023-CCB1	ECD1R004.D	11/18/19 08:22
PDI-143RAB-20-31.1-191111	A9K0332-10RE1	ECD1R009.D	11/18/19 10:16
Calibration Check	9K18023-CCV2	ECD1R011.D	11/18/19 10:53
Calibration Blank	9K18023-CCB2	ECD1R012.D	11/18/19 11:11

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)

EPA 8082A

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9G2702 Date: 07/27/19 14:55 Instrument: DUALECD6R

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aroclor 1016		Ave						20	
Aroclor 1221		Ave						20	
Aroclor 1232		Ave						20	
Aroclor 1242		Ave						20	
Aroclor 1248		Ave						20	
Aroclor 1254		Ave						20	
Aroclor 1260		Ave						20	
Aroclor 1262		Ave						20	
Aroclor 1268		Ave						20	
Decachlorobiphenyl (Surr)	67313.82	Ave	8.287792	11.13371	1.169982E-02			20	

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

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9G2702

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: DUALECD6R

Calibration Date: 07/27/19 14:55

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
1016 (1)	20	5165.3	50	4639.94	100	4262.19	200	4055.245	500	4072.45	1000	3776.021
1016 (2)	20	8287.25	50	7986.16	100	7573.33	200	7267.47	500	7511.958	1000	7181.462
1016 (3)	20	4464.6	50	4040.94	100	3669.55	200	3521.29	500	3584.372	1000	3446.934
1016 (4)	20	4562.45	50	3957.82	100	3487.46	200	3288.93	500	3287.418	1000	3142.909
1016 (5)	20	5027.8	50	4313.26	100	3929.74	200	3722.32	500	3682.11	1000	3585.981
1016 (6)	20	4770.8	50	4266.92	100	3941.97	200	3669.25	500	3686.132	1000	3616.773
Aroclor 1016	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
1260 (1)	20	8764.25	50	7969.24	100	7494.83	200	7148.91	500	7267.464	1000	7213.909
1260 (2)	20	10236.2	50	9745.44	100	9101.67	200	8683.405	500	8983.272	1000	8817.712
1260 (3)	20	9972.2	50	9592.8	100	9185.75	200	8729.255	500	9431.478	1000	9177.024
1260 (4)	20	13856.4	50	13709.14	100	12963.07	200	12925.17	500	13615.8	1000	13490.98
1260 (5)	20	8148.2	50	8029.3	100	7647.6	200	7284.835	500	7910.886	1000	7695.998
1260 (6)	20	3332.6	50	3282.22	100	2996.65	200	2989.42	500	2977.408	1000	2965.288
Aroclor 1260	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
Decachlorobiphenyl (Surr)	10	65335.4	25	63322.84	50	62089.66	100	63900.68	250	70655.52	500	67782.08

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9G2702
Instrument: DUALECD6R
Matrix:
Calibration Date: 07/27/19 14:55

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
1016 (1)	1500	3936.717										
1016 (2)	1500	7629.82										
1016 (3)	1500	3442.863										
1016 (4)	1500	3261.417										
1016 (5)	1500	3646.982										
1016 (6)	1500	3724.76										
Aroclor 1016	1500	0										
1254 (1)											500	6771.936
1254 (2)											500	10009.41
1254 (3)											500	10904.3
1254 (4)											500	7910.276
1254 (5)											500	8088.172
1254 (6)											500	2320.136
Aroclor 1254											500	0
1260 (1)	1500	7499.02										
1260 (2)	1500	9086.787										
1260 (3)	1500	9611.373										
1260 (4)	1500	14306.96										
1260 (5)	1500	8119.773										
1260 (6)	1500	3153.671										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	78110.59	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A9G2702	Instrument:	DUALECD6R
Matrix:		Calibration Date:	07/27/19 14:55

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1262 (1)	500	7337.318										
1262 (2)	500	10040.29										
1262 (3)	500	7409.08										
1262 (4)	500	16164.35										
1262 (5)	500	9639.012										
1262 (6)	500	4255.622										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

INITIAL CALIBRATION DATA (Summary)

EPA 8082A

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J2803 Date: 10/28/19 10:35 Instrument: DUALECD2R

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aroclor 1016		Ave						20	
Aroclor 1221		Ave						20	
Aroclor 1232		Ave						20	
Aroclor 1242		Ave						20	
Aroclor 1248		Ave						20	
Aroclor 1254		Ave						20	
Aroclor 1260		Ave						20	
Aroclor 1262		Ave						20	
Aroclor 1268		Ave						20	
Decachlorobiphenyl (Surr)	146790.4	Ave	11.13687	10.701	1.830451E-02			20	

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

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J2803

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: DUALECD2R

Calibration Date: 10/28/19 10:35

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
1016 (1)	20	10151.75	50	9873.36	100	9252.01	200	8409.495	500	8085.348	1000	8009.226
1016 (2)	20	17127.45	50	17019.64	100	16922.74	200	14752.13	500	16080.45	1000	15600.02
1016 (3)	20	8502.2	50	7706.02	100	7552.46	200	6698.305	500	7013.236	1000	6715.654
1016 (4)	20	8857.6	50	8177.26	100	7725.78	200	6856.835	500	6887.656	1000	6545.978
1016 (5)	20	9451.25	50	9136.26	100	8479.32	200	7726.305	500	7875.734	1000	7260.053
1016 (6)	20	9586.85	50	9057.04	100	8470.87	200	7444.98	500	7904.344	1000	7304.27
Aroclor 1016	20	0	50	0	100	0	200	0	500	0	1000	0
1260 (1)	20	16856.95	50	16484.42	100	15672.69	200	14707.76	500	15695	1000	14942.24
1260 (2)	20	20667.25	50	20515.12	100	19956.6	200	17709.33	500	20277.4	1000	17867.44
1260 (3)	20	20916.7	50	21060.16	100	19854.47	200	19120.24	500	20134.36	1000	19036.7
1260 (4)	20	30933.1	50	30992.52	100	30699.8	200	28633.93	500	29992.72	1000	31228.51
1260 (5)	20	18057.85	50	18606.18	100	17472.57	200	16459	500	17949.59	1000	17681.7
1260 (6)	20	7430.6	50	7501.98	100	6942.4	200	6147.22	500	6473.054	1000	6505.242
Aroclor 1260	20	0	50	0	100	0	200	0	500	0	1000	0
Decachlorobiphenyl (Surr)	10	131865.9	25	140307.6	50	137335.2	100	135426.9	250	151305.7	500	151703.6

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2803
Instrument: DUALECD2R
Matrix:
Calibration Date: 10/28/19 10:35

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
1016 (1)	1500	8400.486										
1016 (2)	1500	17040.45										
1016 (3)	1500	7372.987										
1016 (4)	1500	7150.067										
1016 (5)	1500	7828.54										
1016 (6)	1500	7849.247										
Aroclor 1016	1500	0										
1254 (1)											500	12925.06
1254 (2)											500	20247.58
1254 (3)											500	21427.7
1254 (4)											500	16516.58
1254 (5)											500	15693.16
1254 (6)											500	4890.148
Aroclor 1254											500	0
1260 (1)	1500	16121.04										
1260 (2)	1500	20022.96										
1260 (3)	1500	20802.53										
1260 (4)	1500	34142.69										
1260 (5)	1500	19053.46										
1260 (6)	1500	7289.34										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	179588.1	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J2803
Instrument: DUALECD2R
Matrix:
Calibration Date: 10/28/19 10:35

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1262 (1)	500	15133.52										
1262 (2)	500	21154.26										
1262 (3)	500	17468.28										
1262 (4)	500	35809.34										
1262 (5)	500	21964.82										
1262 (6)	500	9700.53										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

INITIAL CALIBRATION DATA (Summary)

EPA 8082A

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9K0701 Date: 11/07/19 10:43 Instrument: DUALECD2F

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aroclor 1016		Ave						20	
Aroclor 1221		Ave						20	
Aroclor 1232		Ave						20	
Aroclor 1242		Ave						20	
Aroclor 1248		Ave						20	
Aroclor 1254		Ave						20	
Aroclor 1260		Ave						20	
Aroclor 1262		Ave						20	
Aroclor 1268		Ave						20	
Decachlorobiphenyl (Surr)	90257.41	Ave	2.910524	9.578572	1.420735E-02			20	

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

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9K0701

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: DUALECD2F

Calibration Date: 11/07/19 10:43

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
1016 (1)	20	4006.5	50	3651.54	100	3293.63	200	3042.325	500	3141.59	1000	2940.535
1016 (2)	20	6991.35	50	6510.04	100	6291.84	200	6148.155	500	6488.962	1000	6279.795
1016 (3)	20	4201.75	50	3867.68	100	3436.31	200	3274.05	500	3259.012	1000	3312.159
1016 (4)	20	3825.35	50	3320.6	100	3156.72	200	2838.54	500	2800.548	1000	2732.17
1016 (5)	20	4373.15	50	3997.78	100	3596.25	200	3330.56	500	3467.048	1000	3284.938
1016 (6)	20	3126.4	50	2737.38	100	2470.45	200	2377.85	500	2446.568	1000	2196.746
Aroclor 1016	20	0	50	0	100	0	200	0	500	0	1000	0
1260 (1)	20	8182.35	50	7443.7	100	7027.01	200	6589.8	500	6745.806	1000	6475.085
1260 (2)	20	9970.9	50	9356.92	100	8756.25	200	8466.585	500	9048.054	1000	8366.55
1260 (3)	20	7645.1	50	6782.96	100	6774.62	200	6244.34	500	6502.604	1000	6159.348
1260 (4)	20	16219	50	16308.94	100	15580.54	200	15120.83	500	16563.97	1000	15136.84
1260 (5)	20	11267.1	50	10668.68	100	10345.85	200	10038.74	500	10103.56	1000	9811.564
1260 (6)	20	5119.65	50	4554.78	100	4237.47	200	4025.8	500	4176.478	1000	3911.056
Aroclor 1260	20	0	50	0	100	0	200	0	500	0	1000	0
Decachlorobiphenyl (Surr)	10	91909.4	25	89271.96	50	89702.76	100	87358.09	250	94265.64	500	87179.16

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9K0701
Instrument: DUALECD2F
Matrix:
Calibration Date: 11/07/19 10:43

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
1016 (1)	1500	2991.058										
1016 (2)	1500	6461.19										
1016 (3)	1500	3302.619										
1016 (4)	1500	2790.853										
1016 (5)	1500	3324.4										
1016 (6)	1500	2354.849										
Aroclor 1016	1500	0										
1254 (1)											500	5294.604
1254 (2)											500	6305.364
1254 (3)											500	9507.872
1254 (4)											500	6373.598
1254 (5)											500	6567.558
1254 (6)											500	2083.128
Aroclor 1254											500	0
1260 (1)	1500	6542.823										
1260 (2)	1500	8338.9										
1260 (3)	1500	6519.369										
1260 (4)	1500	15686.21										
1260 (5)	1500	9963.366										
1260 (6)	1500	4129.835										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	92114.88	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A9K0701	Instrument:	DUALECD2F
Matrix:		Calibration Date:	11/07/19 10:43

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1262 (1)	500	6665.034										
1262 (2)	500	9333.44										
1262 (3)	500	7936.03										
1262 (4)	500	17579.58										
1262 (5)	500	10755.78										
1262 (6)	500	5695.342										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

INITIAL CALIBRATION DATA (Summary)

EPA 8082A

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9K1502 Date: 11/15/19 10:33 Instrument: DUALECD1R

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aroclor 1016		Ave						20	
Aroclor 1221		Ave						20	
Aroclor 1232		Ave						20	
Aroclor 1242		Ave						20	
Aroclor 1248		Ave						20	
Aroclor 1254		Ave						20	
Aroclor 1260		Ave						20	
Aroclor 1262		Ave						20	
Aroclor 1268		Ave						20	
Decachlorobiphenyl (Surr)	15459.03	Ave	4.035846	10.84457	3.873866E-03			20	

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

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9K1502

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: DUALECD1R

Calibration Date: 11/15/19 10:33

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
1016 (1)	20	1236.95	50	1139.38	100	1050.47	200	964.31	500	931.622	1000	910.088
1016 (2)	20	2116.55	50	1975.82	100	1872.83	200	1822.84	500	1794.436	1000	1760.361
1016 (3)	20	997.05	50	947.68	100	911.64	200	835.195	500	815.71	1000	822.421
1016 (4)	20	1093.75	50	1031.36	100	901.45	200	854.98	500	818.092	1000	798.442
1016 (5)	20	1195.8	50	1114.9	100	1008.99	200	929.76	500	917.502	1000	869.103
1016 (6)	20	1207.9	50	1111.2	100	1004.41	200	943.975	500	918.246	1000	865.672
Aroclor 1016	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
1260 (1)	20	2296.35	50	2113.54	100	1914.33	200	1808.955	500	1800.202	1000	1784.866
1260 (2)	20	2776.95	50	2481.5	100	2379.83	200	2256.69	500	2272.944	1000	2167.457
1260 (3)	20	2660.05	50	2510.82	100	2394.49	200	2333.71	500	2271.866	1000	2304.609
1260 (4)	20	3895.5	50	3625.74	100	3372.25	200	3457.85	500	3476.718	1000	3418.561
1260 (5)	20	2369.75	50	2178.58	100	2040.4	200	2048.06	500	2005.988	1000	1997.897
1260 (6)	20	980.25	50	918.46	100	822.53	200	795.995	500	772.346	1000	745.363
Aroclor 1260	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
Decachlorobiphenyl (Surr)	10	15650	25	15350.92	50	15024.9	100	15034.61	250	15913.94	500	14708.27

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9K1502
Instrument: DUALECD1R
Matrix:
Calibration Date: 11/15/19 10:33

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
1016 (1)	1500	893.4993										
1016 (2)	1500	1806.097										
1016 (3)	1500	833.5493										
1016 (4)	1500	808.0453										
1016 (5)	1500	896.2726										
1016 (6)	1500	911.0714										
Aroclor 1016	1500	0										
1254 (1)											500	1534.06
1254 (2)											500	2516.232
1254 (3)											500	2669.926
1254 (4)											500	1921.078
1254 (5)											500	1944.738
1254 (6)											500	584.56
Aroclor 1254											500	0
1260 (1)	1500	1870.991										
1260 (2)	1500	2259.347										
1260 (3)	1500	2423.439										
1260 (4)	1500	3614.482										
1260 (5)	1500	2075.513										
1260 (6)	1500	792.7454										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	16530.56	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A9K1502	Instrument:	DUALECD1R
Matrix:		Calibration Date:	11/15/19 10:33

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1262 (1)	500	1870.626										
1262 (2)	500	2583.93										
1262 (3)	500	2032.626										
1262 (4)	500	4115.41										
1262 (5)	500	2508.946										
1262 (6)	500	1129.984										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R030.D		
Sequence:	9G23022	Inject Date:	07/23/19
Lab Sample ID:	9G23022-ICV1	Inject Time:	19:38

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	450	-9.9	70 - 130
Aroclor 1260	500	475	-5.0	70 - 130
Decachlorobiphenyl (Surr)	200	175	-12.6	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R038.D		
Sequence:	9G23022	Inject Date:	07/23/19
Lab Sample ID:	9G23022-ICV2	Inject Time:	22:00

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	950	-5.0	70 - 130
Aroclor 1254	500	481	-3.8	70 - 130
Decachlorobiphenyl (Surr)	80.0	86.9	8.6	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R039.D		
Sequence:	9G23022	Inject Date:	07/23/19
Lab Sample ID:	9G23022-ICV3	Inject Time:	22:17

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	506	1.2	70 - 130
Aroclor 1262	500	494	-1.2	70 - 130
Decachlorobiphenyl (Surr)	80.0	86.6	8.3	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R040.D		
Sequence:	9G23022	Inject Date:	07/23/19
Lab Sample ID:	9G23022-ICV4	Inject Time:	22:35

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	553	10.7	70 - 130
Aroclor 1268	500	560	12.0	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R041.D		
Sequence:	9G23022	Inject Date:	07/23/19
Lab Sample ID:	9G23022-ICV5	Inject Time:	22:53

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	507	1.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R012.D		
Sequence:	9J25014	Inject Date:	10/25/19
Lab Sample ID:	9J25014-ICV1	Inject Time:	10:40

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	461	-7.8	70 - 130
Aroclor 1260	500	489	-2.3	70 - 130
Decachlorobiphenyl (Surr)	200	192	-4.1	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R020.D		
Sequence:	9J25014	Inject Date:	10/25/19
Lab Sample ID:	9J25014-ICV2	Inject Time:	13:02

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	1010	0.8	70 - 130
Aroclor 1254	500	516	3.3	70 - 130
Decachlorobiphenyl (Surr)	80.0	85.8	7.3	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R021.D		
Sequence:	9J25014	Inject Date:	10/25/19
Lab Sample ID:	9J25014-ICV3	Inject Time:	13:20

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	544	8.8	70 - 130
Aroclor 1262	500	486	-2.8	70 - 130
Decachlorobiphenyl (Surr)	80.0	89.0	11.3	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R022.D		
Sequence:	9J25014	Inject Date:	10/25/19
Lab Sample ID:	9J25014-ICV4	Inject Time:	13:37

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	541	8.2	70 - 130
Aroclor 1268	500	509	1.9	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R023.D		
Sequence:	9J25014	Inject Date:	10/25/19
Lab Sample ID:	9J25014-ICV5	Inject Time:	13:55

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	575	15.0	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F015.D		
Sequence:	9K05021	Inject Date:	11/05/19
Lab Sample ID:	9K05021-ICV1	Inject Time:	18:48

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	445	-11.0	70 - 130
Aroclor 1260	500	445	-10.9	70 - 130
Decachlorobiphenyl (Surr)	200	187	-6.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F023.D		
Sequence:	9K05021	Inject Date:	11/05/19
Lab Sample ID:	9K05021-ICV2	Inject Time:	21:09

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	956	-4.4	70 - 130
Aroclor 1254	500	492	-1.6	70 - 130
Decachlorobiphenyl (Surr)	80.0	84.9	6.1	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F024.D		
Sequence:	9K05021	Inject Date:	11/05/19
Lab Sample ID:	9K05021-ICV3	Inject Time:	21:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	527	5.5	70 - 130
Aroclor 1262	500	497	-0.6	70 - 130
Decachlorobiphenyl (Surr)	80.0	85.3	6.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F025.D		
Sequence:	9K05021	Inject Date:	11/05/19
Lab Sample ID:	9K05021-ICV4	Inject Time:	21:44

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	542	8.5	70 - 130
Aroclor 1268	500	509	1.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F026.D		
Sequence:	9K05021	Inject Date:	11/05/19
Lab Sample ID:	9K05021-ICV5	Inject Time:	22:01

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	550	10.0	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R012.D		
Sequence:	9K14008	Inject Date:	11/14/19
Lab Sample ID:	9K14008-ICV1	Inject Time:	11:06

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	459	-8.2	70 - 130
Aroclor 1260	500	477	-4.7	70 - 130
Decachlorobiphenyl (Surr)	200	189	-5.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R020.D		
Sequence:	9K14008	Inject Date:	11/14/19
Lab Sample ID:	9K14008-ICV2	Inject Time:	13:31

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	896	-10.4	70 - 130
Aroclor 1254	500	490	-2.1	70 - 130
Decachlorobiphenyl (Surr)	80.0	87.9	9.8	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R021.D		
Sequence:	9K14008	Inject Date:	11/14/19
Lab Sample ID:	9K14008-ICV3	Inject Time:	13:50

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	563	12.7	70 - 130
Aroclor 1262	500	498	-0.3	70 - 130
Decachlorobiphenyl (Surr)	80.0	96.0	20.0	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R022.D		
Sequence:	9K14008	Inject Date:	11/14/19
Lab Sample ID:	9K14008-ICV4	Inject Time:	14:08

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	520	3.9	70 - 130
Aroclor 1268	500	487	-2.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R023.D		
Sequence:	9K14008	Inject Date:	11/14/19
Lab Sample ID:	9K14008-ICV5	Inject Time:	14:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	533	6.5	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F003.D	Calibration Date:	11/07/19 10:43
Sequence:	9K14009	Injection Date:	11/14/19
Lab Sample ID:	9K14009-CCV1	Injection Time:	12:19

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	498				-0.4	20
Aroclor 1260	Ave	500	499				-0.2	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD2F	Calibration:	A9K0701
Lab File ID:	ECD2F014.D	Calibration Date:	11/07/19 10:43
Sequence:	9K14009	Injection Date:	11/14/19
Lab Sample ID:	9K14009-CCV2	Injection Time:	15:34

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	516				3.1	20
Aroclor 1260	Ave	500	513				2.6	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R003.D	Calibration Date:	10/28/19 10:35
Sequence:	9K14010	Injection Date:	11/14/19
Lab Sample ID:	9K14010-CCV1	Injection Time:	12:19

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	472				-5.6	20
Aroclor 1260	Ave	500	510				1.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R015.D	Calibration Date:	10/28/19 10:35
Sequence:	9K14010	Injection Date:	11/14/19
Lab Sample ID:	9K14010-CCV2	Injection Time:	15:52

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	491				-1.8	20
Aroclor 1260	Ave	500	516				3.2	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R003.D	Calibration Date:	07/27/19 14:55
Sequence:	9K15010	Injection Date:	11/15/19
Lab Sample ID:	9K15010-CCV1	Injection Time:	08:19

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	471				-5.8	20
Aroclor 1260	Ave	500	519				3.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD6R	Calibration:	A9G2702
Lab File ID:	ECD6R010.D	Calibration Date:	07/27/19 14:55
Sequence:	9K15010	Injection Date:	11/15/19
Lab Sample ID:	9K15010-CCV2	Injection Time:	10:26

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	503				0.6	20
Aroclor 1260	Ave	500	544				8.7	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R003.D	Calibration Date:	11/15/19 10:33
Sequence:	9K18023	Injection Date:	11/18/19
Lab Sample ID:	9K18023-CCV1	Injection Time:	08:04

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	476				-4.7	20
Aroclor 1260	Ave	500	497				-0.6	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	DUALECD1R	Calibration:	A9K1502
Lab File ID:	ECD1R011.D	Calibration Date:	11/15/19 10:33
Sequence:	9K18023	Injection Date:	11/18/19
Lab Sample ID:	9K18023-CCV2	Injection Time:	10:53

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	481				-3.8	20
Aroclor 1260	Ave	500	508				1.7	20

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

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9G23022	Instrument:	DUALECD6R
Matrix:	Water	Calibration:	A9G2702

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9G23022-ICV1)			Lab File ID: ECD6R030.D		Analyzed: 07/23/19 19:38			
Decachlorobiphenyl (Surr)	200	87	70 - 130	11.132	11.13371	-0.0017	+/-1.0	
Initial Cal Check (9G23022-ICV2)			Lab File ID: ECD6R038.D		Analyzed: 07/23/19 22:00			
Decachlorobiphenyl (Surr)	80.0	109	70 - 130	11.132	11.13371	-0.0017	+/-1.0	
Initial Cal Check (9G23022-ICV3)			Lab File ID: ECD6R039.D		Analyzed: 07/23/19 22:17			
Decachlorobiphenyl (Surr)	80.0	108	70 - 130	11.131	11.13371	-0.0027	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9J25014	Instrument:	DUALECD2R
Matrix:	Soil	Calibration:	A9J2803

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9J25014-ICV1)			Lab File ID: ECD2R012.D		Analyzed: 10/25/19 10:40			
Decachlorobiphenyl (Surr)	200	96	70 - 130	10.701	10.701	0.0000	+/-1.0	
Initial Cal Check (9J25014-ICV2)			Lab File ID: ECD2R020.D		Analyzed: 10/25/19 13:02			
Decachlorobiphenyl (Surr)	80.0	107	70 - 130	10.701	10.701	0.0000	+/-1.0	
Initial Cal Check (9J25014-ICV3)			Lab File ID: ECD2R021.D		Analyzed: 10/25/19 13:20			
Decachlorobiphenyl (Surr)	80.0	111	70 - 130	10.699	10.701	-0.0020	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K05021	Instrument:	DUALECD2F
Matrix:	Soil	Calibration:	A9K0701

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9K05021-ICV1)			Lab File ID: ECD2F015.D		Analyzed: 11/05/19 18:48			
Decachlorobiphenyl (Surr)	200	94	70 - 130	9.578	9.578572	-0.0006	+/-1.0	
Initial Cal Check (9K05021-ICV2)			Lab File ID: ECD2F023.D		Analyzed: 11/05/19 21:09			
Decachlorobiphenyl (Surr)	80.0	106	70 - 130	9.576	9.578572	-0.0026	+/-1.0	
Initial Cal Check (9K05021-ICV3)			Lab File ID: ECD2F024.D		Analyzed: 11/05/19 21:26			
Decachlorobiphenyl (Surr)	80.0	107	70 - 130	9.577	9.578572	-0.0016	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14008	Instrument:	DUALECD1R
Matrix:	Soil	Calibration:	A9K1502

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9K14008-ICV1)			Lab File ID: ECD1R012.D		Analyzed: 11/14/19 11:06			
Decachlorobiphenyl (Surr)	200	94	70 - 130	10.846	10.84457	0.0014	+/-1.0	
Initial Cal Check (9K14008-ICV2)			Lab File ID: ECD1R020.D		Analyzed: 11/14/19 13:31			
Decachlorobiphenyl (Surr)	80.0	110	70 - 130	10.845	10.84457	0.0004	+/-1.0	
Initial Cal Check (9K14008-ICV3)			Lab File ID: ECD1R021.D		Analyzed: 11/14/19 13:50			
Decachlorobiphenyl (Surr)	80.0	120	70 - 130	10.844	10.84457	-0.0006	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14009	Instrument:	DUALECD2F
Matrix:	Soil	Calibration:	A9K0701

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K14009-CCV1)			Lab File ID: ECD2F003.D		Analyzed: 11/14/19 12:19			
Decachlorobiphenyl (Surr)	250	96	80 - 120	9.601	9.578572	0.0224	+/-1.0	
Calibration Blank (9K14009-CCB1)			Lab File ID: ECD2F004.D		Analyzed: 11/14/19 12:37			
Decachlorobiphenyl (Surr)	100	95	43 - 120	9.598	9.578572	0.0194	+/-1.0	
Blank (9110780-BLK1)			Lab File ID: ECD2F005.D		Analyzed: 11/14/19 12:55			
Decachlorobiphenyl (Surr)	16.1	95	43 - 120	9.598	9.578572	0.0194	+/-1.0	
LCS (9110780-BS1)			Lab File ID: ECD2F006.D		Analyzed: 11/14/19 13:13			
Decachlorobiphenyl (Surr)	16.7	96	43 - 120	9.597	9.578572	0.0184	+/-1.0	
LCS Dup (9110780-BSD1)			Lab File ID: ECD2F007.D		Analyzed: 11/14/19 13:30			
Decachlorobiphenyl (Surr)	16.7	98	43 - 120	9.597	9.578572	0.0184	+/-1.0	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: ECD2F008.D		Analyzed: 11/14/19 13:48			
Decachlorobiphenyl (Surr)	20.1	67	43 - 120	9.597	9.578572	0.0184	+/-1.0	
PDI-140RAB-10-12.7-191108 (A9K0332-05)			Lab File ID: ECD2F010.D		Analyzed: 11/14/19 14:23			
Decachlorobiphenyl (Surr)	20.5	72	43 - 120	9.595	9.578572	0.0164	+/-1.0	
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: ECD2F012.D		Analyzed: 11/14/19 14:59			
Decachlorobiphenyl (Surr)	18.7	84	43 - 120	9.597	9.578572	0.0184	+/-1.0	
Calibration Check (9K14009-CCV2)			Lab File ID: ECD2F014.D		Analyzed: 11/14/19 15:34			
Decachlorobiphenyl (Surr)	250	100	80 - 120	9.596	9.578572	0.0174	+/-1.0	
Calibration Blank (9K14009-CCB2)			Lab File ID: ECD2F015.D		Analyzed: 11/14/19 15:52			
Decachlorobiphenyl (Surr)	100	96	43 - 120	9.595	9.578572	0.0164	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14010	Instrument:	DUALECD2R
Matrix:	Soil	Calibration:	A9J2803

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K14010-CCV1)			Lab File ID: ECD2R003.D		Analyzed: 11/14/19 12:19			
Decachlorobiphenyl (Surr)	250	98	80 - 120	10.714	10.701	0.0130	+/-1.0	
Calibration Blank (9K14010-CCB1)			Lab File ID: ECD2R004.D		Analyzed: 11/14/19 12:37			
Decachlorobiphenyl (Surr)	100	100	43 - 120	10.709	10.701	0.0080	+/-1.0	
PDI-141RAB-10-17.7-191107 (A9K0332-07)			Lab File ID: ECD2R005.D		Analyzed: 11/14/19 12:55			
Decachlorobiphenyl (Surr)	20.0	49	43 - 120	10.712	10.701	0.0110	+/-1.0	
PDI-143RAB-00-10-191111 (A9K0332-08)			Lab File ID: ECD2R007.D		Analyzed: 11/14/19 13:30			
Decachlorobiphenyl (Surr)	17.7	88	43 - 120	10.705	10.701	0.0040	+/-1.0	
PDI-143RAB-10-20-191112 (A9K0332-09)			Lab File ID: ECD2R009.D		Analyzed: 11/14/19 14:05			
Decachlorobiphenyl (Surr)	18.2	86	43 - 120	10.704	10.701	0.0030	+/-1.0	
Calibration Check (9K14010-CCV2)			Lab File ID: ECD2R015.D		Analyzed: 11/14/19 15:52			
Decachlorobiphenyl (Surr)	250	102	80 - 120	10.698	10.701	-0.0030	+/-1.0	
Calibration Blank (9K14010-CCB2)			Lab File ID: ECD2R016.D		Analyzed: 11/14/19 16:09			
Decachlorobiphenyl (Surr)	100	104	43 - 120	10.7	10.701	-0.0010	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K15010	Instrument:	DUALECD6R
Matrix:	Water	Calibration:	A9G2702

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K15010-CCV1)			Lab File ID: ECD6R003.D		Analyzed: 11/15/19 08:19			
Decachlorobiphenyl (Surr)	250	101	80 - 120	10.993	11.13371	-0.1407	+/-1.0	
Calibration Blank (9K15010-CCB1)			Lab File ID: ECD6R004.D		Analyzed: 11/15/19 08:37			
Decachlorobiphenyl (Surr)	100	102	40 - 135	10.994	11.13371	-0.1397	+/-1.0	
Blank (9110782-BLK1)			Lab File ID: ECD6R005.D		Analyzed: 11/15/19 08:58			
Decachlorobiphenyl (Surr)	0.455	75	40 - 135	10.995	11.13371	-0.1387	+/-1.0	
LCS (9110782-BS1)			Lab File ID: ECD6R006.D		Analyzed: 11/15/19 09:15			
Decachlorobiphenyl (Surr)	0.500	70	40 - 135	10.994	11.13371	-0.1397	+/-1.0	
LCS Dup (9110782-BSD1)			Lab File ID: ECD6R007.D		Analyzed: 11/15/19 09:33			
Decachlorobiphenyl (Surr)	0.500	72	40 - 135	10.994	11.13371	-0.1397	+/-1.0	
PDI-FB-1911121146 (A9K0332-01)			Lab File ID: ECD6R008.D		Analyzed: 11/15/19 09:51			
Decachlorobiphenyl (Surr)	0.481	64	40 - 135	10.994	11.13371	-0.1397	+/-1.0	
PDI-RB-1911120944 (A9K0332-02)			Lab File ID: ECD6R009.D		Analyzed: 11/15/19 10:09			
Decachlorobiphenyl (Surr)	0.472	55	40 - 135	10.993	11.13371	-0.1407	+/-1.0	
Calibration Check (9K15010-CCV2)			Lab File ID: ECD6R010.D		Analyzed: 11/15/19 10:26			
Decachlorobiphenyl (Surr)	250	104	80 - 120	10.994	11.13371	-0.1397	+/-1.0	
Calibration Blank (9K15010-CCB2)			Lab File ID: ECD6R011.D		Analyzed: 11/15/19 10:44			
Decachlorobiphenyl (Surr)	100	105	40 - 135	10.991	11.13371	-0.1427	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K18023	Instrument:	DUALECD1R
Matrix:	Soil	Calibration:	A9K1502

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K18023-CCV1)			Lab File ID: ECD1R003.D		Analyzed: 11/18/19 08:04			
Decachlorobiphenyl (Surr)	250	102	80 - 120	10.842	10.84457	-0.0026	+/-1.0	
Calibration Blank (9K18023-CCB1)			Lab File ID: ECD1R004.D		Analyzed: 11/18/19 08:22			
Decachlorobiphenyl (Surr)	100	100	43 - 120	10.843	10.84457	-0.0016	+/-1.0	
PDI-143RAB-20-31.1-191111 (A9K0332-10RE1)			Lab File ID: ECD1R009.D		Analyzed: 11/18/19 10:16			
Decachlorobiphenyl (Surr)	18.1	93	43 - 120	10.842	10.84457	-0.0026	+/-1.0	
Calibration Check (9K18023-CCV2)			Lab File ID: ECD1R011.D		Analyzed: 11/18/19 10:53			
Decachlorobiphenyl (Surr)	250	104	80 - 120	10.841	10.84457	-0.0036	+/-1.0	
Calibration Blank (9K18023-CCB2)			Lab File ID: ECD1R012.D		Analyzed: 11/18/19 11:11			
Decachlorobiphenyl (Surr)	100	107	43 - 120	10.843	10.84457	-0.0016	+/-1.0	

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bori

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-FB-1911121146	11/12/19 11:46	11/12/19 16:00	11/14/19 08:15	1.85	365.00	11/15/19 09:51	1.07	40.00	
PDI-RB-1911120944	11/12/19 09:44	11/12/19 16:00	11/14/19 08:15	1.94	365.00	11/15/19 10:09	1.08	40.00	
PDI-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/14/19 07:06	5.81	365.00	11/14/19 13:48	0.28	40.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/14/19 07:06	5.79	365.00	11/14/19 14:23	0.30	40.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/14/19 07:06	6.66	365.00	11/14/19 14:59	0.33	40.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/14/19 07:06	6.60	365.00	11/14/19 12:55	0.24	40.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/14/19 07:06	2.78	365.00	11/14/19 13:30	0.27	40.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/14/19 07:06	1.71	365.00	11/14/19 14:05	0.29	40.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/14/19 07:06	2.65	365.00	11/18/19 10:16	4.13	40.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: EPA 8270D

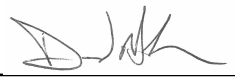
ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-FB-1911121146	A9K0332-01	WQ
PDI-RB-1911120944	A9K0332-02	WQ
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank Ang

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
Pentachlorophenol (PCP)	13.3	26.7	ug/kg
2,4,5-Trichlorophenol	6.67	13.3	ug/kg
Bis(2-ethylhexyl)phthalate	20.0	40.0	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 - 3. Riverbank Ang

Batch Matrix: Water

Analyte	MDL	MRL	Units
Acenaphthene	0.0100	0.0200	ug/L
Acenaphthylene	0.0100	0.0200	ug/L
Anthracene	0.0100	0.0200	ug/L
Benz(a)anthracene	0.0100	0.0200	ug/L
Benzo(a)pyrene	0.0150	0.0300	ug/L
Benzo(b)fluoranthene	0.0150	0.0300	ug/L
Benzo(k)fluoranthene	0.0150	0.0300	ug/L
Benzo(g,h,i)perylene	0.0100	0.0200	ug/L
Chrysene	0.0100	0.0200	ug/L
Dibenz(a,h)anthracene	0.0100	0.0200	ug/L
Fluoranthene	0.0100	0.0200	ug/L
Fluorene	0.0100	0.0200	ug/L
Indeno(1,2,3-cd)pyrene	0.0100	0.0200	ug/L
1-Methylnaphthalene	0.0200	0.0400	ug/L
2-Methylnaphthalene	0.0200	0.0400	ug/L
Naphthalene	0.0200	0.0400	ug/L
Phenanthrene	0.0100	0.0200	ug/L
Pyrene	0.0100	0.0200	ug/L
Carbazole	0.0150	0.0300	ug/L
Dibenzofuran	0.0100	0.0200	ug/L
Pentachlorophenol (PCP)	0.100	0.200	ug/L
2,4,5-Trichlorophenol	0.0500	0.100	ug/L
Bis(2-ethylhexyl)phthalate	0.200	0.400	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-FB-1911121146

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-01	File ID:	E11131925.D
Sampled:	11/12/19 11:46	Prepared:	11/13/19 15:27	Analyzed:	11/13/19 22:50
		Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1040 mL / 1 mL

Batch: 9110772 Sequence: 9K13053 Calibration: A9J0804 Instrument: SV-GCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
83-32-9	Acenaphthene	1	0.00962	U
208-96-8	Acenaphthylene	1	0.00962	U
120-12-7	Anthracene	1	0.00962	U
56-55-3	Benz(a)anthracene	1	0.00962	U
50-32-8	Benzo(a)pyrene	1	0.0144	U
205-99-2	Benzo(b)fluoranthene	1	0.0144	U
207-08-9	Benzo(k)fluoranthene	1	0.0144	U
191-24-2	Benzo(g,h,i)perylene	1	0.00962	U
218-01-9	Chrysene	1	0.00962	U
53-70-3	Dibenz(a,h)anthracene	1	0.00962	U
206-44-0	Fluoranthene	1	0.00962	U
86-73-7	Fluorene	1	0.00962	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.00962	U
91-57-6	2-Methylnaphthalene	1	0.0192	U
91-20-3	Naphthalene	1	0.0192	U
85-01-8	Phenanthrene	1	0.00962	U
129-00-0	Pyrene	1	0.00962	U
87-86-5	Pentachlorophenol (PCP)	1	0.0962	U
95-95-4	2,4,5-Trichlorophenol	1	0.0481	U
117-81-7	Bis(2-ethylhexyl)phthalate	1	0.192	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.81	5.15	107	44 - 120	
2-Fluorobiphenyl (Surr)	4.81	3.56	74	44 - 120	
Phenol-d6 (Surr)	4.81	1.21	25	10 - 120	
p-Terphenyl-d14 (Surr)	4.81	4.44	92	50 - 133	
2-Fluorophenol (Surr)	4.81	2.04	42	19 - 120	
2,4,6-Tribromophenol (Surr)	4.81	4.12	86	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	211577	6.76	331106	6.76	
Naphthalene-d8 (ISTD)	1136944	8.012	1548239	8.012	
Acenaphthene-d10 (ISTD)	811975	9.788	981079	9.788	
Phenanthrene-d10 (ISTD)	1753537	11.307	1906580	11.301	
Chrysene-d12 (ISTD)	1671351	15.243	1969960	15.238	
Perylene-d12 (ISTD)	1521039	18.752	1850282	18.747	
Dibenz(a,h)anthracene-d14 (ISTD)	1198960	21.154	1481619	21.143	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-RB-1911120944

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	WQ	Laboratory ID:	A9K0332-02	File ID:	E11131926.D
Sampled:	11/12/19 09:44	Prepared:	11/13/19 15:27	Analyzed:	11/13/19 23:25
		Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1070 mL / 1 mL

Batch: 9110772 Sequence: 9K13053 Calibration: A9J0804 Instrument: SV-GCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
83-32-9	Acenaphthene	1	0.00935	U
208-96-8	Acenaphthylene	1	0.00935	U
120-12-7	Anthracene	1	0.00935	U
56-55-3	Benz(a)anthracene	1	0.0110	J
50-32-8	Benzo(a)pyrene	1	0.0148	J
205-99-2	Benzo(b)fluoranthene	1	0.0140	U
207-08-9	Benzo(k)fluoranthene	1	0.0140	U
191-24-2	Benzo(g,h,i)perylene	1	0.00935	U
218-01-9	Chrysene	1	0.00935	U
53-70-3	Dibenz(a,h)anthracene	1	0.00935	U
206-44-0	Fluoranthene	1	0.0337	
86-73-7	Fluorene	1	0.00935	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.00935	U
91-57-6	2-Methylnaphthalene	1	0.0187	U
91-20-3	Naphthalene	1	0.0293	J
85-01-8	Phenanthrene	1	0.0147	J
129-00-0	Pyrene	1	0.0431	
87-86-5	Pentachlorophenol (PCP)	1	0.0935	U
95-95-4	2,4,5-Trichlorophenol	1	0.0467	U
117-81-7	Bis(2-ethylhexyl)phthalate	1	0.187	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.67	5.13	110	44 - 120	
2-Fluorobiphenyl (Surr)	4.67	3.70	79	44 - 120	
Phenol-d6 (Surr)	4.67	1.24	26	10 - 120	
p-Terphenyl-d14 (Surr)	4.67	4.14	89	50 - 133	
2-Fluorophenol (Surr)	4.67	2.07	44	19 - 120	
2,4,6-Tribromophenol (Surr)	4.67	4.08	87	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	212839	6.76	331106	6.76	
Naphthalene-d8 (ISTD)	1085022	8.012	1548239	8.012	
Acenaphthene-d10 (ISTD)	759398	9.787	981079	9.788	
Phenanthrene-d10 (ISTD)	1691315	11.306	1906580	11.301	
Chrysene-d12 (ISTD)	1602066	15.243	1969960	15.238	
Perylene-d12 (ISTD)	1475630	18.752	1850282	18.747	
Dibenz(a,h)anthracene-d14 (ISTD)	1168196	21.148	1481619	21.143	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-140RAB-00-10-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-04	File ID:	E11141912.D
Sampled:	11/08/19 11:40	Prepared:	11/14/19 07:10	Analyzed:	11/14/19 14:37
Solids:	81.01	Preparation:	EPA 3546	Initial/Final:	15.6 g / 2 mL
Batch:	9110781	Sequence:	9K14015	Calibration:	A9J0804
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	40	454	D
208-96-8	Acenaphthylene	40	305	D
120-12-7	Anthracene	40	631	D
56-55-3	Benz(a)anthracene	40	557	D
50-32-8	Benzo(a)pyrene	40	849	D
205-99-2	Benzo(b)fluoranthene	40	834	D
207-08-9	Benzo(k)fluoranthene	40	378	D
191-24-2	Benzo(g,h,i)perylene	40	779	D
218-01-9	Chrysene	40	765	D
53-70-3	Dibenz(a,h)anthracene	40	79.6	JD
206-44-0	Fluoranthene	40	2160	D
86-73-7	Fluorene	40	413	D
193-39-5	Indeno(1,2,3-cd)pyrene	40	662	D
91-57-6	2-Methylnaphthalene	40	370	D
91-20-3	Naphthalene	40	1720	D
85-01-8	Phenanthrene	40	2900	D
129-00-0	Pyrene	40	2630	D
87-86-5	Pentachlorophenol (PCP)	40	631	U
95-95-4	2,4,5-Trichlorophenol	40	317	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	950	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	396	161	41	37 - 122	D
2-Fluorobiphenyl (Surr)	396	236	60	44 - 115	D
Phenol-d6 (Surr)	396	147	37	33 - 122	D
p-Terphenyl-d14 (Surr)	396	296	75	54 - 127	D
2-Fluorophenol (Surr)	396	201	51	35 - 115	D
2,4,6-Tribromophenol (Surr)	396	313	79	39 - 132	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	329403	6.76	448986	6.76	
Naphthalene-d8 (ISTD)	1373359	8.012	1811790	8.012	
Acenaphthene-d10 (ISTD)	745605	9.788	930990	9.788	
Phenanthrene-d10 (ISTD)	1714877	11.301	1751114	11.301	
Chrysene-d12 (ISTD)	1709713	15.233	1604620	15.233	
Perylene-d12 (ISTD)	1610687	18.741	1415816	18.741	
Dibenz(a,h)anthracene-d14 (ISTD)	1273918	21.132	1049038	21.137	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-140RAB-10-12.7-191108

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-05RE1	File ID:	J11151923.D
Sampled:	11/08/19 12:15	Prepared:	11/14/19 07:10	Analyzed:	11/15/19 21:21
Solids:	79.57	Preparation:	EPA 3546	Initial/Final:	15.13 g / 2 mL
Batch:	9110781	Sequence:	9K15038	Calibration:	A9I2405
Instrument:	SV-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	4	53.4	D
208-96-8	Acenaphthylene	4	35.2	D
120-12-7	Anthracene	4	73.0	D
56-55-3	Benz(a)anthracene	4	141	D
50-32-8	Benzo(a)pyrene	4	267	D
205-99-2	Benzo(b)fluoranthene	4	287	D
207-08-9	Benzo(k)fluoranthene	4	96.1	D
191-24-2	Benzo(g,h,i)perylene	4	309	D
218-01-9	Chrysene	4	198	D
53-70-3	Dibenz(a,h)anthracene	4	32.2	D
206-44-0	Fluoranthene	4	356	D
86-73-7	Fluorene	4	42.4	D
193-39-5	Indeno(1,2,3-cd)pyrene	4	237	D
91-57-6	2-Methylnaphthalene	4	25.6	JD
91-20-3	Naphthalene	4	107	D
85-01-8	Phenanthrene	4	343	D
129-00-0	Pyrene	4	466	D
87-86-5	Pentachlorophenol (PCP)	4	66.3	U
95-95-4	2,4,5-Trichlorophenol	4	33.2	U
117-81-7	Bis(2-ethylhexyl)phthalate	4	99.7	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	415	216	52	37 - 122	
2-Fluorobiphenyl (Surr)	415	304	73	44 - 115	
Phenol-d6 (Surr)	415	187	45	33 - 122	
p-Terphenyl-d14 (Surr)	415	349	84	54 - 127	
2-Fluorophenol (Surr)	415	253	61	35 - 115	
2,4,6-Tribromophenol (Surr)	415	211	51	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	341650	6.386	333945	6.386	
Naphthalene-d8 (ISTD)	1193951	7.648	1253992	7.648	
Acenaphthene-d10 (ISTD)	628017	9.424	667779	9.424	
Phenanthrene-d10 (ISTD)	1069849	10.932	1232241	10.932	
Chrysene-d12 (ISTD)	905709	14.526	1168472	14.521	
Perylene-d12 (ISTD)	786134	17.971	1155496	17.966	
Dibenz(a,h)anthracene-d14 (ISTD)	650507	20.362	988166	20.351	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-141RAB-00-10-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-06	File ID:	E11141909.D
Sampled:	11/07/19 15:15	Prepared:	11/14/19 07:10	Analyzed:	11/14/19 12:50
Solids:	87.86	Preparation:	EPA 3546	Initial/Final:	15.08 g / 2 mL
Batch:	9110781	Sequence:	9K14015	Calibration:	A9J0804
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	40	60.2	U
208-96-8	Acenaphthylene	40	60.2	U
120-12-7	Anthracene	40	63.8	JD
56-55-3	Benz(a)anthracene	40	345	D
50-32-8	Benzo(a)pyrene	40	630	D
205-99-2	Benzo(b)fluoranthene	40	656	D
207-08-9	Benzo(k)fluoranthene	40	313	D
191-24-2	Benzo(g,h,i)perylene	40	701	D
218-01-9	Chrysene	40	443	D
53-70-3	Dibenz(a,h)anthracene	40	72.4	JD
206-44-0	Fluoranthene	40	563	D
86-73-7	Fluorene	40	60.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	40	571	D
91-57-6	2-Methylnaphthalene	40	121	U
91-20-3	Naphthalene	40	121	U
85-01-8	Phenanthrene	40	324	D
129-00-0	Pyrene	40	798	D
87-86-5	Pentachlorophenol (PCP)	40	602	U
95-95-4	2,4,5-Trichlorophenol	40	302	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	906	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	377	174	46	37 - 122	D
2-Fluorobiphenyl (Surr)	377	244	65	44 - 115	D
Phenol-d6 (Surr)	377	162	43	33 - 122	D
p-Terphenyl-d14 (Surr)	377	317	84	54 - 127	D
2-Fluorophenol (Surr)	377	224	59	35 - 115	D
2,4,6-Tribromophenol (Surr)	377	281	75	39 - 132	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	406398	6.76	448986	6.76	
Naphthalene-d8 (ISTD)	1645220	8.012	1811790	8.012	
Acenaphthene-d10 (ISTD)	803039	9.788	930990	9.788	
Phenanthrene-d10 (ISTD)	1622202	11.301	1751114	11.301	
Chrysene-d12 (ISTD)	1449045	15.232	1604620	15.233	
Perylene-d12 (ISTD)	1316598	18.741	1415816	18.741	
Dibenz(a,h)anthracene-d14 (ISTD)	1017776	21.137	1049038	21.137	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-141RAB-10-17.7-191107

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-07	File ID:	E11141908.D
Sampled:	11/07/19 16:45	Prepared:	11/14/19 07:10	Analyzed:	11/14/19 12:14
Solids:	82.86	Preparation:	EPA 3546	Initial/Final:	15.59 g / 5 mL
Batch:	9110781	Sequence:	9K14015	Calibration:	A9J0804
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1000	185000	D
208-96-8	Acenaphthylene	1000	64400	D
120-12-7	Anthracene	1000	172000	D
56-55-3	Benz(a)anthracene	1000	174000	D
50-32-8	Benzo(a)pyrene	1000	243000	D
205-99-2	Benzo(b)fluoranthene	1000	214000	D
207-08-9	Benzo(k)fluoranthene	1000	88400	D
191-24-2	Benzo(g,h,i)perylene	1000	193000	D
218-01-9	Chrysene	1000	219000	D
53-70-3	Dibenz(a,h)anthracene	1000	19200	D
206-44-0	Fluoranthene	1000	640000	D
86-73-7	Fluorene	1000	131000	D
193-39-5	Indeno(1,2,3-cd)pyrene	1000	159000	D
91-57-6	2-Methylnaphthalene	1000	156000	D
91-20-3	Naphthalene	1000	1050000	D
85-01-8	Phenanthrene	1000	790000	D
129-00-0	Pyrene	1000	782000	D
87-86-5	Pentachlorophenol (PCP)	1000	38600	U
95-95-4	2,4,5-Trichlorophenol	1000	19400	U
117-81-7	Bis(2-ethylhexyl)phthalate	1000	58100	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	387	303	78	37 - 122	D
2-Fluorobiphenyl (Surr)	387	641	166	44 - 115	D
Phenol-d6 (Surr)	387	0.00		33 - 122	D
p-Terphenyl-d14 (Surr)	387	878	227	54 - 127	D
2-Fluorophenol (Surr)	387	170	44	35 - 115	D
2,4,6-Tribromophenol (Surr)	387	0.00		39 - 132	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	408984	6.76	448986	6.76	
Naphthalene-d8 (ISTD)	1672124	8.012	1811790	8.012	
Acenaphthene-d10 (ISTD)	827114	9.788	930990	9.788	
Phenanthrene-d10 (ISTD)	1568866	11.301	1751114	11.301	
Chrysene-d12 (ISTD)	1401926	15.233	1604620	15.233	
Perylene-d12 (ISTD)	1248728	18.741	1415816	18.741	
Dibenz(a,h)anthracene-d14 (ISTD)	933413	21.132	1049038	21.137	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-143RAB-00-10-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-08RE1	File ID:	J11151924.D
Sampled:	11/11/19 12:30	Prepared:	11/14/19 07:10	Analyzed:	11/15/19 21:56
Solids:	92.62	Preparation:	EPA 3546	Initial/Final:	15.54 g / 2 mL
Batch:	9110781	Sequence:	9K15038	Calibration:	A9I2405
Instrument:	SV-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	4	5.54	U
208-96-8	Acenaphthylene	4	8.54	JD
120-12-7	Anthracene	4	5.54	U
56-55-3	Benz(a)anthracene	4	48.8	D
50-32-8	Benzo(a)pyrene	4	82.4	D
205-99-2	Benzo(b)fluoranthene	4	71.4	D
207-08-9	Benzo(k)fluoranthene	4	32.1	D
191-24-2	Benzo(g,h,i)perylene	4	88.1	D
218-01-9	Chrysene	4	65.6	D
53-70-3	Dibenz(a,h)anthracene	4	9.26	JD
206-44-0	Fluoranthene	4	72.4	D
86-73-7	Fluorene	4	5.54	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	67.8	D
91-57-6	2-Methylnaphthalene	4	11.1	U
91-20-3	Naphthalene	4	11.1	U
85-01-8	Phenanthrene	4	7.79	JD
129-00-0	Pyrene	4	105	D
87-86-5	Pentachlorophenol (PCP)	4	55.4	U
95-95-4	2,4,5-Trichlorophenol	4	27.8	U
117-81-7	Bis(2-ethylhexyl)phthalate	4	83.4	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	347	227	65	37 - 122	
2-Fluorobiphenyl (Surr)	347	316	91	44 - 115	
Phenol-d6 (Surr)	347	200	58	33 - 122	
p-Terphenyl-d14 (Surr)	347	359	103	54 - 127	
2-Fluorophenol (Surr)	347	264	76	35 - 115	
2,4,6-Tribromophenol (Surr)	347	224	65	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	352962	6.386	333945	6.386	
Naphthalene-d8 (ISTD)	1246504	7.648	1253992	7.648	
Acenaphthene-d10 (ISTD)	639117	9.424	667779	9.424	
Phenanthrene-d10 (ISTD)	1096136	10.932	1232241	10.932	
Chrysene-d12 (ISTD)	972208	14.532	1168472	14.521	
Perylene-d12 (ISTD)	943355	17.971	1155496	17.966	
Dibenz(a,h)anthracene-d14 (ISTD)	748252	20.362	988166	20.351	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-143RAB-10-20-191112

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-09RE1	File ID:	E11141915.D
Sampled:	11/12/19 14:05	Prepared:	11/14/19 07:10	Analyzed:	11/14/19 16:28
Solids:	91.60	Preparation:	EPA 3546	Initial/Final:	15.03 g / 2 mL
Batch:	9110781	Sequence:	9K14015	Calibration:	A9J0804
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	4	5.80	U
208-96-8	Acenaphthylene	4	26.1	D
120-12-7	Anthracene	4	6.34	JD
56-55-3	Benz(a)anthracene	4	34.9	D
50-32-8	Benzo(a)pyrene	4	108	D
205-99-2	Benzo(b)fluoranthene	4	96.0	D
207-08-9	Benzo(k)fluoranthene	4	39.8	D
191-24-2	Benzo(g,h,i)perylene	4	169	D
218-01-9	Chrysene	4	48.7	D
53-70-3	Dibenz(a,h)anthracene	4	12.9	D
206-44-0	Fluoranthene	4	37.3	D
86-73-7	Fluorene	4	5.80	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	123	D
91-57-6	2-Methylnaphthalene	4	11.6	U
91-20-3	Naphthalene	4	21.2	JD
85-01-8	Phenanthrene	4	11.8	D
129-00-0	Pyrene	4	58.3	D
87-86-5	Pentachlorophenol (PCP)	4	58.0	U
95-95-4	2,4,5-Trichlorophenol	4	29.1	U
117-81-7	Bis(2-ethylhexyl)phthalate	4	87.2	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	363	279	77	37 - 122	
2-Fluorobiphenyl (Surr)	363	288	79	44 - 115	
Phenol-d6 (Surr)	363	252	69	33 - 122	
p-Terphenyl-d14 (Surr)	363	363	100	54 - 127	
2-Fluorophenol (Surr)	363	274	76	35 - 115	
2,4,6-Tribromophenol (Surr)	363	242	67	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	270775	6.76	448986	6.76	
Naphthalene-d8 (ISTD)	1331978	8.012	1811790	8.012	
Acenaphthene-d10 (ISTD)	830427	9.788	930990	9.788	
Phenanthrene-d10 (ISTD)	1735217	11.301	1751114	11.301	
Chrysene-d12 (ISTD)	1647837	15.233	1604620	15.233	
Perylene-d12 (ISTD)	1567252	18.747	1415816	18.741	
Dibenz(a,h)anthracene-d14 (ISTD)	1219569	21.137	1049038	21.137	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

PDI-143RAB-20-31.1-191111

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Matrix:	SO	Laboratory ID:	A9K0332-10	File ID:	E11141910.D
Sampled:	11/11/19 15:30	Prepared:	11/14/19 07:10	Analyzed:	11/14/19 13:26
Solids:	90.19	Preparation:	EPA 3546	Initial/Final:	15.09 g / 2 mL
Batch:	9110781	Sequence:	9K14015	Calibration:	A9J0804
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	40	2920	D
208-96-8	Acenaphthylene	40	271	D
120-12-7	Anthracene	40	627	D
56-55-3	Benz(a)anthracene	40	982	D
50-32-8	Benzo(a)pyrene	40	1540	D
205-99-2	Benzo(b)fluoranthene	40	1430	D
207-08-9	Benzo(k)fluoranthene	40	643	D
191-24-2	Benzo(g,h,i)perylene	40	1520	D
218-01-9	Chrysene	40	1380	D
53-70-3	Dibenz(a,h)anthracene	40	156	D
206-44-0	Fluoranthene	40	2750	D
86-73-7	Fluorene	40	869	D
193-39-5	Indeno(1,2,3-cd)pyrene	40	1170	D
91-57-6	2-Methylnaphthalene	40	118	U
91-20-3	Naphthalene	40	196	JD
85-01-8	Phenanthrene	40	526	D
129-00-0	Pyrene	40	3790	D
87-86-5	Pentachlorophenol (PCP)	40	586	U
95-95-4	2,4,5-Trichlorophenol	40	294	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	882	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	367	192	52	37 - 122	D
2-Fluorobiphenyl (Surr)	367	295	80	44 - 115	D
Phenol-d6 (Surr)	367	188	51	33 - 122	D
p-Terphenyl-d14 (Surr)	367	377	103	54 - 127	D
2-Fluorophenol (Surr)	367	244	66	35 - 115	D
2,4,6-Tribromophenol (Surr)	367	360	98	39 - 132	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	390267	6.76	448986	6.76	
Naphthalene-d8 (ISTD)	1656633	8.012	1811790	8.012	
Acenaphthene-d10 (ISTD)	863312	9.788	930990	9.788	
Phenanthrene-d10 (ISTD)	1688061	11.301	1751114	11.301	
Chrysene-d12 (ISTD)	1575544	15.233	1604620	15.233	
Perylene-d12 (ISTD)	1481808	18.741	1415816	18.741	
Dibenz(a,h)anthracene-d14 (ISTD)	1169974	21.132	1049038	21.137	

* 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 - 3. Riverbank Angled Borin
Batch: 9110772 Batch Matrix: Water
Preparation: EPA 3510C (Acid Extraction)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110772-BLK1	E11131922.D	11/13/19 15:27	
LCS	9110772-BS1	E11131923.D	11/13/19 15:27	
LCS Dup	9110772-BSD1	E11131924.D	11/13/19 15:27	
PDI-FB-1911121146	A9K0332-01	E11131925.D	11/13/19 15:27	
PDI-RB-1911120944	A9K0332-02	E11131926.D	11/13/19 15:27	

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.

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110781 Batch Matrix: Soil
Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110781-BLK2	J11151912.D	11/14/19 07:10	
LCS	9110781-BS1	E11141906.D	11/14/19 07:10	
LCS Dup	9110781-BSD1	E11141907.D	11/14/19 07:10	
PDI-140RAB-00-10-191108	A9K0332-04	E11141912.D	11/14/19 07:10	
PDI-140RAB-10-12.7-191108	A9K0332-05RE1	J11151923.D	11/14/19 07:10	
PDI-141RAB-00-10-191107	A9K0332-06	E11141909.D	11/14/19 07:10	
PDI-141RAB-10-17.7-191107	A9K0332-07	E11141908.D	11/14/19 07:10	
PDI-143RAB-00-10-191111	A9K0332-08RE1	J11151924.D	11/14/19 07:10	
PDI-143RAB-10-20-191112	A9K0332-09RE1	E11141915.D	11/14/19 07:10	
PDI-143RAB-20-31.1-191111	A9K0332-10	E11141910.D	11/14/19 07:10	

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

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water	Laboratory ID:	9110772-BLK1	File ID:	E11131922.D
Prepared:	11/13/19 15:27	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	11/13/19 21:04	Instrument:	SV-GCMS5		
Batch:	9110772	Sequence:	9K13053	Calibration:	A9J0804

CAS NO.	COMPOUND	CONC. (ug/L)	Q
83-32-9	Acenaphthene	0.00909	U
208-96-8	Acenaphthylene	0.00909	U
120-12-7	Anthracene	0.00909	U
56-55-3	Benz(a)anthracene	0.00909	U
50-32-8	Benzo(a)pyrene	0.0136	U
205-99-2	Benzo(b)fluoranthene	0.0136	U
207-08-9	Benzo(k)fluoranthene	0.0136	U
191-24-2	Benzo(g,h,i)perylene	0.00909	U
218-01-9	Chrysene	0.00909	U
53-70-3	Dibenz(a,h)anthracene	0.00909	U
206-44-0	Fluoranthene	0.00909	U
86-73-7	Fluorene	0.00909	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.00909	U
90-12-0	1-Methylnaphthalene	0.0182	U
91-57-6	2-Methylnaphthalene	0.0182	U
91-20-3	Naphthalene	0.0182	U
85-01-8	Phenanthrene	0.00909	U
129-00-0	Pyrene	0.00909	U
86-74-8	Carbazole	0.0136	U
132-64-9	Dibenzofuran	0.00909	U
87-86-5	Pentachlorophenol (PCP)	0.0909	U
95-95-4	2,4,5-Trichlorophenol	0.0455	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.182	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.55	3.45	76	44 - 120	
2-Fluorobiphenyl (Surr)	4.55	3.27	72	44 - 120	
Phenol-d6 (Surr)	4.55	1.01	22	10 - 120	
p-Terphenyl-d14 (Surr)	4.55	4.47	98	50 - 133	
2-Fluorophenol (Surr)	4.55	1.95	43	19 - 120	
2,4,6-Tribromophenol (Surr)	4.55	3.47	76	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	224439	6.76	331106	6.76	
Naphthalene-d8 (ISTD)	896578	8.012	1548239	8.012	

METHOD BLANK DATA SHEET

EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water	Laboratory ID:	9110772-BLK1	File ID:	E11131922.D
Prepared:	11/13/19 15:27	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	11/13/19 21:04	Instrument:	SV-GCMS5		
Batch:	9110772	Sequence:	9K13053	Calibration:	A9J0804

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Acenaphthene-d10 (ISTD)	617901	9.787	981079	9.788	
Phenanthrene-d10 (ISTD)	1530735	11.306	1906580	11.301	
Chrysene-d12 (ISTD)	1386425	15.238	1969960	15.238	
Perylene-d12 (ISTD)	1205005	18.752	1850282	18.747	
Dibenz(a,h)anthracene-d14 (ISTD)	912905	21.153	1481619	21.143	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110781-BLK2	File ID:	J11151912.D
Prepared:	11/14/19 07:10	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	11/15/19 14:56	Instrument:	SV-GCMS10		
Batch:	9110781	Sequence:	9K15018	Calibration:	A9I2405

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
87-86-5	Pentachlorophenol (PCP)	12.5	U
95-95-4	2,4,5-Trichlorophenol	6.25	U
117-81-7	Bis(2-ethylhexyl)phthalate	18.7	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	312	227	73	37 - 122	
2-Fluorobiphenyl (Surr)	312	255	82	44 - 115	
Phenol-d6 (Surr)	312	216	69	33 - 122	
p-Terphenyl-d14 (Surr)	312	293	94	54 - 127	
2-Fluorophenol (Surr)	312	256	82	35 - 115	
2,4,6-Tribromophenol (Surr)	312	261	84	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	353825	6.386	318957	6.386	
Naphthalene-d8 (ISTD)	1286462	7.648	1215749	7.648	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110781-BLK2	File ID:	J11151912.D
Prepared:	11/14/19 07:10	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	11/15/19 14:56	Instrument:	SV-GCMS10		
Batch:	9110781	Sequence:	9K15018	Calibration:	A9I2405

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Acenaphthene-d10 (ISTD)	683892	9.424	657030	9.424	
Phenanthrene-d10 (ISTD)	1286370	10.932	1220335	10.937	
Chrysene-d12 (ISTD)	1334892	14.521	1211801	14.526	
Perylene-d12 (ISTD)	1317794	17.965	1227655	17.976	
Dibenz(a,h)anthracene-d14 (ISTD)	1159518	20.346	1064363	20.362	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water		
Batch:	9110772	Laboratory ID:	9110772-BS1
Preparation:	EPA 3510C (Acid Extraction)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	4.00	3.41	85	47 - 122
Acenaphthylene	4.00	3.58	90	41 - 130
Anthracene	4.00	3.77	94	57 - 123
Benz(a)anthracene	4.00	4.03	101	58 - 125
Benzo(a)pyrene	4.00	3.66	91	54 - 128
Benzo(b)fluoranthene	4.00	3.70	92	53 - 131
Benzo(k)fluoranthene	4.00	3.84	96	57 - 129
Benzo(g,h,i)perylene	4.00	3.86	97	50 - 134
Chrysene	4.00	3.87	97	59 - 123
Dibenz(a,h)anthracene	4.00	4.06	102	51 - 134
Fluoranthene	4.00	3.99	100	57 - 128
Fluorene	4.00	3.70	93	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.74	94	52 - 133
1-Methylnaphthalene	4.00	4.17	104	41 - 120
2-Methylnaphthalene	4.00	4.18	105	40 - 121
Naphthalene	4.00	3.31	83	40 - 121
Phenanthrene	4.00	3.53	88	59 - 120
Pyrene	4.00	3.99	100	57 - 126
Carbazole	4.00	4.11	103	60 - 122
Dibenzofuran	4.00	3.64	91	53 - 120
Pentachlorophenol (PCP)	4.00	3.76	94	35 - 138
2,4,5-Trichlorophenol	4.00	3.90	97	53 - 123
Bis(2-ethylhexyl)phthalate	4.00	3.97	99	55 - 135

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix: Water
Batch: 9110772
Laboratory ID: 9110772-BSD1
Preparation: EPA 3510C (Acid Extraction)
Initial/Final: 1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
Acenaphthene	4.00	3.38	84	0.8	30	47 - 122
Acenaphthylene	4.00	3.54	88	1	30	41 - 130
Anthracene	4.00	3.79	95	0.6	30	57 - 123
Benz(a)anthracene	4.00	4.00	100	0.8	30	58 - 125
Benzo(a)pyrene	4.00	3.64	91	0.6	30	54 - 128
Benzo(b)fluoranthene	4.00	3.74	94	1	30	53 - 131
Benzo(k)fluoranthene	4.00	3.78	94	2	30	57 - 129
Benzo(g,h,i)perylene	4.00	3.85	96	0.2	30	50 - 134
Chrysene	4.00	3.80	95	2	30	59 - 123
Dibenz(a,h)anthracene	4.00	4.06	101	0.1	30	51 - 134
Fluoranthene	4.00	4.15	104	4	30	57 - 128
Fluorene	4.00	3.66	92	1	30	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.81	95	2	30	52 - 133
1-Methylnaphthalene	4.00	3.75	94	11	30	41 - 120
2-Methylnaphthalene	4.00	3.69	92	12	30	40 - 121
Naphthalene	4.00	3.21	80	3	30	40 - 121
Phenanthrene	4.00	3.49	87	1	30	59 - 120
Pyrene	4.00	4.15	104	4	30	57 - 126
Carbazole	4.00	4.24	106	3	30	60 - 122
Dibenzofuran	4.00	3.58	90	2	30	53 - 120
Pentachlorophenol (PCP)	4.00	3.90	98	4	30	35 - 138
2,4,5-Trichlorophenol	4.00	3.98	99	2	30	53 - 123
Bis(2-ethylhexyl)phthalate	4.00	3.87	97	3	30	55 - 135

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110781	Laboratory ID:	9110781-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	518	97	40 - 122
Acenaphthylene	533	548	103	32 - 132
Anthracene	533	567	106	47 - 123
Benz(a)anthracene	533	595	112	49 - 126
Benzo(a)pyrene	533	536	100	45 - 129
Benzo(b)fluoranthene	533	547	102	45 - 132
Benzo(k)fluoranthene	533	571	107	47 - 132
Benzo(g,h,i)perylene	533	549	103	43 - 134
Chrysene	533	565	106	50 - 124
Dibenz(a,h)anthracene	533	600	112	45 - 134
Fluoranthene	533	602	113	50 - 127
Fluorene	533	546	102	43 - 125
Indeno(1,2,3-cd)pyrene	533	549	103	45 - 133
1-Methylnaphthalene	533	587	110	40 - 120
2-Methylnaphthalene	533	589	111	38 - 122
Naphthalene	533	513	96	35 - 123
Phenanthrene	533	515	97	50 - 121
Pyrene	533	598	112	47 - 127
Carbazole	533	617	116	50 - 122
Dibenzofuran	533	538	101	44 - 120
Pentachlorophenol (PCP)	533	559	105	25 - 133
2,4,5-Trichlorophenol	533	618	116	41 - 124
Bis(2-ethylhexyl)phthalate	533	576	108	51 - 133

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110781	Laboratory ID:	9110781-BSD1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS
Acenaphthene	533	505	95	3	30	40 - 122
Acenaphthylene	533	533	100	3	30	32 - 132
Anthracene	533	557	104	2	30	47 - 123
Benz(a)anthracene	533	576	108	3	30	49 - 126
Benzo(a)pyrene	533	531	100	0.9	30	45 - 129
Benzo(b)fluoranthene	533	540	101	1	30	45 - 132
Benzo(k)fluoranthene	533	568	107	0.4	30	47 - 132
Benzo(g,h,i)perylene	533	524	98	5	30	43 - 134
Chrysene	533	551	103	3	30	50 - 124
Dibenz(a,h)anthracene	533	581	109	3	30	45 - 134
Fluoranthene	533	577	108	4	30	50 - 127
Fluorene	533	525	98	4	30	43 - 125
Indeno(1,2,3-cd)pyrene	533	529	99	4	30	45 - 133
1-Methylnaphthalene	533	565	106	4	30	40 - 120
2-Methylnaphthalene	533	565	106	4	30	38 - 122
Naphthalene	533	495	93	3	30	35 - 123
Phenanthrene	533	509	95	1	30	50 - 121
Pyrene	533	580	109	3	30	47 - 127
Carbazole	533	597	112	3	30	50 - 122
Dibenzofuran	533	523	98	3	30	44 - 120
Pentachlorophenol (PCP)	533	552	103	1	30	25 - 133
2,4,5-Trichlorophenol	533	592	111	4	30	41 - 124
Bis(2-ethylhexyl)phthalate	533	559	105	3	30	51 - 133

* = 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 - 3. Riverbank Angled Borin
Sequence:	9I19035	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9I19035-TUN1	J09191916.D	09/20/19 00:22
Initial Cal Blank	9I19035-ICB1	J09191917.D	09/20/19 00:49
Cal Standard	9I19035-CAL1	J09191918.D	09/20/19 01:24
Cal Standard	9I19035-CAL2	J09191919.D	09/20/19 01:59
Cal Standard	9I19035-CAL3	J09191920.D	09/20/19 02:34
Cal Standard	9I19035-CAL4	J09191921.D	09/20/19 03:09
Cal Standard	9I19035-CAL5	J09191922.D	09/20/19 03:44
Cal Standard	9I19035-CAL6	J09191923.D	09/20/19 04:19
Cal Standard	9I19035-CAL7	J09191924.D	09/20/19 04:54
Cal Standard	9I19035-CAL8	J09191925.D	09/20/19 05:29
Cal Standard	9I19035-CAL9	J09191926.D	09/20/19 06:04
Cal Standard	9I19035-CALA	J09191927.D	09/20/19 06:39
Initial Cal Check	9I19035-ICV1	J09191929.D	09/20/19 07:50

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 - 3. Riverbank Angled Borin
Sequence:	9J04044	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J04044-TUN1	E10041906.D	10/04/19 16:46
Initial Cal Blank	9J04044-ICB1	E10041907.D	10/04/19 17:14
Cal Standard	9J04044-CAL1	E10041908.D	10/04/19 17:49
Cal Standard	9J04044-CAL2	E10041909.D	10/04/19 18:25
Cal Standard	9J04044-CAL3	E10041910.D	10/04/19 19:01
Cal Standard	9J04044-CAL4	E10041911.D	10/04/19 19:36
Cal Standard	9J04044-CAL5	E10041912.D	10/04/19 20:12
Cal Standard	9J04044-CAL6	E10041913.D	10/04/19 20:47
Cal Standard	9J04044-CAL7	E10041914.D	10/04/19 21:23
Cal Standard	9J04044-CAL8	E10041915.D	10/04/19 21:58
Cal Standard	9J04044-CAL9	E10041916.D	10/04/19 22:34
Cal Standard	9J04044-CALA	E10041917.D	10/04/19 23:09
Initial Cal Check	9J04044-ICV1	E10041919.D	10/05/19 00:20

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 - 3. Riverbank Angled Borin
Sequence:	9K13053	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K13053-TUN1	E11131913.D	11/13/19 15:51
Calibration Check	9K13053-CCV1	E11131915.D	11/13/19 16:54
Calibration Blank	9K13053-CCB1	E11131916.D	11/13/19 17:30
Blank	9110772-BLK1	E11131922.D	11/13/19 21:04
LCS	9110772-BS1	E11131923.D	11/13/19 21:39
LCS Dup	9110772-BSD1	E11131924.D	11/13/19 22:15
PDI-FB-1911121146	A9K0332-01	E11131925.D	11/13/19 22:50
PDI-RB-1911120944	A9K0332-02	E11131926.D	11/13/19 23:25

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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K14015-TUN1	E11141901.D	11/14/19 08:13
Calibration Check	9K14015-CCV1	E11141903.D	11/14/19 09:16
Calibration Blank	9K14015-CCB1	E11141904.D	11/14/19 09:52
LCS	9110781-BS1	E11141906.D	11/14/19 11:03
LCS Dup	9110781-BSD1	E11141907.D	11/14/19 11:39
PDI-141RAB-10-17.7-191107	A9K0332-07	E11141908.D	11/14/19 12:14
PDI-141RAB-00-10-191107	A9K0332-06	E11141909.D	11/14/19 12:50
PDI-143RAB-20-31.1-191111	A9K0332-10	E11141910.D	11/14/19 13:26
PDI-140RAB-00-10-191108	A9K0332-04	E11141912.D	11/14/19 14:37
PDI-143RAB-10-20-191112	A9K0332-09RE1	E11141915.D	11/14/19 16:28

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 - 3. Riverbank Angled Borin
Sequence:	9K15018	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K15018-TUN2	J11151904.D	11/15/19 10:14
Calibration Check	9K15018-CCV2	J11151905.D	11/15/19 10:42
Calibration Blank	9K15018-CCB1	J11151906.D	11/15/19 11:18
Blank	9110781-BLK2	J11151912.D	11/15/19 14:56

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 - 3. Riverbank Angled Borin
Sequence:	9K15038	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9K15038-TUN2	J11151916.D	11/15/19 17:19
Calibration Check	9K15038-CCV2	J11151917.D	11/15/19 17:47
Calibration Blank	9K15038-CCB1	J11151918.D	11/15/19 18:23
PDI-140RAB-10-12.7-191108	A9K0332-05RE1	J11151923.D	11/15/19 21:21
PDI-143RAB-00-10-191111	A9K0332-08RE1	J11151924.D	11/15/19 21:56

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 - 3. Riverbank Angled Borin
Lab File ID:	J09191916.D	Injection Date:	09/20/19
Instrument ID:	SV-GCMS10	Injection Time:	00:22
Sequence:	9I19035	Lab Sample ID:	9I19035-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.61	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	6.90	PASS
m/z 365	1 - 100% of m/z 198	3.17	PASS
m/z 441	Less than 150% of m/z 443	73.90	PASS
m/z 442	0.1 - 200% of m/z 198	95.52	PASS
m/z 443	15 - 24% of m/z 442	19.71	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 - 3. Riverbank Angled Borin
Lab File ID:	E10041906.D	Injection Date:	10/04/19
Instrument ID:	SV-GCMS5	Injection Time:	16:46
Sequence:	9J04044	Lab Sample ID:	9J04044-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.96	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.48	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	6.63	PASS
m/z 365	1 - 100% of m/z 198	3.00	PASS
m/z 441	Less than 150% of m/z 443	78.47	PASS
m/z 442	0.1 - 200% of m/z 198	104.13	PASS
m/z 443	15 - 24% of m/z 442	19.43	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 - 3. Riverbank Angled Borin
Lab File ID:	E11131913.D	Injection Date:	11/13/19
Instrument ID:	SV-GCMS5	Injection Time:	15:51
Sequence:	9K13053	Lab Sample ID:	9K13053-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.19	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.49	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	6.85	PASS
m/z 365	1 - 100% of m/z 198	3.26	PASS
m/z 441	Less than 150% of m/z 443	78.98	PASS
m/z 442	0.1 - 200% of m/z 198	119.91	PASS
m/z 443	15 - 24% of m/z 442	19.19	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 - 3. Riverbank Angled Borin
Lab File ID:	E11141901.D	Injection Date:	11/14/19
Instrument ID:	SV-GCMS5	Injection Time:	08:13
Sequence:	9K14015	Lab Sample ID:	9K14015-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.18	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.48	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	6.77	PASS
m/z 365	1 - 100% of m/z 198	3.07	PASS
m/z 441	Less than 150% of m/z 443	79.54	PASS
m/z 442	0.1 - 200% of m/z 198	111.85	PASS
m/z 443	15 - 24% of m/z 442	19.14	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 - 3. Riverbank Angled Borin
Lab File ID:	J11151904.D	Injection Date:	11/15/19
Instrument ID:	SV-GCMS10	Injection Time:	10:14
Sequence:	9K15018	Lab Sample ID:	9K15018-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.32	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.33	PASS
m/z 197	Less than 2% of m/z 198	0.14	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.96	PASS
m/z 365	1 - 100% of m/z 198	3.54	PASS
m/z 441	Less than 150% of m/z 443	75.32	PASS
m/z 442	0.1 - 200% of m/z 198	109.52	PASS
m/z 443	15 - 24% of m/z 442	20.08	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 - 3. Riverbank Angled Borin
Lab File ID:	J11151916.D	Injection Date:	11/15/19
Instrument ID:	SV-GCMS10	Injection Time:	17:19
Sequence:	9K15038	Lab Sample ID:	9K15038-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.23	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.48	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	6.83	PASS
m/z 365	1 - 100% of m/z 198	3.79	PASS
m/z 441	Less than 150% of m/z 443	76.48	PASS
m/z 442	0.1 - 200% of m/z 198	125.63	PASS
m/z 443	15 - 24% of m/z 442	19.92	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9I2405 Date: 09/24/19 12:40 Instrument: SV-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.335064	Ave	12.00263	9.651445	4.798832E-02			20	
Acenaphthylene	2.033107	Ave	12.59998	9.475	5.163532E-02			20	
Anthracene	1.078521	Ave	11.55364	11.20911	0.0528488			20	
Benz(a)anthracene	1.116647	Ave	2.722448	14.896	7.721358E-02			20	
Benzo(a)pyrene	0.9229655	XXX	18.38284	18.2629	0.1483268				
Benzo(b)fluoranthene	1.044887	XXX	15.64696	17.4886	0.1311316				
Benzo(k)fluoranthene	0.9982469	XXX	14.76859	17.5581	0.1423844				
Benzo(g,h,i)perylene	1.135992	Ave	11.86721	21.3396	0.148299			20	
Chrysene	1.046442	Ave	3.739453	14.9805	0.1249936			20	
Dibenz(a,h)anthracene	1.085854	Ave	5.573512	20.8726	0.1153242			20	
Fluoranthene	1.149972	Ave	12.02429	12.4287	0.0528868			20	
Fluorene	1.400546	Ave	13.78814	10.17644	5.824506E-02			20	
Indeno(1,2,3-cd)pyrene	1.182676	Ave	3.602412	20.802	0.1428709			20	
2-Methylnaphthalene	0.735115	Ave	11.99797	8.5583	4.303798E-02			20	
Naphthalene	1.052115	Ave	15.04523	7.86	0.0547767			20	
Phenanthrene	1.12201	Ave	12.26362	11.15744	0.0459683			20	
Pyrene	1.170273	Ave	11.89191	12.7185	7.336212E-02			20	
Pentachlorophenol (PCP)	0.1189653	XXX	26.10993	10.94237	3.850139E-02				
2,4,5-Trichlorophenol	0.3514615	XXX	18.51245	8.876	5.529415E-02				
Bis(2-ethylhexyl)phthalate	0.7194223	Ave	12.77537	15.08029	5.325404E-02			20	
Nitrobenzene-d5 (Surr)	1.205168	Ave	9.142619	7.1168	8.867008E-02			20	
2-Fluorobiphenyl (Surr)	1.565217	Ave	12.06569	8.927444	2.774874E-02			20	
Phenol-d6 (Surr)	1.553469	Ave	11.40827	6.2088	0.1181197			20	
p-Terphenyl-d14 (Surr)	0.9216776	Ave	6.530579	12.9267	5.442172E-02			20	
2-Fluorophenol (Surr)	1.213667	Ave	14.14738	5.3054	0.1655531			20	
2,4,6-Tribromophenol (Surr)	0.1092555	XXX	18.24175	10.42356	6.009604E-02				

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: A9I2405

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: SV-GCMS10

Calibration Date: 09/24/19 12:40

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	1.387139	50	1.465177	100	1.444455	200	1.458304	500	1.435781	1000	1.37025
Acenaphthylene	20	1.943712	50	2.089623	100	2.211243	200	2.225813	500	2.309322	1000	2.183771
Anthracene	20	0.9951892	50	1.126429	100	1.165603	200	1.205198	500	1.196213	1000	1.142983
Benz(a)anthracene	20	1.160991	50	1.06995	100	1.154466	200	1.114494	500	1.142581	1000	1.101713
Benzo(a)pyrene	20	0.5735994	50	0.6774644	100	0.8890347	200	0.9169897	500	1.02761	1000	1.026781
Benzo(b)fluoranthene	20	0.7158776	50	0.7954364	100	1.015807	200	1.038157	500	1.108912	1000	1.109485
Benzo(k)fluoranthene	20	0.705265	50	0.8635365	100	1.038213	200	1.064845	500	1.120218	1000	1.117069
Benzo(b+k)fluoranthene(s)	40	0.7342124	100	0.8714657	200	1.06775	400	1.078713	1000	1.136196	2000	1.134211
Benzo(g,h,i)perylene	20	0.8503915	50	0.9437662	100	1.107488	200	1.164969	500	1.222029	1000	1.214462
Chrysene	20	0.9945931	50	1.051087	100	1.093909	200	1.079592	500	1.093683	1000	1.062001
Dibenz(a,h)anthracene	20	0.9578393	50	1.019058	100	1.090869	200	1.097365	500	1.134733	1000	1.104801
Fluoranthene	20	1.064548	50	1.145916	100	1.255752	200	1.261732	500	1.315847	1000	1.256722
Fluorene	20	1.422735	50	1.444081	100	1.592168	200	1.562318	500	1.562158	1000	1.459883
Indeno(1,2,3-cd)pyrene	20	1.102051	50	1.169408	100	1.175957	200	1.156023	500	1.17071	1000	1.152494
1-Methylnaphthalene	20	0.7366736	50	0.7695878	100	0.7774042	200	0.7926092	500	0.8043127	1000	0.7520123
2-Methylnaphthalene	20	0.7055696	50	0.7739031	100	0.7758033	200	0.8187475	500	0.8328583	1000	0.7928421
Naphthalene	20	1.146264	50	1.150802	100	1.167151	200	1.172727	500	1.186172	1000	1.117145
Phenanthrene	20	1.195009	50	1.197392	100	1.224623	200	1.228283	500	1.224617	1000	1.146124
Pyrene	20	1.098706	50	1.202944	100	1.242163	200	1.307583	500	1.336081	1000	1.283352
Carbazole	20	0.7984112	50	0.9004153	100	0.9787618	200	1.010698	500	1.001555	1000	0.8613414
Dibenzofuran	20	1.821625	50	1.906898	100	2.037226	200	2.018423	500	1.982566	1000	1.887185
4-Chloro-3-methylphenol	20	~~0.1569115~~	50	~~0.1743164~~	100	0.197123	200	0.2197758	500	0.2781846	1000	0.2840447
2-Chlorophenol	20	1.230865	50	1.299351	100	1.339463	200	1.473585	500	1.520086	1000	1.505381
2,4-Dichlorophenol	20	~~0.1312097~~	50	0.1695328	100	0.2138224	200	0.251967	500	0.2951581	1000	0.3028913
2,4-Dimethylphenol	20	~~0.1944~~	50	0.1981005	100	0.249496	200	0.264704	500	0.2828699	1000	0.2871584
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~5.494943E-03~~	200	1.301196E-02	500	2.920926E-02	1000	6.180619E-02
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~1.337172E-02~~	100	~~0.0247435~~	200	4.093209E-02	500	9.085052E-02	1000	0.1331837
2-Methylphenol	20	0.9295757	50	0.8796476	100	0.9810251	200	1.076563	500	1.154826	1000	1.147864
3+4-Methylphenol(s)	20	1.06531	50	1.132761	100	1.159969	200	1.345101	500	1.440506	1000	1.458462
2-Nitrophenol	20	~~0.0861908~~	50	~~0.1137355~~	100	0.1220013	200	0.1353245	500	0.1797043	1000	0.2007836
4-Nitrophenol	20	~~1.873457E-02~~	50	~~4.537296E-02~~	100	6.847545E-02	200	9.464728E-02	500	0.1640399	1000	0.2011801

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9I2405

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: SV-GCMS10

Calibration Date: 09/24/19 12:40

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	~~8.691609E-02~~	50	~~5.118127E-02~~	100	7.761508E-02	200	6.955638E-02	500	0.1080871	1000	0.1222728
Phenol	20	1.541752	50	1.561941	100	1.608017	200	1.797137	500	1.826981	1000	1.842828
2,3,4,6-Tetrachlorophenol	20	~~0.13364~~	50	0.163122	100	0.2361525	200	0.2622007	500	0.3227598	1000	0.3465662
2,3,5,6-Tetrachlorophenol	20	~~0.120838~~	50	0.1089211	100	0.1844545	200	0.2156618	500	0.2958013	1000	0.3147484
2,4,5-Trichlorophenol	20	~~0.1901559~~	50	0.2373804	100	0.2701951	200	0.3011386	500	0.3811527	1000	0.3898394
2,4,6-Trichlorophenol	20	~~0.1746999~~	50	0.2365366	100	0.2572544	200	0.3068435	500	0.3835634	1000	0.4024493
Bis(2-ethylhexyl)phthalate	20	~~0.2293689~~	50	~~0.3123726~~	100	~~0.4749806~~	200	0.520599	500	0.7063373	1000	0.7429592
Butyl benzyl phthalate	20	~~0.2186725~~	50	0.2430642	100	0.3343815	200	0.379613	500	0.4872825	1000	0.5328862
Diethylphthalate	20	1.254436	50	1.387673	100	1.556467	200	1.504663	500	1.488445	1000	1.460229
Dimethylphthalate	20	1.434756	50	1.459594	100	1.596102	200	1.569984	500	1.599808	1000	1.540098
Di-n-butylphthalate	20	~~1.016657~~	50	1.070578	100	1.256574	200	1.258672	500	1.31772	1000	1.283145
Di-n-octyl phthalate	20	~~0.2876625~~	50	~~0.359494~~	100	0.5972254	200	0.6937602	500	0.9792716	1000	1.135609
2,3,5-Trimethylnaphthalene	20	1.19105	50	1.237598	100	1.255318	200	1.278229	500	1.274081	1000	1.216964
2,6-Dimethylnaphthalene	20	1.107994	50	1.334965	100	1.409892	200	1.425676	500	1.404685	1000	1.335547
Benzo(e)pyrene	20	0.7469389	50	0.8957272	100	1.031861	200	1.038735	500	1.102471	1000	1.104983
1,1'-Biphenyl	20	1.593219	50	1.861849	100	1.891301	200	1.926064	500	1.922996	1000	1.826688
Perylene	20	0.8005198	50	0.9000655	100	0.8921393	200	0.9200652	500	0.9506848	1000	0.9144488
Nitrobenzene-d5 (Surr)	20	0.9806475	50	1.085379	100	1.135054	200	1.209032	500	1.31341	1000	1.321832
2-Fluorobiphenyl (Surr)	20	1.476909	50	1.609929	100	1.734744	200	1.751334	500	1.739556	1000	1.652173
Phenol-d6 (Surr)	20	1.197274	50	1.304845	100	1.445522	200	1.602349	500	1.667059	1000	1.681755
p-Terphenyl-d14 (Surr)	20	0.8205178	50	0.9023018	100	0.9773009	200	0.9592621	500	0.994643	1000	0.9688955
2-Fluorophenol (Surr)	20	0.9398586	50	1.045277	100	0.9521188	200	1.216931	500	1.280008	1000	1.263499
2,4,6-Tribromophenol (Surr)	20	~~6.623006E-02~~	50	7.092577E-02	100	8.598271E-02	200	9.861561E-02	500	0.1200291	1000	0.122147

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9I2405
Instrument: SV-GCMS10
Matrix:
Calibration Date: 09/24/19 12:40

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	1.3141	4000	1.127129	6000	1.013245	8000	~~0.9282602~~				
Acenaphthylene	2000	2.066515	4000	1.748495	6000	1.519472	8000	~~1.324874~~				
Anthracene	2000	1.087514	4000	0.9437941	6000	0.8437674	8000	~~0.7448748~~				
Benz(a)anthracene	2000	1.124688	4000	1.115111	6000	1.106753	8000	1.07572				
Benzo(a)pyrene	2000	1.091404	4000	1.048852	6000	1.010301	8000	0.9676185				
Benzo(b)fluoranthene	2000	1.177652	4000	1.182772	6000	1.176711	8000	1.12806				
Benzo(k)fluoranthene	2000	1.167974	4000	1.078346	6000	0.9727135	8000	0.8542889				
Benzo(b+k)fluoranthene(s)	4000	1.191029	8000	1.147505	12000	1.112943	16000	1.060446				
Benzo(g,h,i)perylene	2000	1.250377	4000	1.243478	6000	1.204491	8000	1.158473				
Chrysene	2000	1.053921	4000	1.041373	6000	1.00938	8000	0.9848763				
Dibenz(a,h)anthracene	2000	1.14524	4000	1.151969	6000	1.102805	8000	1.053858				
Fluoranthene	2000	1.228565	4000	1.087861	6000	0.9920321	8000	0.8907439				
Fluorene	2000	1.38538	4000	1.15108	6000	1.025113	8000	~~0.9142278~~				
Indeno(1,2,3-cd)pyrene	2000	1.20516	4000	1.22416	6000	1.229731	8000	1.241071				
1-Methylnaphthalene	2000	0.7398778	4000	0.6351137	6000	0.5768393	8000	0.5319497				
2-Methylnaphthalene	2000	0.7829658	4000	0.678854	6000	0.6199818	8000	0.5696241				
Naphthalene	2000	1.076346	4000	0.9247484	6000	0.8259695	8000	0.7538274				
Phenanthrene	2000	1.091051	4000	0.9399318	6000	0.851062	8000	~~0.7677285~~				
Pyrene	2000	1.225105	4000	1.09439	6000	0.9974297	8000	0.9149714				
Carbazole	2000	0.5922316	4000	~~0.3504932~~	6000	~~0.3356799~~	8000	~~0.249538~~				
Dibenzofuran	2000	1.852082	4000	1.60426	6000	1.422149	8000	1.264436				
4-Chloro-3-methylphenol	2000	0.3089864	4000	0.2914504	6000	0.2779513	8000	0.2655486				
2-Chlorophenol	2000	1.484607	4000	1.474844	6000	1.444576	8000	1.38865				
2,4-Dichlorophenol	2000	0.3201088	4000	0.3053461	6000	0.2873242	8000	0.2716327				
2,4-Dimethylphenol	2000	0.3044865	4000	0.286533	6000	0.2842333	8000	0.2557606				
2,4-Dinitrophenol	2000	9.957952E-02	4000	0.1369712	6000	0.1528641	8000	~~0.1635984~~				
4,6-Dinitro-2-methylphenol	2000	0.1736742	4000	0.2029718	6000	0.212265	8000	0.2122266				
2-Methylphenol	2000	1.116896	4000	1.057322	6000	1.00091	8000	0.9567711				
3+4-Methylphenol(s)	2000	1.400529	4000	1.304656	6000	1.18889	8000	~~1.118737~~				
2-Nitrophenol	2000	0.1891146	4000	0.2009709	6000	0.2008293	8000	0.1949359				
4-Nitrophenol	2000	0.2419629	4000	0.2567932	6000	0.2625059	8000	~~0.2571442~~				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9I2405
Instrument: SV-GCMS10
Matrix:
Calibration Date: 09/24/19 12:40

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	0.1418302	4000	0.1484859	6000	0.1453844	8000	0.1384905				
Phenol	2000	1.776393	4000	1.793731	6000	1.708216	8000	1.624675				
2,3,4,6-Tetrachlorophenol	2000	0.3641115	4000	0.3547479	6000	0.3390141	8000	0.3257666				
2,3,5,6-Tetrachlorophenol	2000	0.3435903	4000	0.3418179	6000	0.3354848	8000	0.3215912				
2,4,5-Trichlorophenol	2000	0.4178827	4000	0.4063886	6000	0.3928207	8000	0.3663551				
2,4,6-Trichlorophenol	2000	0.4232436	4000	0.4186057	6000	0.4009108	8000	0.3885235				
Bis(2-ethylhexyl)phthalate	2000	0.7763648	4000	0.7902806	6000	0.7625502	8000	0.7368646				
Butyl benzyl phthalate	2000	0.5700974	4000	0.5904404	6000	0.5801587	8000	0.5694196				
Diethylphthalate	2000	1.383707	4000	1.20631	6000	1.077035	8000	0.9764122				
Dimethylphthalate	2000	1.48145	4000	1.34643	6000	1.249458	8000	1.165787				
Di-n-butylphthalate	2000	1.234995	4000	1.082271	6000	0.9583471	8000	~~0.8647394~~				
Di-n-octyl phthalate	2000	1.33731	4000	1.351805	6000	1.295496	8000	1.228669				
2,3,5-Trimethylnaphthalene	2000	1.168098	4000	1.003502	6000	0.8946988	8000	0.8133397				
2,6-Dimethylnaphthalene	2000	1.262926	4000	1.089174	6000	0.9790218	8000	~~0.8795554~~				
Benzo(e)pyrene	2000	1.132581	4000	1.109684	6000	1.089407	8000	1.027112				
1,1'-Biphenyl	2000	1.723435	4000	1.451071	6000	1.274641	8000	~~1.139707~~				
Perylene	2000	0.9539392	4000	0.9130756	6000	0.9081392	8000	0.8666273				
Nitrobenzene-d5 (Surr)	2000	1.281854	4000	1.28613	6000	1.24582	8000	1.192526				
2-Fluorobiphenyl (Surr)	2000	1.564374	4000	1.350787	6000	1.207146	8000	~~1.092707~~				
Phenol-d6 (Surr)	2000	1.673553	4000	1.705426	6000	1.658679	8000	1.598233				
p-Terphenyl-d14 (Surr)	2000	0.953339	4000	0.9235964	6000	0.8801238	8000	0.8367959				
2-Fluorophenol (Surr)	2000	1.332531	4000	1.380766	6000	1.371479	8000	1.354202				
2,4,6-Tribromophenol (Surr)	2000	0.1302975	4000	0.1246898	6000	0.1182398	8000	0.1123724				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor

Calibration: A9J0804 Date: 10/08/19 10:22 Instrument: SV-GCMS5

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.329653	Ave	6.617398	9.8355	6.787249E-02			20	
Acenaphthylene	1.93331	Ave	8.171375	9.6582	6.312736E-02			20	
Anthracene	1.087198	Ave	6.933843	11.3918	6.166785E-02			20	
Benz(a)anthracene	1.075856	Ave	5.3127	15.2292	0.1181987			20	
Benzo(a)pyrene	0.8922531	XXX	29.01492	18.6213	0.1621314				
Benzo(b)fluoranthene	1.026725	XXX	22.36033	17.8426	0.1489475				
Benzo(k)fluoranthene	1.001077	XXX	20.09093	17.9094	0.1498107				
Benzo(g,h,i)perylene	1.168957	Ave	11.1888	21.6999	0.1663823			20	
Chrysene	1.074563	Ave	3.104847	15.3121	0.1395924			20	
Dibenz(a,h)anthracene	1.120896	Ave	7.3455	21.2245	0.1405032			20	
Fluoranthene	1.092995	Ave	8.618556	12.6393	6.375098E-02			20	
Fluorene	1.410382	Ave	7.453431	10.3594	6.653909E-02			20	
Indeno(1,2,3-cd)pyrene	1.216987	Ave	6.588168	21.1619	0.1562016			20	
2-Methylnaphthalene	0.7165955	Ave	5.586424	8.7408	0.0290918			20	
Naphthalene	1.063357	Ave	6.599756	8.0472	5.828113E-02			20	
Phenanthrene	1.137752	Ave	7.283402	11.3385	5.979982E-02			20	
Pyrene	1.124682	Ave	8.092086	12.9492	8.873458E-02			20	
Pentachlorophenol (PCP)	9.070953E-02	XXX	39.54388	11.12071	2.752602E-02				
2,4,5-Trichlorophenol	0.3130699	XXX	27.28763	9.057889	0.0473967				
Bis(2-ethylhexyl)phthalate	0.6733201	XXX	25.8604	15.391	6.252756E-02				
Nitrobenzene-d5 (Surr)	1.156197	Ave	12.96796	7.3101	8.094485E-02			20	
2-Fluorobiphenyl (Surr)	1.498202	Ave	5.912581	9.1062	4.813918E-02			20	
Phenol-d6 (Surr)	1.450731	Ave	10.19691	6.4125	0.1259904			20	
p-Terphenyl-d14 (Surr)	0.9026915	Ave	6.809962	13.1583	0.0618866			20	
2-Fluorophenol (Surr)	1.16931	Ave	11.06003	5.56	4.839815E-02			20	
2,4,6-Tribromophenol (Surr)	0.0857113	XXX	27.82851	10.60533	5.854695E-02				

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: A9J0804

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: SV-GCMS5

Calibration Date: 10/08/19 10:22

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	1.309384	50	1.408106	100	1.390702	200	1.412902	500	1.409671	1000	1.350285
Acenaphthylene	20	1.612458	50	1.841039	100	1.973849	200	2.037459	500	2.109571	1000	2.052816
Anthracene	20	0.9730482	50	1.044628	100	1.094339	200	1.142667	500	1.188454	1000	1.150602
Benz(a)anthracene	20	1.025281	50	0.9832821	100	0.9955828	200	1.056919	500	1.126165	1000	1.099284
Benzo(a)pyrene	20	0.4123855	50	0.5344924	100	0.6975294	200	0.8430128	500	0.9972492	1000	1.042563
Benzo(b)fluoranthene	20	0.5875866	50	0.7372118	100	0.8462272	200	1.001853	500	1.096593	1000	1.128434
Benzo(k)fluoranthene	20	0.5733269	50	0.7512045	100	0.8957189	200	1.015061	500	1.110826	1000	1.133027
Benzo(b+k)fluoranthene(s)	40	0.6398603	100	0.7969432	200	0.9218137	400	1.050834	1000	1.139364	2000	1.160863
Benzo(g,h,i)perylene	20	0.8921532	50	0.9973518	100	1.102954	200	1.197643	500	1.275415	1000	1.244651
Chrysene	20	1.003504	50	1.062605	100	1.056222	200	1.073534	500	1.106033	1000	1.087289
Dibenz(a,h)anthracene	20	0.9800112	50	1.011694	100	1.076273	200	1.084095	500	1.131105	1000	1.129878
Fluoranthene	20	0.9053036	50	0.9961549	100	1.051228	200	1.111452	500	1.208522	1000	1.170393
Fluorene	20	1.294612	50	1.404103	100	1.463778	200	1.5231	500	1.543582	1000	1.473974
Indeno(1,2,3-cd)pyrene	20	1.141533	50	1.135417	100	1.147634	200	1.186945	500	1.202625	1000	1.190982
1-Methylnaphthalene	20	0.6438364	50	0.6902316	100	0.7102009	200	0.7082274	500	0.7230124	1000	0.7027131
2-Methylnaphthalene	20	0.6781723	50	0.7259981	100	0.7411767	200	0.7525631	500	0.7588251	1000	0.7480045
Naphthalene	20	1.083551	50	1.110312	100	1.130009	200	1.12026	500	1.121775	1000	1.077008
Phenanthrene	20	1.147814	50	1.204556	100	1.206107	200	1.207707	500	1.209998	1000	1.160333
Pyrene	20	0.9411815	50	1.040018	100	1.096941	200	1.172058	500	1.245777	1000	1.195533
Carbazole	20	0.7188946	50	0.8113687	100	0.888006	200	0.9434658	500	1.014752	1000	0.9532231
Dibenzofuran	20	1.712192	50	1.857255	100	1.842116	200	1.87597	500	1.884227	1000	1.794081
4-Chloro-3-methylphenol	20	~~4.221627E-02~~	50	~~5.923181E-02~~	100	9.381958E-02	200	0.1473022	500	0.2048509	1000	0.2270194
2-Chlorophenol	20	1.00359	50	1.097702	100	1.234857	200	1.281548	500	1.389282	1000	1.368914
2,4-Dichlorophenol	20	0.1470661	50	0.1766824	100	0.1647941	200	0.1846865	500	0.2182216	1000	0.2378062
2,4-Dimethylphenol	20	0.1522344	50	0.1718033	100	0.2241378	200	0.2521564	500	0.2712229	1000	0.2854799
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~0~~	200	9.020145E-03	500	2.821914E-02	1000	0.0490803
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~3.63535E-03~~	100	~~1.541642E-02~~	200	3.003036E-02	500	6.680379E-02	1000	0.1044447
2-Methylphenol	20	0.8083315	50	0.8423888	100	0.901565	200	0.9911171	500	1.057638	1000	1.054676
3+4-Methylphenol(s)	20	0.928874	50	0.9884094	100	1.092945	200	1.203156	500	1.341188	1000	1.356117
2-Nitrophenol	20	~~6.468043E-02~~	50	7.992677E-02	100	9.856906E-02	200	0.11547	500	0.1481667	1000	0.1657283
4-Nitrophenol	20	~~1.905039E-02~~	50	~~4.260303E-02~~	100	5.211101E-02	200	9.325165E-02	500	0.1664529	1000	0.200027

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J0804

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle

Instrument: SV-GCMS5

Calibration Date: 10/08/19 10:22

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	~~8.434644E-02~~	50	~~0.0420328~~	100	0.0421229	200	5.081541E-02	500	7.577208E-02	1000	9.398601E-02
Phenol	20	1.193868	50	1.334247	100	1.456191	200	1.544805	500	1.61587	1000	1.599435
2,3,4,6-Tetrachlorophenol	20	~~0.1148117~~	50	0.1552172	100	0.16155	200	0.2230254	500	0.2797146	1000	0.3024848
2,3,5,6-Tetrachlorophenol	20	~~5.399309E-02~~	50	8.344966E-02	100	0.1156134	200	0.1676202	500	0.2451475	1000	0.266909
2,4,5-Trichlorophenol	20	~~0.1499582~~	50	0.1693093	100	0.2024651	200	0.2486008	500	0.3170898	1000	0.3438972
2,4,6-Trichlorophenol	20	0.1605531	50	0.2064389	100	0.238593	200	0.2836379	500	0.3346006	1000	0.3489631
Bis(2-ethylhexyl)phthalate	20	~~0.210859~~	50	~~0.2642148~~	100	0.3458063	200	0.4777585	500	0.6537328	1000	0.7070409
Butyl benzyl phthalate	20	~~0.187126~~	50	0.2058449	100	0.2583861	200	0.3248453	500	0.4463008	1000	0.4822076
Diethylphthalate	20	1.153415	50	1.239409	100	1.348771	200	1.426869	500	1.473551	1000	1.406852
Dimethylphthalate	20	1.177559	50	1.310564	100	1.390115	200	1.436982	500	1.466201	1000	1.422475
Di-n-butylphthalate	20	~~0.7764997~~	50	~~0.8256282~~	100	0.9460032	200	1.07131	500	1.20815	1000	1.222229
Di-n-octyl phthalate	20	~~0.2640557~~	50	~~0.2708755~~	100	0.3575533	200	0.5346718	500	0.8057325	1000	1.017744
2,3,5-Trimethylnaphthalene	20	1.012421	50	1.134924	100	1.190894	200	1.227743	500	1.244905	1000	1.188116
2,6-Dimethylnaphthalene	20	1.09555	50	1.223071	100	1.265377	200	1.303717	500	1.332178	1000	1.284649
Benzo(e)pyrene	20	0.6787342	50	0.7945528	100	0.926507	200	1.015941	500	1.09974	1000	1.115349
1,1'-Biphenyl	20	1.655041	50	1.784017	100	1.792388	200	1.804701	500	1.813178	1000	1.740562
Perylene	20	0.8397472	50	0.8961165	100	0.9426937	200	0.9528693	500	0.9701687	1000	0.9909787
Nitrobenzene-d5 (Surr)	20	0.8824502	50	0.9443201	100	1.051415	200	1.117222	500	1.228842	1000	1.230786
2-Fluorobiphenyl (Surr)	20	1.443246	50	1.524151	100	1.583964	200	1.596024	500	1.580534	1000	1.523772
Phenol-d6 (Surr)	20	1.131306	50	1.267749	100	1.388031	200	1.448651	500	1.552132	1000	1.532708
p-Terphenyl-d14 (Surr)	20	0.7608921	50	0.8410455	100	0.9001727	200	0.9161461	500	0.9517233	1000	0.9197668
2-Fluorophenol (Surr)	20	0.9111413	50	1.01373	100	1.096738	200	1.127895	500	1.21369	1000	1.21382
2,4,6-Tribromophenol (Surr)	20	~~3.247951E-02~~	50	4.438303E-02	100	5.669081E-02	200	0.0684808	500	8.553469E-02	1000	9.303905E-02

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J0804
Instrument: SV-GCMS5
Matrix:
Calibration Date: 10/08/19 10:22

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	1.35744	4000	1.281392	6000	1.224212	8000	1.152433				
Acenaphthylene	2000	2.073083	4000	1.985565	6000	1.890662	8000	1.756597				
Anthracene	2000	1.158342	4000	1.094971	6000	1.048595	8000	0.9763358				
Benz(a)anthracene	2000	1.132351	4000	1.134632	6000	1.115235	8000	1.089832				
Benzo(a)pyrene	2000	1.105934	4000	1.10427	6000	1.100569	8000	1.084526				
Benzo(b)fluoranthene	2000	1.189258	4000	1.2123	6000	1.197953	8000	1.269831				
Benzo(k)fluoranthene	2000	1.177199	4000	1.170575	6000	1.120669	8000	1.063166				
Benzo(b+k)fluoranthene(s)	4000	1.210561	8000	1.215073	12000	1.20286	16000	1.193289				
Benzo(g,h,i)perylene	2000	1.276852	4000	1.257429	6000	1.237287	8000	1.207829				
Chrysene	2000	1.115806	4000	1.106292	6000	1.08328	8000	1.051063				
Dibenz(a,h)anthracene	2000	1.220031	4000	1.209339	6000	1.195056	8000	1.171476				
Fluoranthene	2000	1.184199	4000	1.155264	6000	1.094888	8000	1.052544				
Fluorene	2000	1.480891	4000	1.379763	6000	1.310955	8000	1.229066				
Indeno(1,2,3-cd)pyrene	2000	1.211796	4000	1.259452	6000	1.305451	8000	1.388035				
1-Methylnaphthalene	2000	0.7031304	4000	0.6726785	6000	0.6372169	8000	0.6096631				
2-Methylnaphthalene	2000	0.7403244	4000	0.7065216	6000	0.6724607	8000	0.6419082				
Naphthalene	2000	1.074278	4000	1.024087	6000	0.971596	8000	0.9206957				
Phenanthrene	2000	1.14829	4000	1.092794	6000	1.030266	8000	0.9696524				
Pyrene	2000	1.197999	4000	1.174173	6000	1.113815	8000	1.069324				
Carbazole	2000	0.9152834	4000	0.9406929	6000	0.9096693	8000	0.8702127				
Dibenzofuran	2000	1.82448	4000	1.74333	6000	1.671024	8000	1.549025				
4-Chloro-3-methylphenol	2000	0.2506253	4000	0.2648278	6000	0.2599332	8000	0.2572784				
2-Chlorophenol	2000	1.391903	4000	1.421634	6000	1.400422	8000	1.379398				
2,4-Dichlorophenol	2000	0.2590674	4000	0.2752864	6000	0.2745849	8000	0.27173				
2,4-Dimethylphenol	2000	0.2929342	4000	0.29499	6000	0.2691082	8000	0.2587523				
2,4-Dinitrophenol	2000	8.192114E-02	4000	0.1316172	6000	0.1507538	8000	~~0.1650998~~				
4,6-Dinitro-2-methylphenol	2000	0.1504559	4000	0.1979012	6000	0.212997	8000	~~0.2185486~~				
2-Methylphenol	2000	1.074041	4000	1.080348	6000	1.039176	8000	1.00165				
3+4-Methylphenol(s)	2000	1.372559	4000	1.347485	6000	1.285801	8000	1.23272				
2-Nitrophenol	2000	0.1720781	4000	0.1840173	6000	0.1857768	8000	0.1871873				
4-Nitrophenol	2000	0.2424139	4000	0.2674142	6000	0.2722273	8000	0.2692587				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration: A9J0804
Instrument: SV-GCMS5
Matrix:
Calibration Date: 10/08/19 10:22

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	0.1128047	4000	0.1295347	6000	0.1299309	8000	~~0.1286592~~				
Phenol	2000	1.594826	4000	1.611096	6000	1.575395	8000	1.543759				
2,3,4,6-Tetrachlorophenol	2000	0.324155	4000	0.3465826	6000	0.3421251	8000	0.3353952				
2,3,5,6-Tetrachlorophenol	2000	0.3083183	4000	0.3282203	6000	0.3320407	8000	0.3279994				
2,4,5-Trichlorophenol	2000	0.379867	4000	0.3914103	6000	0.3903509	8000	0.3746385				
2,4,6-Trichlorophenol	2000	0.3745379	4000	0.391752	6000	0.3848752	8000	0.3847798				
Bis(2-ethylhexyl)phthalate	2000	0.7984601	4000	0.8115167	6000	0.8080133	8000	0.7842321				
Butyl benzyl phthalate	2000	0.5511477	4000	0.5729985	6000	0.5730351	8000	0.564608				
Diethylphthalate	2000	1.408247	4000	1.301168	6000	1.240464	8000	1.163456				
Dimethylphthalate	2000	1.440775	4000	1.390699	6000	1.349905	8000	1.304958				
Di-n-butylphthalate	2000	1.243791	4000	1.180018	6000	1.10596	8000	1.030811				
Di-n-octyl phthalate	2000	1.267401	4000	1.368001	6000	1.408172	8000	1.394247				
2,3,5-Trimethylnaphthalene	2000	1.199152	4000	1.090465	6000	1.027176	8000	0.9630964				
2,6-Dimethylnaphthalene	2000	1.285001	4000	1.210454	6000	1.162255	8000	1.088418				
Benzo(e)pyrene	2000	1.16086	4000	1.16293	6000	1.144808	8000	1.133599				
1,1'-Biphenyl	2000	1.743275	4000	1.622928	6000	1.55102	8000	1.43395				
Perylene	2000	0.997401	4000	0.9883363	6000	0.9913912	8000	0.9655145				
Nitrobenzene-d5 (Surr)	2000	1.28166	4000	1.300237	6000	1.26797	8000	1.257069				
2-Fluorobiphenyl (Surr)	2000	1.537491	4000	1.463439	6000	1.410377	8000	1.31902				
Phenol-d6 (Surr)	2000	1.572	4000	1.572388	6000	1.544246	8000	1.498103				
p-Terphenyl-d14 (Surr)	2000	0.9644472	4000	0.9533718	6000	0.9289125	8000	0.8904368				
2-Fluorophenol (Surr)	2000	1.268264	4000	1.293579	6000	1.288441	8000	1.265804				
2,4,6-Tribromophenol (Surr)	2000	0.1008193	4000	0.1076928	6000	0.1074873	8000	0.1072739				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J09191929.D		
Sequence:	9I19035	Inject Date:	09/20/19
Lab Sample ID:	9I19035-ICV1	Inject Time:	07:50

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1000	0.2	70 - 130
Acenaphthylene	1000	1060	5.9	70 - 130
Anthracene	1000	1060	5.8	70 - 130
Benz(a)anthracene	1000	1030	2.9	70 - 130
Benzo(a)pyrene	1000	971	-2.9	70 - 130
Benzo(b)fluoranthene	1000	1010	0.9	70 - 130
Benzo(k)fluoranthene	1000	992	-0.8	70 - 130
Benzo(g,h,i)perylene	1000	1050	5.5	70 - 130
Chrysene	1000	1010	1.0	70 - 130
Dibenz(a,h)anthracene	1000	1020	1.9	70 - 130
Fluoranthene	1000	1090	8.8	70 - 130
Fluorene	1000	1050	4.6	70 - 130
Indeno(1,2,3-cd)pyrene	1000	974	-2.6	70 - 130
1-Methylnaphthalene	1000	1070	7.3	70 - 130
2-Methylnaphthalene	1000	1100	9.7	70 - 130
Naphthalene	1000	1050	4.8	70 - 130
Phenanthrene	1000	1020	1.6	70 - 130
Pyrene	1000	1070	7.1	70 - 130
Carbazole	1000	965	-3.5	70 - 130
Dibenzofuran	1000	1070	7.1	70 - 130
4-Chloro-3-methylphenol	1000	1060	5.6	70 - 130
2-Chlorophenol	1000	1010	0.9	70 - 130
2,4-Dichlorophenol	1000	969	-3.1	70 - 130
2,4-Dimethylphenol	1000	968	-3.2	70 - 130
2,4-Dinitrophenol	1000	972	-2.8	70 - 130
4,6-Dinitro-2-methylphenol	1000	1160	15.8	70 - 130
2-Methylphenol	1000	1050	5.3	70 - 130
3+4-Methylphenol(s)	1000	1070	6.7	70 - 130
2-Nitrophenol	1000	969	-3.1	70 - 130
4-Nitrophenol	1000	1110	10.7	70 - 130
Pentachlorophenol (PCP)	1000	976	-2.4	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 - 3. Riverbank Ang
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J09191929.D		
Sequence:	9I19035	Inject Date:	09/20/19
Lab Sample ID:	9I19035-ICV1	Inject Time:	07:50

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	990	-1.0	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1010	1.4	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1080	7.7	70 - 130
2,4,5-Trichlorophenol	1000	1050	4.8	70 - 130
2,4,6-Trichlorophenol	1000	1030	3.4	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1040	3.9	70 - 130
Butyl benzyl phthalate	1000	1000	0.4	70 - 130
Diethylphthalate	1000	1090	8.7	70 - 130
Dimethylphthalate	1000	1060	6.1	70 - 130
Di-n-butylphthalate	1000	1060	5.8	70 - 130
Di-n-octyl phthalate	1000	1010	1.4	70 - 130
Nitrobenzene-d5 (Surr)	1000	1070	6.6	70 - 130
2-Fluorobiphenyl (Surr)	1000	1060	6.2	70 - 130
Phenol-d6 (Surr)	1000	1020	1.6	70 - 130
p-Terphenyl-d14 (Surr)	1000	1060	6.1	70 - 130
2-Fluorophenol (Surr)	1000	981	-1.9	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1040	4.1	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 - 3. Riverbank Ang
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E10041919.D		
Sequence:	9J04044	Inject Date:	10/05/19
Lab Sample ID:	9J04044-ICV1	Inject Time:	00:20

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1010	0.7	70 - 130
Acenaphthylene	1000	1050	4.9	70 - 130
Anthracene	1000	1050	4.8	70 - 130
Benz(a)anthracene	1000	1050	5.3	70 - 130
Benzo(a)pyrene	1000	999	-0.08	70 - 130
Benzo(b)fluoranthene	1000	1010	1.1	70 - 130
Benzo(k)fluoranthene	1000	1040	3.9	70 - 130
Benzo(g,h,i)perylene	1000	1040	4.5	70 - 130
Chrysene	1000	993	-0.7	70 - 130
Dibenz(a,h)anthracene	1000	993	-0.7	70 - 130
Fluoranthene	1000	1080	7.9	70 - 130
Fluorene	1000	1030	3.4	70 - 130
Indeno(1,2,3-cd)pyrene	1000	957	-4.3	70 - 130
1-Methylnaphthalene	1000	1020	1.5	70 - 130
2-Methylnaphthalene	1000	1020	2.0	70 - 130
Naphthalene	1000	1000	-0.03	70 - 130
Phenanthrene	1000	1000	0.1	70 - 130
Pyrene	1000	1070	7.2	70 - 130
Carbazole	1000	1080	7.6	70 - 130
Dibenzofuran	1000	1010	1.4	70 - 130
4-Chloro-3-methylphenol	1000	858	-14.2	70 - 130
2-Chlorophenol	1000	1020	1.8	70 - 130
2,4-Dichlorophenol	1000	998	-0.2	70 - 130
2,4-Dimethylphenol	1000	851	-14.9	70 - 130
2,4-Dinitrophenol	1000	1050	5.4	70 - 130
4,6-Dinitro-2-methylphenol	1000	1180	18.2	70 - 130
2-Methylphenol	1000	996	-0.4	70 - 130
3+4-Methylphenol(s)	1000	1050	5.4	70 - 130
2-Nitrophenol	1000	1080	8.1	70 - 130
4-Nitrophenol	1000	990	-1.0	70 - 130
Pentachlorophenol (PCP)	1000	1010	0.9	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 - 3. Riverbank Ang
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E10041919.D		
Sequence:	9J04044	Inject Date:	10/05/19
Lab Sample ID:	9J04044-ICV1	Inject Time:	00:20

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1020	2.3	70 - 130
2,3,4,6-Tetrachlorophenol	1000	994	-0.6	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1030	3.4	70 - 130
2,4,5-Trichlorophenol	1000	957	-4.3	70 - 130
2,4,6-Trichlorophenol	1000	1040	4.4	70 - 130
Bis(2-ethylhexyl)phthalate	1000	992	-0.8	70 - 130
Butyl benzyl phthalate	1000	1010	0.6	70 - 130
Diethylphthalate	1000	1060	6.2	70 - 130
Dimethylphthalate	1000	1030	2.7	70 - 130
Di-n-butylphthalate	1000	1080	7.8	70 - 130
Di-n-octyl phthalate	1000	995	-0.5	70 - 130
Nitrobenzene-d5 (Surr)	1000	1070	6.7	70 - 130
2-Fluorobiphenyl (Surr)	1000	1030	3.4	70 - 130
Phenol-d6 (Surr)	1000	1030	2.6	70 - 130
p-Terphenyl-d14 (Surr)	1000	1050	4.6	70 - 130
2-Fluorophenol (Surr)	1000	1010	0.8	70 - 130
2,4,6-Tribromophenol (Surr)	1000	996	-0.4	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E11131915.D	Calibration Date:	10/08/19 10:22
Sequence:	9K13053	Injection Date:	11/13/19
Lab Sample ID:	9K13053-CCV1	Injection Time:	16:54

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		1.329653	1.364702	2.6	20
Acenaphthylene	Ave	1000	1060		1.93331	2.058114	6.5	20
Anthracene	Ave	1000	1070		1.087198	1.165644	7.2	20
Benz(a)anthracene	Ave	1000	1030		1.075856	1.103517	2.6	20
Benzo(a)pyrene	XXX	1000	1070	7.0				20
Benzo(b)fluoranthene	XXX	1000	1030	3.1				20
Benzo(k)fluoranthene	XXX	1000	1030	2.6				20
Benzo(g,h,i)perylene	Ave	1000	936		1.168957	1.093682	-6.4	20
Chrysene	Ave	1000	1010		1.074563	1.084647	0.9	20
Dibenz(a,h)anthracene	Ave	1000	988		1.120896	1.107918	-1.2	20
Fluoranthene	Ave	1000	1130		1.092995	1.23096	12.6	20
Fluorene	Ave	1000	1100		1.410382	1.545841	9.6	20
Indeno(1,2,3-cd)pyrene	Ave	1000	914		1.216987	1.112618	-8.6	20
1-Methylnaphthalene	Ave	1000	1150		0.6800911	0.7842148	15.3	20
2-Methylnaphthalene	Ave	1000	1150		0.7165955	0.8217801	14.7	20
Naphthalene	Ave	1000	997		1.063357	1.060345	-0.3	20
Phenanthrene	Ave	1000	1000		1.137752	1.142753	0.4	20
Pyrene	Ave	1000	1130		1.124682	1.265966	12.6	20
Carbazole	Ave	1000	1140		0.8965568	1.01871	13.6	20
Dibenzofuran	Ave	1000	1060		1.77537	1.876899	5.7	20
Pentachlorophenol (PCP)	XXX	1000	889	-11.1				20
2,4,5-Trichlorophenol	XXX	1000	1080	7.5				20
Bis(2-ethylhexyl)phthalate	XXX	1000	984	-1.6				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 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E11141903.D	Calibration Date:	10/08/19 10:22
Sequence:	9K14015	Injection Date:	11/14/19
Lab Sample ID:	9K14015-CCV1	Injection Time:	09:16

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		1.329653	1.368124	2.9	20
Acenaphthylene	Ave	1000	1060		1.93331	2.05132	6.1	20
Anthracene	Ave	1000	1060		1.087198	1.157761	6.5	20
Benz(a)anthracene	Ave	1000	1010		1.075856	1.083671	0.7	20
Benzo(a)pyrene	XXX	1000	1040	3.6				20
Benzo(b)fluoranthene	XXX	1000	1020	1.6				20
Benzo(k)fluoranthene	XXX	1000	1020	2.3				20
Benzo(g,h,i)perylene	Ave	1000	912		1.168957	1.065654	-8.8	20
Chrysene	Ave	1000	997		1.074563	1.071804	-0.3	20
Dibenz(a,h)anthracene	Ave	1000	1030		1.120896	1.157087	3.2	20
Fluoranthene	Ave	1000	1060		1.092995	1.155418	5.7	20
Fluorene	Ave	1000	1070		1.410382	1.510613	7.1	20
Indeno(1,2,3-cd)pyrene	Ave	1000	877		1.216987	1.067603	-12.3	20
1-Methylnaphthalene	Ave	1000	1030		0.6800911	0.6974219	2.5	20
2-Methylnaphthalene	Ave	1000	1020		0.7165955	0.729802	1.8	20
Naphthalene	Ave	1000	1010		1.063357	1.07002	0.6	20
Phenanthrene	Ave	1000	995		1.137752	1.132291	-0.5	20
Pyrene	Ave	1000	1060		1.124682	1.193907	6.2	20
Carbazole	Ave	1000	1070		0.8965568	0.9580541	6.9	20
Dibenzofuran	Ave	1000	1040		1.77537	1.854649	4.5	20
4-Chloro-3-methylphenol	XXX	1000	1090	9.3				20
2-Chlorophenol	Ave	1000	1070		1.296925	1.393001	7.4	20
2,4-Dichlorophenol	XXX	1000	1150	15.5				20
2,4-Dimethylphenol	XXX	1000	1010	1.2				20
2,4-Dinitrophenol	XXX	1000	1080	7.8				20
4,6-Dinitro-2-methylphenol	XXX	1000	1270	26.5 *				20
2-Methylphenol	Ave	1000	1060		0.9850931	1.048768	6.5	20
3+4-Methylphenol(s)	Ave	1000	1070		1.214925	1.304067	7.3	20
2-Nitrophenol	XXX	1000	1140	14.5				20
4-Nitrophenol	XXX	1000	863	-13.7				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E11141903.D	Calibration Date:	10/08/19 10:22
Sequence:	9K14015	Injection Date:	11/14/19
Lab Sample ID:	9K14015-CCV1	Injection Time:	09:16

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	824	-17.6				20
Phenol	Ave	1000	1090		1.506949	1.645352	9.2	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1090	8.8				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1080	7.5				20
2,4,5-Trichlorophenol	XXX	1000	1090	9.2				20
2,4,6-Trichlorophenol	XXX	1000	1070	6.7				20
Bis(2-ethylhexyl)phthalate	XXX	1000	986	-1.4				20
Butyl benzyl phthalate	XXX	1000	1060	5.6				20
Diethylphthalate	Ave	1000	1060		1.31622	1.396092	6.1	20
Dimethylphthalate	Ave	1000	1050		1.369023	1.437375	5.0	20
Di-n-butylphthalate	Ave	1000	1050		1.126034	1.181709	4.9	20
Di-n-octyl phthalate	XXX	1000	1100	10.2				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 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J11151905.D	Calibration Date:	09/24/19 12:40
Sequence:	9K15018	Injection Date:	11/15/19
Lab Sample ID:	9K15018-CCV2	Injection Time:	10:42

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	997		1.335064	1.331005	-0.3	20
Acenaphthylene	Ave	1000	1050		2.033107	2.13561	5.0	20
Anthracene	Ave	1000	1060		1.078521	1.142473	5.9	20
Benz(a)anthracene	Ave	1000	1040		1.116647	1.158958	3.8	20
Benzo(a)pyrene	XXX	1000	1090	9.3				20
Benzo(b)fluoranthene	XXX	1000	1070	7.1				20
Benzo(k)fluoranthene	XXX	1000	1060	5.9				20
Benzo(g,h,i)perylene	Ave	1000	1110		1.135992	1.263118	11.2	20
Chrysene	Ave	1000	1080		1.046442	1.126769	7.7	20
Dibenz(a,h)anthracene	Ave	1000	1090		1.085854	1.183594	9.0	20
Fluoranthene	Ave	1000	1100		1.149972	1.266447	10.1	20
Fluorene	Ave	1000	1030		1.400546	1.439797	2.8	20
Indeno(1,2,3-cd)pyrene	Ave	1000	992		1.182676	1.172698	-0.8	20
1-Methylnaphthalene	Ave	1000	1050		0.711638	0.7462001	4.9	20
2-Methylnaphthalene	Ave	1000	1090		0.735115	0.8008347	8.9	20
Naphthalene	Ave	1000	1040		1.052115	1.093486	3.9	20
Phenanthrene	Ave	1000	1000		1.12201	1.122572	0.05	20
Pyrene	Ave	1000	1100		1.170273	1.287348	10.0	20
Carbazole	XXX	1000	1240	23.9 *				20
Dibenzofuran	Ave	1000	1080		1.779685	1.917535	7.7	20
4-Chloro-3-methylphenol	Ave	1000	1060		0.2653831	0.2807043	5.8	20
2-Chlorophenol	Ave	1000	996		1.416141	1.41051	-0.4	20
2,4-Dichlorophenol	XXX	1000	1060	5.6				20
2,4-Dimethylphenol	Ave	1000	1080		0.2681491	0.2892571	7.9	20
2,4-Dinitrophenol	XXX	1000	1060	6.2				20
4,6-Dinitro-2-methylphenol	XXX	1000	1160	16.4				20
2-Methylphenol	Ave	1000	979		1.03014	1.008957	-2.1	20
3+4-Methylphenol(s)	Ave	1000	1000		1.277354	1.282706	0.4	20
2-Nitrophenol	XXX	1000	1140	13.8				20
4-Nitrophenol	XXX	1000	1030	2.6				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J11151905.D	Calibration Date:	09/24/19 12:40
Sequence:	9K15018	Injection Date:	11/15/19
Lab Sample ID:	9K15018-CCV2	Injection Time:	10:42

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	947	-5.3				20
Phenol	Ave	1000	881		1.708167	1.505099	-11.9	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1090	9.1				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1110	10.8				20
2,4,5-Trichlorophenol	XXX	1000	1140	13.6				20
2,4,6-Trichlorophenol	XXX	1000	1150	14.5				20
Bis(2-ethylhexyl)phthalate	Ave	1000	1070		0.7194223	0.7665351	6.5	20
Butyl benzyl phthalate	XXX	1000	1060	6.2				20
Diethylphthalate	Ave	1000	1070		1.329538	1.421208	6.9	20
Dimethylphthalate	Ave	1000	1070		1.444347	1.544788	7.0	20
Di-n-butylphthalate	Ave	1000	1050		1.182788	1.245928	5.3	20
Di-n-octyl phthalate	XXX	1000	1030	3.0				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 - 3. Riverbank Angled Borir
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J11151917.D	Calibration Date:	09/24/19 12:40
Sequence:	9K15038	Injection Date:	11/15/19
Lab Sample ID:	9K15038-CCV2	Injection Time:	17:47

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	994		1.335064	1.327382	-0.6	20
Acenaphthylene	Ave	1000	1060		2.033107	2.147869	5.6	20
Anthracene	Ave	1000	1060		1.078521	1.140082	5.7	20
Benz(a)anthracene	Ave	1000	1040		1.116647	1.159492	3.8	20
Benzo(a)pyrene	XXX	1000	1080	8.5				20
Benzo(b)fluoranthene	XXX	1000	1080	7.6				20
Benzo(k)fluoranthene	XXX	1000	1060	5.7				20
Benzo(g,h,i)perylene	Ave	1000	1120		1.135992	1.270969	11.9	20
Chrysene	Ave	1000	1060		1.046442	1.111811	6.2	20
Dibenz(a,h)anthracene	Ave	1000	1050		1.085854	1.141308	5.1	20
Fluoranthene	Ave	1000	1090		1.149972	1.254782	9.1	20
Fluorene	Ave	1000	1020		1.400546	1.433474	2.4	20
Indeno(1,2,3-cd)pyrene	Ave	1000	1000		1.182676	1.184645	0.2	20
1-Methylnaphthalene	Ave	1000	1040		0.711638	0.7375119	3.6	20
2-Methylnaphthalene	Ave	1000	1080		0.735115	0.7914724	7.7	20
Naphthalene	Ave	1000	1060		1.052115	1.112771	5.8	20
Phenanthrene	Ave	1000	1020		1.12201	1.139988	1.6	20
Pyrene	Ave	1000	1090		1.170273	1.27563	9.0	20
Carbazole	XXX	1000	1170	16.9				20
Dibenzofuran	Ave	1000	1070		1.779685	1.910437	7.3	20
Pentachlorophenol (PCP)	XXX	1000	943	-5.7				20
2,4,5-Trichlorophenol	XXX	1000	1120	11.7				20
Bis(2-ethylhexyl)phthalate	Ave	1000	1060		0.7194223	0.759022	5.5	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 - 3. Riverbank Angled Borin
Sequence:	9I19035	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9I19035-ICV1)				Lab File ID: J09191929.D		Analyzed: 09/20/19 07:50		
Nitrobenzene-d5 (Surr)	1000	107	70 - 130	7.113	7.1168	-0.0038	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	106	70 - 130	8.927	8.927444	-0.0004	+/-1.0	
Phenol-d6 (Surr)	1000	102	70 - 130	6.209	6.2088	0.0002	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	106	70 - 130	12.917	12.9267	-0.0097	+/-1.0	
2-Fluorophenol (Surr)	1000	98	70 - 130	5.316	5.3054	0.0106	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	104	70 - 130	10.419	10.42356	-0.0046	+/-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 - 3. Riverbank Angled Borin
Sequence:	9J04044	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9J04044-ICV1)			Lab File ID: E10041919.D		Analyzed: 10/05/19 00:20			
Nitrobenzene-d5 (Surr)	1000	107	70 - 130	7.306	7.3101	-0.0041	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	103	70 - 130	9.103	9.1062	-0.0032	+/-1.0	
Phenol-d6 (Surr)	1000	103	70 - 130	6.407	6.4125	-0.0055	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	105	70 - 130	13.157	13.1583	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	1000	101	70 - 130	5.562	5.56	0.0020	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	100	70 - 130	10.601	10.60533	-0.0043	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K13053	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K13053-CCV1)			Lab File ID: E11131915.D		Analyzed: 11/13/19 16:54			
Nitrobenzene-d5 (Surr)	1000	117	80 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	99	80 - 120	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	1000	102	80 - 120	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	103	80 - 120	13.147	13.1583	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	1000	101	80 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	114	80 - 120	10.595	10.60533	-0.0103	+/-1.0	
Calibration Blank (9K13053-CCB1)			Lab File ID: E11131916.D		Analyzed: 11/13/19 17:30			
Nitrobenzene-d5 (Surr)			44 - 120	7.284	7.3101	-0.0261	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	9.1062	-9.1062	+/-1.0	
Phenol-d6 (Surr)			10 - 120	0	6.4125	-6.4125	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	0	13.1583	-13.1583	+/-1.0	
2-Fluorophenol (Surr)			19 - 120	0	5.56	-5.5600	+/-1.0	
2,4,6-Tribromophenol (Surr)			43 - 140	0	10.60533	-10.6053	+/-1.0	
Blank (9110772-BLK1)			Lab File ID: E11131922.D		Analyzed: 11/13/19 21:04			
Nitrobenzene-d5 (Surr)	4.55	76	44 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	4.55	72	44 - 120	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	4.55	22	10 - 120	6.412	6.4125	-0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	4.55	98	50 - 133	13.157	13.1583	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	4.55	43	19 - 120	5.551	5.56	-0.0090	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.55	76	43 - 140	10.595	10.60533	-0.0103	+/-1.0	
LCS (9110772-BS1)			Lab File ID: E11131923.D		Analyzed: 11/13/19 21:39			
Nitrobenzene-d5 (Surr)	5.00	120	44 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	79	44 - 120	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	5.00	36	10 - 120	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	97	50 - 133	13.163	13.1583	0.0047	+/-1.0	
2-Fluorophenol (Surr)	5.00	52	19 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	102	43 - 140	10.601	10.60533	-0.0043	+/-1.0	
LCS Dup (9110772-BSD1)			Lab File ID: E11131924.D		Analyzed: 11/13/19 22:15			
Nitrobenzene-d5 (Surr)	5.00	109	44 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	78	44 - 120	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	5.00	31	10 - 120	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	91	50 - 133	13.163	13.1583	0.0047	+/-1.0	
2-Fluorophenol (Surr)	5.00	46	19 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	99	43 - 140	10.601	10.60533	-0.0043	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K13053	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
PDI-FB-1911121146 (A9K0332-01)			Lab File ID: E11131925.D		Analyzed: 11/13/19 22:50			
Nitrobenzene-d5 (Surr)	4.81	107	44 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	4.81	74	44 - 120	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	4.81	25	10 - 120	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	4.81	92	50 - 133	13.157	13.1583	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	4.81	42	19 - 120	5.552	5.56	-0.0080	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.81	86	43 - 140	10.595	10.60533	-0.0103	+/-1.0	
PDI-RB-1911120944 (A9K0332-02)			Lab File ID: E11131926.D		Analyzed: 11/13/19 23:25			
Nitrobenzene-d5 (Surr)	4.67	110	44 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	4.67	79	44 - 120	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	4.67	26	10 - 120	6.412	6.4125	-0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	4.67	89	50 - 133	13.157	13.1583	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	4.67	44	19 - 120	5.551	5.56	-0.0090	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.67	87	43 - 140	10.595	10.60533	-0.0103	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K14015-CCV1)			Lab File ID: E11141903.D		Analyzed: 11/14/19 09:16			
Nitrobenzene-d5 (Surr)	1000	105	80 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	102	80 - 120	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	1000	102	80 - 120	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	107	80 - 120	13.147	13.1583	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	1000	105	80 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	112	80 - 120	10.59	10.60533	-0.0153	+/-1.0	
Calibration Blank (9K14015-CCB1)			Lab File ID: E11141904.D		Analyzed: 11/14/19 09:52			
Nitrobenzene-d5 (Surr)			37 - 122	7.274	7.3101	-0.0361	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	9.1062	-9.1062	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.4125	-6.4125	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	13.1583	-13.1583	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.56	-5.5600	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.60533	-10.6053	+/-1.0	
LCS (9110781-BS1)			Lab File ID: E11141906.D		Analyzed: 11/14/19 11:03			
Nitrobenzene-d5 (Surr)	333	144	37 - 122	7.295	7.3101	-0.0151	+/-1.0	*
2-Fluorobiphenyl (Surr)	333	99	44 - 115	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	333	132	33 - 122	6.412	6.4125	-0.0005	+/-1.0	*
p-Terphenyl-d14 (Surr)	333	114	54 - 127	13.152	13.1583	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	333	106	35 - 115	5.562	5.56	0.0020	+/-1.0	
2,4,6-Tribromophenol (Surr)	333	121	39 - 132	10.595	10.60533	-0.0103	+/-1.0	
LCS Dup (9110781-BSD1)			Lab File ID: E11141907.D		Analyzed: 11/14/19 11:39			
Nitrobenzene-d5 (Surr)	333	136	37 - 122	7.295	7.3101	-0.0151	+/-1.0	*
2-Fluorobiphenyl (Surr)	333	95	44 - 115	9.097	9.1062	-0.0092	+/-1.0	
Phenol-d6 (Surr)	333	125	33 - 122	6.412	6.4125	-0.0005	+/-1.0	*
p-Terphenyl-d14 (Surr)	333	110	54 - 127	13.152	13.1583	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	333	99	35 - 115	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	333	117	39 - 132	10.595	10.60533	-0.0103	+/-1.0	
PDI-141RAB-10-17.7-191107 (A9K0332-07)			Lab File ID: E11141908.D		Analyzed: 11/14/19 12:14			
Nitrobenzene-d5 (Surr)	387	78	37 - 122	7.301	7.3101	-0.0091	+/-1.0	
2-Fluorobiphenyl (Surr)	387	166	44 - 115	9.092	9.1062	-0.0142	+/-1.0	*
Phenol-d6 (Surr)	387		33 - 122	0	6.4125	-6.4125	+/-1.0	*
p-Terphenyl-d14 (Surr)	387	227	54 - 127	13.147	13.1583	-0.0113	+/-1.0	*
2-Fluorophenol (Surr)	387	44	35 - 115	5.568	5.56	0.0080	+/-1.0	
2,4,6-Tribromophenol (Surr)	387		39 - 132	0	10.60533	-10.6053	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: E11141909.D		Analyzed: 11/14/19 12:50			
Nitrobenzene-d5 (Surr)	377	46	37 - 122	7.311	7.3101	0.0009	+/-1.0	
2-Fluorobiphenyl (Surr)	377	65	44 - 115	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	377	43	33 - 122	6.418	6.4125	0.0055	+/-1.0	
p-Terphenyl-d14 (Surr)	377	84	54 - 127	13.152	13.1583	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	377	59	35 - 115	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	377	75	39 - 132	10.606	10.60533	0.0007	+/-1.0	
PDI-143RAB-20-31.1-191111 (A9K0332-10)			Lab File ID: E11141910.D		Analyzed: 11/14/19 13:26			
Nitrobenzene-d5 (Surr)	367	52	37 - 122	7.306	7.3101	-0.0041	+/-1.0	
2-Fluorobiphenyl (Surr)	367	80	44 - 115	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	367	51	33 - 122	6.418	6.4125	0.0055	+/-1.0	
p-Terphenyl-d14 (Surr)	367	103	54 - 127	13.147	13.1583	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	367	66	35 - 115	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	367	98	39 - 132	10.595	10.60533	-0.0103	+/-1.0	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: E11141912.D		Analyzed: 11/14/19 14:37			
Nitrobenzene-d5 (Surr)	396	41	37 - 122	7.311	7.3101	0.0009	+/-1.0	
2-Fluorobiphenyl (Surr)	396	60	44 - 115	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	396	37	33 - 122	6.418	6.4125	0.0055	+/-1.0	
p-Terphenyl-d14 (Surr)	396	75	54 - 127	13.152	13.1583	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	396	51	35 - 115	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	396	79	39 - 132	10.601	10.60533	-0.0043	+/-1.0	
PDI-143RAB-10-20-191112 (A9K0332-09RE1)			Lab File ID: E11141915.D		Analyzed: 11/14/19 16:28			
Nitrobenzene-d5 (Surr)	363	77	37 - 122	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	363	79	44 - 115	9.092	9.1062	-0.0142	+/-1.0	
Phenol-d6 (Surr)	363	69	33 - 122	6.413	6.4125	0.0005	+/-1.0	
p-Terphenyl-d14 (Surr)	363	100	54 - 127	13.147	13.1583	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	363	76	35 - 115	5.551	5.56	-0.0090	+/-1.0	
2,4,6-Tribromophenol (Surr)	363	67	39 - 132	10.595	10.60533	-0.0103	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K15018	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K15018-CCV2)			Lab File ID: J11151905.D		Analyzed: 11/15/19 10:42			
Nitrobenzene-d5 (Surr)	1000	94	80 - 120	6.931	7.1168	-0.1858	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	105	80 - 120	8.739	8.927444	-0.1884	+/-1.0	
Phenol-d6 (Surr)	1000	92	80 - 120	6.038	6.2088	-0.1708	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	109	80 - 120	12.665	12.9267	-0.2617	+/-1.0	
2-Fluorophenol (Surr)	1000	103	80 - 120	5.134	5.3054	-0.1714	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	99	80 - 120	10.226	10.42356	-0.1976	+/-1.0	
Calibration Blank (9K15018-CCB1)			Lab File ID: J11151906.D		Analyzed: 11/15/19 11:18			
Nitrobenzene-d5 (Surr)			37 - 122	0	7.1168	-7.1168	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	8.927444	-8.9274	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.2088	-6.2088	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	12.9267	-12.9267	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.3054	-5.3054	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.42356	-10.4236	+/-1.0	
Blank (9110781-BLK2)			Lab File ID: J11151912.D		Analyzed: 11/15/19 14:56			
Nitrobenzene-d5 (Surr)	312	73	37 - 122	6.931	7.1168	-0.1858	+/-1.0	
2-Fluorobiphenyl (Surr)	312	82	44 - 115	8.734	8.927444	-0.1934	+/-1.0	
Phenol-d6 (Surr)	312	69	33 - 122	6.038	6.2088	-0.1708	+/-1.0	
p-Terphenyl-d14 (Surr)	312	94	54 - 127	12.665	12.9267	-0.2617	+/-1.0	
2-Fluorophenol (Surr)	312	82	35 - 115	5.129	5.3054	-0.1764	+/-1.0	
2,4,6-Tribromophenol (Surr)	312	84	39 - 132	10.226	10.42356	-0.1976	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K15038	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9K15038-CCV2)			Lab File ID: J11151917.D		Analyzed: 11/15/19 17:47			
Nitrobenzene-d5 (Surr)	1000	92	80 - 120	6.926	7.1168	-0.1908	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	106	80 - 120	8.739	8.927444	-0.1884	+/-1.0	
Phenol-d6 (Surr)	1000	92	80 - 120	6.038	6.2088	-0.1708	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	109	80 - 120	12.66	12.9267	-0.2667	+/-1.0	
2-Fluorophenol (Surr)	1000	106	80 - 120	5.124	5.3054	-0.1814	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	101	80 - 120	10.226	10.42356	-0.1976	+/-1.0	
Calibration Blank (9K15038-CCB1)			Lab File ID: J11151918.D		Analyzed: 11/15/19 18:23			
Nitrobenzene-d5 (Surr)			37 - 122	0	7.1168	-7.1168	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	8.927444	-8.9274	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.2088	-6.2088	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	12.9267	-12.9267	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.3054	-5.3054	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.42356	-10.4236	+/-1.0	
PDI-140RAB-10-12.7-191108 (A9K0332-05RE1)			Lab File ID: J11151923.D		Analyzed: 11/15/19 21:21			
Nitrobenzene-d5 (Surr)	415	52	37 - 122	6.931	7.1168	-0.1858	+/-1.0	
2-Fluorobiphenyl (Surr)	415	73	44 - 115	8.734	8.927444	-0.1934	+/-1.0	
Phenol-d6 (Surr)	415	45	33 - 122	6.043	6.2088	-0.1658	+/-1.0	
p-Terphenyl-d14 (Surr)	415	84	54 - 127	12.665	12.9267	-0.2617	+/-1.0	
2-Fluorophenol (Surr)	415	61	35 - 115	5.14	5.3054	-0.1654	+/-1.0	
2,4,6-Tribromophenol (Surr)	415	51	39 - 132	10.226	10.42356	-0.1976	+/-1.0	
PDI-143RAB-00-10-191111 (A9K0332-08RE1)			Lab File ID: J11151924.D		Analyzed: 11/15/19 21:56			
Nitrobenzene-d5 (Surr)	347	65	37 - 122	6.931	7.1168	-0.1858	+/-1.0	
2-Fluorobiphenyl (Surr)	347	91	44 - 115	8.734	8.927444	-0.1934	+/-1.0	
Phenol-d6 (Surr)	347	58	33 - 122	6.044	6.2088	-0.1648	+/-1.0	
p-Terphenyl-d14 (Surr)	347	103	54 - 127	12.671	12.9267	-0.2557	+/-1.0	
2-Fluorophenol (Surr)	347	76	35 - 115	5.129	5.3054	-0.1764	+/-1.0	
2,4,6-Tribromophenol (Surr)	347	65	39 - 132	10.226	10.42356	-0.1976	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K13053	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9K13053-CCV1)			Lab File ID: E11131915.D			Analyzed: 11/13/19 16:54			
1,4-Dichlorobenzene-d4 (ISTD)	331106	6.76	506660	6.776	65	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	1548239	8.012	1967039	8.028	79	50 - 200	-0.0160	+/-0.50	
Acenaphthene-d10 (ISTD)	981079	9.788	1014623	9.804	97	50 - 200	-0.0160	+/-0.50	
Phenanthrene-d10 (ISTD)	1906580	11.301	1837465	11.312	104	50 - 200	-0.0110	+/-0.50	
Chrysene-d12 (ISTD)	1969960	15.238	1661969	15.248	119	50 - 200	-0.0100	+/-0.50	
Perylene-d12 (ISTD)	1850282	18.747	1540594	18.757	120	50 - 200	-0.0100	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1481619	21.143	1155569	21.148	128	50 - 200	-0.0050	+/-0.50	
Calibration Blank (9K13053-CCB1)			Lab File ID: E11131916.D			Analyzed: 11/13/19 17:30			
1,4-Dichlorobenzene-d4 (ISTD)	486683	6.76	331106	6.76	147	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	2016309	8.012	1548239	8.012	130	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	1061715	9.787	981079	9.788	108	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10 (ISTD)	2141179	11.301	1906580	11.301	112	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	2045118	15.232	1969960	15.238	104	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	1860303	18.741	1850282	18.747	101	50 - 200	-0.0060	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1448220	21.132	1481619	21.143	98	50 - 200	-0.0110	+/-0.50	
Blank (9110772-BLK1)			Lab File ID: E11131922.D			Analyzed: 11/13/19 21:04			
1,4-Dichlorobenzene-d4 (ISTD)	224439	6.76	331106	6.76	68	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	896578	8.012	1548239	8.012	58	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	617901	9.787	981079	9.788	63	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10 (ISTD)	1530735	11.306	1906580	11.301	80	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	1386425	15.238	1969960	15.238	70	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1205005	18.752	1850282	18.747	65	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	912905	21.153	1481619	21.143	62	50 - 200	0.0100	+/-0.50	
LCS (9110772-BS1)			Lab File ID: E11131923.D			Analyzed: 11/13/19 21:39			
1,4-Dichlorobenzene-d4 (ISTD)	204276	6.76	331106	6.76	62	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1149663	8.012	1548239	8.012	74	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	856167	9.793	981079	9.788	87	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	1652854	11.307	1906580	11.301	87	50 - 200	0.0060	+/-0.50	
Chrysene-d12 (ISTD)	1543056	15.259	1969960	15.238	78	50 - 200	0.0210	+/-0.50	
Perylene-d12 (ISTD)	1451346	18.773	1850282	18.747	78	50 - 200	0.0260	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1155526	21.175	1481619	21.143	78	50 - 200	0.0320	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K13053	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (9110772-BSD1)			Lab File ID: E11131924.D			Analyzed: 11/13/19 22:15			
1,4-Dichlorobenzene-d4 (ISTD)	281215	6.76	331106	6.76	85	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1406454	8.012	1548239	8.012	91	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	900335	9.793	981079	9.788	92	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	1776076	11.312	1906580	11.301	93	50 - 200	0.0110	+/-0.50	
Chrysene-d12 (ISTD)	1828467	15.259	1969960	15.238	93	50 - 200	0.0210	+/-0.50	
Perylene-d12 (ISTD)	1764298	18.773	1850282	18.747	95	50 - 200	0.0260	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1427023	21.18	1481619	21.143	96	50 - 200	0.0370	+/-0.50	
PDI-FB-1911121146 (A9K0332-01)			Lab File ID: E11131925.D			Analyzed: 11/13/19 22:50			
1,4-Dichlorobenzene-d4 (ISTD)	211577	6.76	331106	6.76	64	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1136944	8.012	1548239	8.012	73	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	811975	9.788	981079	9.788	83	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1753537	11.307	1906580	11.301	92	50 - 200	0.0060	+/-0.50	
Chrysene-d12 (ISTD)	1671351	15.243	1969960	15.238	85	50 - 200	0.0050	+/-0.50	
Perylene-d12 (ISTD)	1521039	18.752	1850282	18.747	82	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1198960	21.154	1481619	21.143	81	50 - 200	0.0110	+/-0.50	
PDI-RB-1911120944 (A9K0332-02)			Lab File ID: E11131926.D			Analyzed: 11/13/19 23:25			
1,4-Dichlorobenzene-d4 (ISTD)	212839	6.76	331106	6.76	64	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1085022	8.012	1548239	8.012	70	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	759398	9.787	981079	9.788	77	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10 (ISTD)	1691315	11.306	1906580	11.301	89	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	1602066	15.243	1969960	15.238	81	50 - 200	0.0050	+/-0.50	
Perylene-d12 (ISTD)	1475630	18.752	1850282	18.747	80	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1168196	21.148	1481619	21.143	79	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 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9K14015-CCV1)			Lab File ID: E11141903.D			Analyzed: 11/14/19 09:16			
1,4-Dichlorobenzene-d4 (ISTD)	448986	6.76	506660	6.776	89	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	1811790	8.012	1967039	8.028	92	50 - 200	-0.0160	+/-0.50	
Acenaphthene-d10 (ISTD)	930990	9.788	1014623	9.804	92	50 - 200	-0.0160	+/-0.50	
Phenanthrene-d10 (ISTD)	1751114	11.301	1837465	11.312	95	50 - 200	-0.0110	+/-0.50	
Chrysene-d12 (ISTD)	1604620	15.233	1661969	15.248	97	50 - 200	-0.0150	+/-0.50	
Perylene-d12 (ISTD)	1415816	18.741	1540594	18.757	92	50 - 200	-0.0160	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1049038	21.137	1155569	21.148	91	50 - 200	-0.0110	+/-0.50	
Calibration Blank (9K14015-CCB1)			Lab File ID: E11141904.D			Analyzed: 11/14/19 09:52			
1,4-Dichlorobenzene-d4 (ISTD)	408321	6.76	448986	6.76	91	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1635298	8.012	1811790	8.012	90	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	769204	9.788	930990	9.788	83	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1487898	11.301	1751114	11.301	85	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1224816	15.233	1604620	15.233	76	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1015696	18.736	1415816	18.741	72	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	685579	21.132	1049038	21.137	65	50 - 200	-0.0050	+/-0.50	
LCS (9110781-BS1)			Lab File ID: E11141906.D			Analyzed: 11/14/19 11:03			
1,4-Dichlorobenzene-d4 (ISTD)	259176	6.76	448986	6.76	58	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1396649	8.012	1811790	8.012	77	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	875653	9.793	930990	9.788	94	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	1689200	11.306	1751114	11.301	96	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	1661085	15.248	1604620	15.233	104	50 - 200	0.0150	+/-0.50	
Perylene-d12 (ISTD)	1590052	18.757	1415816	18.741	112	50 - 200	0.0160	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1265493	21.159	1049038	21.137	121	50 - 200	0.0220	+/-0.50	
LCS Dup (9110781-BSD1)			Lab File ID: E11141907.D			Analyzed: 11/14/19 11:39			
1,4-Dichlorobenzene-d4 (ISTD)	269349	6.76	448986	6.76	60	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1458972	8.012	1811790	8.012	81	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	886264	9.793	930990	9.788	95	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	1661417	11.306	1751114	11.301	95	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	1595356	15.248	1604620	15.233	99	50 - 200	0.0150	+/-0.50	
Perylene-d12 (ISTD)	1455547	18.762	1415816	18.741	103	50 - 200	0.0210	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1136386	21.159	1049038	21.137	108	50 - 200	0.0220	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
PDI-141RAB-10-17.7-191107 (A9K0332-07)			Lab File ID: E11141908.D			Analyzed: 11/14/19 12:14			
1,4-Dichlorobenzene-d4 (ISTD)	408984	6.76	448986	6.76	91	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1672124	8.012	1811790	8.012	92	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	827114	9.788	930990	9.788	89	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1568866	11.301	1751114	11.301	90	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1401926	15.233	1604620	15.233	87	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1248728	18.741	1415816	18.741	88	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	933413	21.132	1049038	21.137	89	50 - 200	-0.0050	+/-0.50	
PDI-141RAB-00-10-191107 (A9K0332-06)			Lab File ID: E11141909.D			Analyzed: 11/14/19 12:50			
1,4-Dichlorobenzene-d4 (ISTD)	406398	6.76	448986	6.76	91	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1645220	8.012	1811790	8.012	91	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	803039	9.788	930990	9.788	86	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1622202	11.301	1751114	11.301	93	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1449045	15.232	1604620	15.233	90	50 - 200	-0.0010	+/-0.50	
Perylene-d12 (ISTD)	1316598	18.741	1415816	18.741	93	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1017776	21.137	1049038	21.137	97	50 - 200	0.0000	+/-0.50	
PDI-143RAB-20-31.1-191111 (A9K0332-10)			Lab File ID: E11141910.D			Analyzed: 11/14/19 13:26			
1,4-Dichlorobenzene-d4 (ISTD)	390267	6.76	448986	6.76	87	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1656633	8.012	1811790	8.012	91	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	863312	9.788	930990	9.788	93	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1688061	11.301	1751114	11.301	96	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1575544	15.233	1604620	15.233	98	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1481808	18.741	1415816	18.741	105	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1169974	21.132	1049038	21.137	112	50 - 200	-0.0050	+/-0.50	
PDI-140RAB-00-10-191108 (A9K0332-04)			Lab File ID: E11141912.D			Analyzed: 11/14/19 14:37			
1,4-Dichlorobenzene-d4 (ISTD)	329403	6.76	448986	6.76	73	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1373359	8.012	1811790	8.012	76	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	745605	9.788	930990	9.788	80	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1714877	11.301	1751114	11.301	98	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1709713	15.233	1604620	15.233	107	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1610687	18.741	1415816	18.741	114	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1273918	21.132	1049038	21.137	121	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 - 3. Riverbank Angled Borin
Sequence:	9K14015	Instrument:	SV-GCMS5
Matrix:	Soil	Calibration:	A9J0804

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
PDI-143RAB-10-20-191112 (A9K0332-09RE1)			Lab File ID: E11141915.D			Analyzed: 11/14/19 16:28			
1,4-Dichlorobenzene-d4 (ISTD)	270775	6.76	448986	6.76	60	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1331978	8.012	1811790	8.012	74	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	830427	9.788	930990	9.788	89	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1735217	11.301	1751114	11.301	99	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1647837	15.233	1604620	15.233	103	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1567252	18.747	1415816	18.741	111	50 - 200	0.0060	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1219569	21.137	1049038	21.137	116	50 - 200	0.0000	+/-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 - 3. Riverbank Angled Borin
Sequence:	9K15038	Instrument:	SV-GCMS10
Matrix:	Soil	Calibration:	A9I2405

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9K15038-CCV2)			Lab File ID: J11151917.D			Analyzed: 11/15/19 17:47			
1,4-Dichlorobenzene-d4 (ISTD)	333945	6.386	283511	6.568	118	50 - 200	-0.1820	+/-0.50	
Naphthalene-d8 (ISTD)	1253992	7.648	1143968	7.835	110	50 - 200	-0.1870	+/-0.50	
Acenaphthene-d10 (ISTD)	667779	9.424	583825	9.616	114	50 - 200	-0.1920	+/-0.50	
Phenanthrene-d10 (ISTD)	1232241	10.932	1065192	11.135	116	50 - 200	-0.2030	+/-0.50	
Chrysene-d12 (ISTD)	1168472	14.521	1048464	14.917	111	50 - 200	-0.3960	+/-0.50	
Perylene-d12 (ISTD)	1155496	17.966	1042709	18.399	111	50 - 200	-0.4330	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	988166	20.351	886236	20.795	112	50 - 200	-0.4440	+/-0.50	
Calibration Blank (9K15038-CCB1)			Lab File ID: J11151918.D			Analyzed: 11/15/19 18:23			
1,4-Dichlorobenzene-d4 (ISTD)	314645	6.386	333945	6.386	94	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1159597	7.648	1253992	7.648	92	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	605269	9.424	667779	9.424	91	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1020337	10.932	1232241	10.932	83	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	909470	14.516	1168472	14.521	78	50 - 200	-0.0050	+/-0.50	
Perylene-d12 (ISTD)	898329	17.955	1155496	17.966	78	50 - 200	-0.0110	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	721081	20.346	988166	20.351	73	50 - 200	-0.0050	+/-0.50	
PDI-140RAB-10-12.7-191108 (A9K0332-05RE1)			Lab File ID: J11151923.D			Analyzed: 11/15/19 21:21			
1,4-Dichlorobenzene-d4 (ISTD)	341650	6.386	333945	6.386	102	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1193951	7.648	1253992	7.648	95	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	628017	9.424	667779	9.424	94	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1069849	10.932	1232241	10.932	87	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	905709	14.526	1168472	14.521	78	50 - 200	0.0050	+/-0.50	
Perylene-d12 (ISTD)	786134	17.971	1155496	17.966	68	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	650507	20.362	988166	20.351	66	50 - 200	0.0110	+/-0.50	
PDI-143RAB-00-10-191111 (A9K0332-08RE1)			Lab File ID: J11151924.D			Analyzed: 11/15/19 21:56			
1,4-Dichlorobenzene-d4 (ISTD)	352962	6.386	333945	6.386	106	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1246504	7.648	1253992	7.648	99	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	639117	9.424	667779	9.424	96	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1096136	10.932	1232241	10.932	89	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	972208	14.532	1168472	14.521	83	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	943355	17.971	1155496	17.966	82	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	748252	20.362	988166	20.351	76	50 - 200	0.0110	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bori

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-FB-1911121146	11/12/19 11:46	11/12/19 16:00	11/13/19 15:27	1.15	7.00	11/13/19 22:50	0.31	40.00	
PDI-RB-1911120944	11/12/19 09:44	11/12/19 16:00	11/13/19 15:27	1.24	7.00	11/13/19 23:25	0.33	40.00	
PDI-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/14/19 07:10	5.81	14.00	11/14/19 14:37	0.31	40.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/14/19 07:10	5.79	14.00	11/15/19 21:21	1.59	40.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/14/19 07:10	6.66	14.00	11/14/19 12:50	0.24	40.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/14/19 07:10	6.60	14.00	11/14/19 12:14	0.21	40.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/14/19 07:10	2.78	14.00	11/15/19 21:56	1.62	40.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/14/19 07:10	1.71	14.00	11/14/19 16:28	0.39	40.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/14/19 07:10	2.65	14.00	11/14/19 13:26	0.26	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 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-FB-1911121146	A9K0332-01	WQ
PDI-RB-1911120944	A9K0332-02	WQ
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank Ang

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Arsenic	0.500	1.00	mg/kg
Cadmium	0.100	0.200	mg/kg
Chromium	0.500	1.00	mg/kg
Copper	0.500	1.00	mg/kg
Lead	0.100	0.200	mg/kg
Manganese	0.500	1.00	mg/kg
Mercury	0.0400	0.0800	mg/kg
Vanadium	0.500	1.00	mg/kg
Zinc	2.00	4.00	mg/kg

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

METHOD DETECTION AND REPORTING LIMITS

EPA 6020A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang

Batch Matrix: Water

Analyte	MDL	MRL	Units
Arsenic	0.500	1.00	ug/L
Cadmium	0.0400	0.200	ug/L
Chromium	0.500	1.00	ug/L
Copper	0.500	1.00	ug/L
Lead	0.100	0.200	ug/L
Manganese	0.500	1.00	ug/L
Mercury	0.0400	0.0800	ug/L
Vanadium	0.500	1.00	ug/L
Zinc	2.00	4.00	ug/L

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

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-FB-1911121146

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: WQ
Laboratory ID: A9K0332-01
File ID: 9K15037-048
Sampled: 11/12/19 11:46
Prepared: 11/13/19 14:44
Analyzed: 11/15/19 20:55
Solids: N/A
Preparation: EPA 3015A
Initial/Final: 45 mL / 50 mL
Batch: 9110769
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7440-38-2	Arsenic	0.500	1	U	EPA 6020A
7440-43-9	Cadmium	0.0400	1	U	EPA 6020A
7440-47-3	Chromium	0.500	1	U	EPA 6020A
7440-50-8	Copper	0.500	1	U	EPA 6020A
7439-92-1	Lead	0.100	1	U	EPA 6020A
7439-96-5	Manganese	0.500	1	U	EPA 6020A
7439-97-6	Mercury	0.0400	1	U	EPA 6020A
7440-62-2	Vanadium	0.500	1	U	EPA 6020A
7440-66-6	Zinc	2.00	1	U	EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-RB-1911120944

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: WQ
Laboratory ID: A9K0332-02
File ID: 9K15037-049
Sampled: 11/12/19 09:44
Prepared: 11/13/19 14:44
Analyzed: 11/15/19 21:00
Solids: N/A
Preparation: EPA 3015A
Initial/Final: 45 mL / 50 mL
Batch: 9110769
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7440-38-2	Arsenic	0.500	1	U	EPA 6020A
7440-43-9	Cadmium	0.0400	1	U	EPA 6020A
7440-47-3	Chromium	0.500	1	U	EPA 6020A
7440-50-8	Copper	0.500	1	U	EPA 6020A
7439-92-1	Lead	0.100	1	U	EPA 6020A
7439-96-5	Manganese	0.500	1	U	EPA 6020A
7439-97-6	Mercury	0.0400	1	U	EPA 6020A
7440-62-2	Vanadium	0.500	1	U	EPA 6020A
7440-66-6	Zinc	2.00	1	U	EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-140RAB-00-10-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-04
File ID: 9K15037-055
Sampled: 11/08/19 11:40
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 21:28
Solids: 81.01
Preparation: EPA 3051A
Initial/Final: 0.47 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.06	10		EPA 6020A
7440-43-9	Cadmium	0.131	10	U	EPA 6020A
7440-47-3	Chromium	41.3	10		EPA 6020A
7440-50-8	Copper	30.7	10		EPA 6020A
7439-92-1	Lead	6.78	10		EPA 6020A
7439-96-5	Manganese	768	10		EPA 6020A
7439-97-6	Mercury	0.0525	10	U	EPA 6020A
7440-62-2	Vanadium	115	10		EPA 6020A
7440-66-6	Zinc	78.3	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-140RAB-10-12.7-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-05
File ID: 9K15037-056
Sampled: 11/08/19 12:15
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 21:32
Solids: 79.57
Preparation: EPA 3051A
Initial/Final: 0.511 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.33	10		EPA 6020A
7440-43-9	Cadmium	0.123	10	U	EPA 6020A
7440-47-3	Chromium	32.8	10		EPA 6020A
7440-50-8	Copper	29.0	10		EPA 6020A
7439-92-1	Lead	9.82	10		EPA 6020A
7439-96-5	Manganese	1210	10		EPA 6020A
7439-97-6	Mercury	0.0492	10	U	EPA 6020A
7440-62-2	Vanadium	152	10		EPA 6020A
7440-66-6	Zinc	85.2	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-141RAB-00-10-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-06
File ID: 9K15037-057
Sampled: 11/07/19 15:15
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 21:37
Solids: 87.86
Preparation: EPA 3051A
Initial/Final: 0.477 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	1.61	10		EPA 6020A
7440-43-9	Cadmium	0.462	10		EPA 6020A
7440-47-3	Chromium	12.9	10		EPA 6020A
7440-50-8	Copper	28.3	10		EPA 6020A
7439-92-1	Lead	33.9	10		EPA 6020A
7439-96-5	Manganese	1410	10		EPA 6020A
7439-97-6	Mercury	0.0477	10	U	EPA 6020A
7440-62-2	Vanadium	147	10		EPA 6020A
7440-66-6	Zinc	133	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-141RAB-10-17.7-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-07
File ID: 9K15037-060
Sampled: 11/07/19 16:45
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 21:51
Solids: 82.86
Preparation: EPA 3051A
Initial/Final: 0.518 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	1.62	10		EPA 6020A
7440-43-9	Cadmium	0.116	10	U	EPA 6020A
7440-47-3	Chromium	12.5	10		EPA 6020A
7440-50-8	Copper	38.2	10		EPA 6020A
7439-92-1	Lead	6.74	10		EPA 6020A
7439-96-5	Manganese	1340	10		EPA 6020A
7439-97-6	Mercury	0.0466	10	U	EPA 6020A
7440-62-2	Vanadium	119	10		EPA 6020A
7440-66-6	Zinc	63.6	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-08
File ID: 9K15037-063
Sampled: 11/11/19 12:30
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 22:05
Solids: 92.62
Preparation: EPA 3051A
Initial/Final: 0.5 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.19	10		EPA 6020A
7440-43-9	Cadmium	0.108	10	U	EPA 6020A
7440-47-3	Chromium	15.5	10		EPA 6020A
7440-50-8	Copper	16.3	10		EPA 6020A
7439-92-1	Lead	3.13	10		EPA 6020A
7439-96-5	Manganese	356	10		EPA 6020A
7439-97-6	Mercury	0.0432	10	U	EPA 6020A
7440-62-2	Vanadium	72.5	10		EPA 6020A
7440-66-6	Zinc	54.4	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-143RAB-10-20-191112

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-09
File ID: 9K15037-064
Sampled: 11/12/19 14:05
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 22:09
Solids: 91.60
Preparation: EPA 3051A
Initial/Final: 0.487 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	3.29	10		EPA 6020A
7440-43-9	Cadmium	0.112	10	U	EPA 6020A
7440-47-3	Chromium	15.6	10		EPA 6020A
7440-50-8	Copper	18.7	10		EPA 6020A
7439-92-1	Lead	3.74	10		EPA 6020A
7439-96-5	Manganese	315	10		EPA 6020A
7439-97-6	Mercury	0.0448	10	U	EPA 6020A
7440-62-2	Vanadium	68.3	10		EPA 6020A
7440-66-6	Zinc	52.9	10		EPA 6020A

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

PDI-143RAB-20-31.1-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-10
File ID: 9K15037-065
Sampled: 11/11/19 15:30
Prepared: 11/15/19 12:16
Analyzed: 11/15/19 22:14
Solids: 90.19
Preparation: EPA 3051A
Initial/Final: 0.504 g / 50 mL
Batch: 9110847
Sequence: 9K15037
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-38-2	Arsenic	2.70	10		EPA 6020A
7440-43-9	Cadmium	0.122	10	J	EPA 6020A
7440-47-3	Chromium	13.1	10		EPA 6020A
7440-50-8	Copper	17.1	10		EPA 6020A
7439-92-1	Lead	7.47	10		EPA 6020A
7439-96-5	Manganese	256	10		EPA 6020A
7439-97-6	Mercury	0.0440	10	U	EPA 6020A
7440-62-2	Vanadium	52.9	10		EPA 6020A
7440-66-6	Zinc	80.6	10		EPA 6020A

PREPARATION BATCH SUMMARY

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110769 Batch Matrix: Water Preparation: EPA 3015A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110769-BLK1	9K15037-043	11/13/19 14:44	
LCS	9110769-BS1	9K15037-044	11/13/19 14:44	
PDI-FB-1911121146	A9K0332-01	9K15037-048	11/13/19 14:44	
PDI-RB-1911120944	A9K0332-02	9K15037-049	11/13/19 14:44	

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.

PREPARATION BATCH SUMMARY

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110847 Batch Matrix: Soil
Preparation: EPA 3051A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110847-BLK1	9K15037-053	11/15/19 12:16	
LCS	9110847-BS1	9K15037-054	11/15/19 12:16	
PDI-141RAB-10-17.7-191107 (Dup)	9110847-DUP1	9K15037-061	11/15/19 12:16	
PDI-141RAB-10-17.7-191107 (MS)	9110847-MS1	9K15037-062	11/15/19 12:16	
PDI-140RAB-00-10-191108	A9K0332-04	9K15037-055	11/15/19 12:16	
PDI-140RAB-10-12.7-191108	A9K0332-05	9K15037-056	11/15/19 12:16	
PDI-141RAB-00-10-191107	A9K0332-06	9K15037-057	11/15/19 12:16	
PDI-141RAB-10-17.7-191107	A9K0332-07	9K15037-060	11/15/19 12:16	
PDI-143RAB-00-10-191111	A9K0332-08	9K15037-063	11/15/19 12:16	
PDI-143RAB-10-20-191112	A9K0332-09	9K15037-064	11/15/19 12:16	
PDI-143RAB-20-31.1-191111	A9K0332-10	9K15037-065	11/15/19 12:16	

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 - 3. Riverbank Angled Borin
Matrix:	Water	Laboratory ID:	9110769-BLK1	File ID:	9K15037-043
Prepared:	11/13/19 14:44	Preparation:	EPA 3015A	Initial/Final:	45 mL / 50 mL
Analyzed:	11/15/19 20:32	Instrument:	ICPMS6		
Batch:	9110769	Sequence:	9K15037	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7440-38-2	Arsenic	0.500	U
7440-43-9	Cadmium	0.0400	U
7440-47-3	Chromium	0.500	U
7440-50-8	Copper	0.500	U
7439-92-1	Lead	0.100	U
7439-96-5	Manganese	0.500	U
7439-97-6	Mercury	0.0400	U
7440-62-2	Vanadium	0.500	U
7440-66-6	Zinc	2.00	U

METHOD BLANK DATA SHEET

EPA 6020A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9110847-BLK1	File ID:	9K15037-053
Prepared:	11/15/19 12:16	Preparation:	EPA 3051A	Initial/Final:	0.52 g / 50 mL
Analyzed:	11/15/19 21:18	Instrument:	ICPMS6		
Batch:	9110847	Sequence:	9K15037	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
7440-38-2	Arsenic	0.481	U
7440-43-9	Cadmium	0.0962	U
7440-47-3	Chromium	0.481	U
7440-50-8	Copper	0.481	U
7439-92-1	Lead	0.0962	U
7439-96-5	Manganese	0.481	U
7439-97-6	Mercury	0.0385	U
7440-62-2	Vanadium	0.481	U
7440-66-6	Zinc	1.92	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Water		
Batch:	9110769	Laboratory ID:	9110769-BS1
Preparation:	EPA 3015A	Initial/Final:	45 mL / 50 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Arsenic	55.6	50.8	92	80 - 120
Cadmium	55.6	51.3	92	80 - 120
Chromium	55.6	52.1	94	80 - 120
Copper	55.6	53.2	96	80 - 120
Lead	55.6	52.8	95	80 - 120
Manganese	55.6	53.6	96	80 - 120
Mercury	1.11	1.07	97	80 - 120
Vanadium	55.6	50.6	91	80 - 120
Zinc	55.6	52.2	94	80 - 120

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110847	Laboratory ID:	9110847-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	50.0	48.5	97	80 - 120
Cadmium	50.0	48.5	97	80 - 120
Chromium	50.0	49.5	99	80 - 120
Copper	50.0	50.3	101	80 - 120
Lead	50.0	50.5	101	80 - 120
Manganese	50.0	50.7	101	80 - 120
Mercury	1.00	0.958	96	80 - 120
Vanadium	50.0	48.1	96	80 - 120
Zinc	50.0	49.4	99	80 - 120

* = Values outside of QC limits

PDI-141RAB-10-17.7-191107

DUPLICATES

EPA 6020A

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9110847
Preparation: EPA 3051A
Source Sample Name: PDI-141RAB-10-17.7-191107

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110847-DUP1
Lab Source ID: A9K0332-07
Initial/Final: 0.519 g / 50 mL
% Solids: 82.86

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/kg dry)	C	DUPLICATE CONCENTRATION (mg/kg dry)	C	RPD %	Q	METHOD
Arsenic	40	1.62		1.66		3		EPA 6020A
Cadmium	40	0.0942		ND				EPA 6020A
Chromium	40	12.5		13.8		10		EPA 6020A
Copper	40	38.2		38.4		0.6		EPA 6020A
Lead	40	6.74		6.84		1		EPA 6020A
Manganese	40	1340		1490		10		EPA 6020A
Mercury	40	0.0172		ND				EPA 6020A
Vanadium	40	119		134		12		EPA 6020A
Zinc	40	63.6		66.4		4		EPA 6020A

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 6020A

PDI-141RAB-10-17.7-191107

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9110847	Laboratory ID:	9110847-MS1
Preparation:	EPA 3051A	Initial/Final:	0.489 g / 50 mL

Source Sample Name: PDI-141RAB-10-17.7-191107

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. (*=Out)	QC LIMITS REC.
Arsenic	61.7	1.62	60.3	95	75 - 125
Cadmium	61.7	ND	60.3	98	75 - 125
Chromium	61.7	12.5	67.9	90	75 - 125
Copper	61.7	38.2	83.9	74 *	75 - 125
Lead	61.7	6.74	64.3	93	75 - 125
Manganese	61.7	1340	780	-912 *	75 - 125
Mercury	1.23	ND	1.19	96	75 - 125
Vanadium	61.7	119	129	17 *	75 - 125
Zinc	61.7	63.6	95.4	52 *	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 - 3. Riverbank Angled Borin
Sequence:	9K15037	Instrument:	ICPMS6
Matrix:	Soil	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	9K15037-ICV1	9K15037-013	11/15/19 17:53
Initial Cal Blank	9K15037-ICB1	9K15037-014	11/15/19 17:58
Instrument RL Check	9K15037-CRL1	9K15037-015	11/15/19 18:05
Instrument RL Check	9K15037-CRL2	9K15037-016	11/15/19 18:09
Instrument RL Check	9K15037-CRL3	9K15037-017	11/15/19 18:14
Calibration Check	9K15037-CCV1	9K15037-030	11/15/19 19:32
Calibration Blank	9K15037-CCB1	9K15037-031	11/15/19 19:36
Instrument RL Check	9K15037-CRL4	9K15037-032	11/15/19 19:41
Instrument RL Check	9K15037-CRL5	9K15037-033	11/15/19 19:45
Instrument RL Check	9K15037-CRL6	9K15037-034	11/15/19 19:50
Instrument RL Check	9K15037-CRL7	9K15037-035	11/15/19 19:55
Blank	9110769-BLK1	9K15037-043	11/15/19 20:32
LCS	9110769-BS1	9K15037-044	11/15/19 20:37
Calibration Check	9K15037-CCV2	9K15037-046	11/15/19 20:46
Calibration Blank	9K15037-CCB2	9K15037-047	11/15/19 20:50
PDI-FB-1911121146	A9K0332-01	9K15037-048	11/15/19 20:55
PDI-RB-1911120944	A9K0332-02	9K15037-049	11/15/19 21:00
Blank	9110847-BLK1	9K15037-053	11/15/19 21:18
LCS	9110847-BS1	9K15037-054	11/15/19 21:23
PDI-140RAB-00-10-191108	A9K0332-04	9K15037-055	11/15/19 21:28
PDI-140RAB-10-12.7-191108	A9K0332-05	9K15037-056	11/15/19 21:32
PDI-141RAB-00-10-191107	A9K0332-06	9K15037-057	11/15/19 21:37
Calibration Check	9K15037-CCV3	9K15037-058	11/15/19 21:41
Calibration Blank	9K15037-CCB3	9K15037-059	11/15/19 21:46
PDI-141RAB-10-17.7-191107	A9K0332-07	9K15037-060	11/15/19 21:51
PDI-141RAB-10-17.7-191107 (Dup)	9110847-DUP1	9K15037-061	11/15/19 21:55
PDI-141RAB-10-17.7-191107 (MS)	9110847-MS1	9K15037-062	11/15/19 22:00
PDI-143RAB-00-10-191111	A9K0332-08	9K15037-063	11/15/19 22:05
PDI-143RAB-10-20-191112	A9K0332-09	9K15037-064	11/15/19 22:09
PDI-143RAB-20-31.1-191111	A9K0332-10	9K15037-065	11/15/19 22:14
Calibration Check	9K15037-CCV4	9K15037-070	11/15/19 22:37
Calibration Blank	9K15037-CCB4	9K15037-071	11/15/19 22:42
Calibration Check	9K15037-CCV5	9K15037-076	11/15/19 23:05

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K15037	Instrument:	ICPMS6
Matrix:	Soil	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	9K15037-CCB5	9K15037-077	11/15/19 23:09
Instrument RL Check	9K15037-CRL8	9K15037-078	11/15/19 23:14
Instrument RL Check	9K15037-CRL9	9K15037-079	11/15/19 23:19
Instrument RL Check	9K15037-CRLA	9K15037-080	11/15/19 23:23
Instrument RL Check	9K15037-CRLB	9K15037-081	11/15/19 23:28

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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9K15037-ICV1	Arsenic	100	96.3	96	ug/L	EPA 6020A
	Cadmium	100	97.1	97	ug/L	EPA 6020A
	Chromium	100	99.0	99	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Lead	100	100	100	ug/L	EPA 6020A
	Manganese	100	102	102	ug/L	EPA 6020A
	Mercury	800	811	101	ng/L	EPA 6020A
	Vanadium	100	94.8	95	ug/L	EPA 6020A
	Zinc	100	102	102	ug/L	EPA 6020A
9K15037-CCV1	Arsenic	100	94.9	95	ug/L	EPA 6020A
	Cadmium	100	95.9	96	ug/L	EPA 6020A
	Chromium	100	97.2	97	ug/L	EPA 6020A
	Copper	100	99.9	100	ug/L	EPA 6020A
	Lead	100	102	102	ug/L	EPA 6020A
	Manganese	100	101	101	ug/L	EPA 6020A
	Mercury	800	817	102	ng/L	EPA 6020A
	Vanadium	100	92.6	93	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9K15037-CCV2	Arsenic	100	94.1	94	ug/L	EPA 6020A
	Cadmium	100	96.2	96	ug/L	EPA 6020A
	Chromium	100	97.5	98	ug/L	EPA 6020A
	Copper	100	100	100	ug/L	EPA 6020A
	Lead	100	101	101	ug/L	EPA 6020A
	Manganese	100	102	102	ug/L	EPA 6020A
	Mercury	800	803	100	ng/L	EPA 6020A
	Vanadium	100	93.1	93	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9K15037-CCV3	Arsenic	100	97.7	98	ug/L	EPA 6020A
	Cadmium	100	99.2	99	ug/L	EPA 6020A
	Chromium	100	99.7	100	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Lead	100	103	103	ug/L	EPA 6020A
	Manganese	100	103	103	ug/L	EPA 6020A
	Mercury	800	805	101	ng/L	EPA 6020A
	Vanadium	100	95.3	95	ug/L	EPA 6020A
	Zinc	100	101	101	ug/L	EPA 6020A
9K15037-CCV4	Arsenic	100	96.3	96	ug/L	EPA 6020A
	Cadmium	100	94.4	94	ug/L	EPA 6020A
	Chromium	100	98.0	98	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	102	102	ug/L	EPA 6020A
	Manganese	100	102	102	ug/L	EPA 6020A
	Mercury	800	822	103	ng/L	EPA 6020A
	Vanadium	100	94.4	94	ug/L	EPA 6020A
	Zinc	100	98.7	99	ug/L	EPA 6020A
9K15037-CCV5	Arsenic	100	96.3	96	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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9K15037-CCV5	Cadmium	100	95.8	96	ug/L	EPA 6020A
	Chromium	100	98.9	99	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	101	101	ug/L	EPA 6020A
	Manganese	100	102	102	ug/L	EPA 6020A
	Mercury	800	798	100	ng/L	EPA 6020A
	Vanadium	100	94.9	95	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
SDG: Gasco_PreRD_DG 2019
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Sequence: 9K15037
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9K15037-ICB1	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
9K15037-CCB1	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9K15037-CCB2	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9K15037-CCB3	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/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 - 3. Riverbank Angled Borings
Sequence: 9K15037
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9K15037-CCB3	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
9K15037-CCB4	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9K15037-CCB5	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Manganese	ND	0.450 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Vanadium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9K15037-CRL1	Arsenic	0.180	0.189	105	ug/L	70 - 130
	Cadmium	0.180	0.191	106	ug/L	70 - 130
	Chromium	0.180	0.182	101	ug/L	70 - 130
	Copper	0.180	0.208	115	ug/L	70 - 130
	Lead	0.180	0.187	104	ug/L	70 - 130
	Manganese	0.180	0.201	112	ug/L	70 - 130
	Zinc	0.180	0.165	92	ug/L	70 - 130
9K15037-CRL2	Arsenic	0.900	0.905	101	ug/L	70 - 130
	Cadmium	0.900	0.940	104	ug/L	70 - 130
	Chromium	0.900	0.883	98	ug/L	70 - 130
	Copper	0.900	0.960	107	ug/L	70 - 130
	Lead	0.900	0.899	100	ug/L	70 - 130
	Manganese	0.900	0.953	106	ug/L	70 - 130
	Mercury	36.0	36.8	102	ng/L	70 - 130
	Vanadium	0.900	0.798	89	ug/L	70 - 130
	Zinc	0.900	0.843	94	ug/L	70 - 130
9K15037-CRL3	Arsenic	1.80	1.80	100	ug/L	70 - 130
	Cadmium	1.80	1.73	96	ug/L	70 - 130
	Chromium	1.80	1.79	100	ug/L	70 - 130
	Copper	1.80	1.85	103	ug/L	70 - 130
	Lead	1.80	1.75	97	ug/L	70 - 130
	Manganese	1.80	1.80	100	ug/L	70 - 130
	Mercury	72.0	74.4	103	ng/L	70 - 130
	Vanadium	1.80	1.67	93	ug/L	70 - 130
	Zinc	1.80	1.77	98	ug/L	70 - 130
9K15037-CRL4	Arsenic	0.180	0.199	111	ug/L	70 - 130
	Cadmium	0.180	0.182	101	ug/L	70 - 130
	Chromium	0.180	0.168	93	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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9K15037-CRL4	Copper	0.180	0.178	99	ug/L	70 - 130
	Lead	0.180	0.176	98	ug/L	70 - 130
	Manganese	0.180	0.181	101	ug/L	70 - 130
	Mercury	7.20	7.16	99	ng/L	70 - 130
	Vanadium	0.180	0.143	79	ug/L	70 - 130
	Zinc	0.180	0.129	72	ug/L	70 - 130
9K15037-CRL5	Arsenic	0.900	0.866	96	ug/L	70 - 130
	Cadmium	0.900	0.877	97	ug/L	70 - 130
	Chromium	0.900	0.871	97	ug/L	70 - 130
	Copper	0.900	0.895	99	ug/L	70 - 130
	Lead	0.900	0.894	99	ug/L	70 - 130
	Manganese	0.900	0.878	98	ug/L	70 - 130
	Mercury	36.0	34.5	96	ng/L	70 - 130
	Vanadium	0.900	0.784	87	ug/L	70 - 130
	Zinc	0.900	0.841	93	ug/L	70 - 130
9K15037-CRL6	Arsenic	1.80	1.75	97	ug/L	70 - 130
	Cadmium	1.80	1.75	97	ug/L	70 - 130
	Chromium	1.80	1.74	96	ug/L	70 - 130
	Copper	1.80	1.81	101	ug/L	70 - 130
	Lead	1.80	1.74	96	ug/L	70 - 130
	Manganese	1.80	1.81	101	ug/L	70 - 130
	Mercury	72.0	70.6	98	ng/L	70 - 130
	Vanadium	1.80	1.61	89	ug/L	70 - 130
	Zinc	1.80	1.81	100	ug/L	70 - 130
9K15037-CRL7	Arsenic	3.60	3.49	97	ug/L	70 - 130
	Cadmium	3.60	3.49	97	ug/L	70 - 130
	Chromium	3.60	3.43	95	ug/L	70 - 130
	Copper	3.60	3.59	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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9K15037-CRL7	Lead	3.60	3.54	98	ug/L	70 - 130
	Manganese	3.60	3.56	99	ug/L	70 - 130
	Mercury	144	145	101	ng/L	70 - 130
	Vanadium	3.60	3.26	91	ug/L	70 - 130
	Zinc	3.60	3.64	101	ug/L	70 - 130
9K15037-CRL8	Arsenic	0.180	0.193	107	ug/L	70 - 130
	Cadmium	0.180	0.181	100	ug/L	70 - 130
	Chromium	0.180	0.183	101	ug/L	70 - 130
	Copper	0.180	0.173	96	ug/L	70 - 130
	Lead	0.180	0.172	96	ug/L	70 - 130
	Manganese	0.180	0.199	111	ug/L	70 - 130
	Mercury	7.20	6.36	88	ng/L	70 - 130
	Vanadium	0.180	0.199	110	ug/L	70 - 130
9K15037-CRL9	Arsenic	0.900	0.888	99	ug/L	70 - 130
	Cadmium	0.900	0.873	97	ug/L	70 - 130
	Chromium	0.900	0.866	96	ug/L	70 - 130
	Copper	0.900	0.893	99	ug/L	70 - 130
	Lead	0.900	0.850	94	ug/L	70 - 130
	Manganese	0.900	0.888	99	ug/L	70 - 130
	Mercury	36.0	34.2	95	ng/L	70 - 130
	Vanadium	0.900	0.889	99	ug/L	70 - 130
	Zinc	0.900	0.813	90	ug/L	70 - 130
9K15037-CRLA	Arsenic	1.80	1.74	97	ug/L	70 - 130
	Cadmium	1.80	1.64	91	ug/L	70 - 130
	Chromium	1.80	1.67	93	ug/L	70 - 130
	Copper	1.80	1.72	95	ug/L	70 - 130
	Lead	1.80	1.69	94	ug/L	70 - 130
	Manganese	1.80	1.72	96	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 - 3. Riverbank Angled Boring
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9K15037

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9K15037-CRLA	Mercury	72.0	68.9	96	ng/L	70 - 130
	Vanadium	1.80	1.62	90	ug/L	70 - 130
	Zinc	1.80	1.67	93	ug/L	70 - 130
9K15037-CRLB	Arsenic	3.60	3.61	100	ug/L	70 - 130
	Cadmium	3.60	3.48	97	ug/L	70 - 130
	Chromium	3.60	3.56	99	ug/L	70 - 130
	Copper	3.60	3.66	102	ug/L	70 - 130
	Lead	3.60	3.55	99	ug/L	70 - 130
	Manganese	3.60	3.61	100	ug/L	70 - 130
	Mercury	144	150	104	ng/L	70 - 130
	Vanadium	3.60	3.47	96	ug/L	70 - 130
	Zinc	3.60	3.65	101	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 - 3. Riverbank Angled Bori

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-FB-1911121146	11/12/19 11:46	11/12/19 16:00	11/13/19 14:44	1.12	28.00	11/15/19 20:55	3.38	28.00	
PDI-FB-1911121146	11/12/19 11:46	11/12/19 16:00	11/13/19 14:44	1.12	180.00	11/15/19 20:55	3.38	180.00	
PDI-RB-1911120944	11/12/19 09:44	11/12/19 16:00	11/13/19 14:44	1.21	28.00	11/15/19 21:00	3.47	28.00	
PDI-RB-1911120944	11/12/19 09:44	11/12/19 16:00	11/13/19 14:44	1.21	180.00	11/15/19 21:00	3.47	180.00	
PDI-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/15/19 12:16	7.03	28.00	11/15/19 21:28	7.41	28.00	
PDI-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/15/19 12:16	7.03	180.00	11/15/19 21:28	7.41	180.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/15/19 12:16	7.00	28.00	11/15/19 21:32	7.39	28.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/15/19 12:16	7.00	180.00	11/15/19 21:32	7.39	180.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/15/19 12:16	7.88	28.00	11/15/19 21:37	8.27	28.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/15/19 12:16	7.88	180.00	11/15/19 21:37	8.27	180.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/15/19 12:16	7.81	28.00	11/15/19 21:51	8.21	28.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/15/19 12:16	7.81	180.00	11/15/19 21:51	8.21	180.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/15/19 12:16	3.99	28.00	11/15/19 22:05	4.40	28.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/15/19 12:16	3.99	180.00	11/15/19 22:05	4.40	180.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/15/19 12:16	2.92	28.00	11/15/19 22:09	3.34	28.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/15/19 12:16	2.92	180.00	11/15/19 22:09	3.34	180.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/15/19 12:16	3.87	28.00	11/15/19 22:14	4.28	28.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/15/19 12:16	3.87	180.00	11/15/19 22:14	4.28	180.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: D7511-12

ANALYSES DATA PACKAGE COVER PAGE

D7511-12

Laboratory: Apex Laboratories
SDG: Gasco PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank Ang

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Total Cyanide	0.00000500	0.0000100	%

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

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-140RAB-00-10-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-04RE1
File ID: 9K22008-023
Sampled: 11/08/19 11:40
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:12
Solids: 81.01
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5069 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.00000956	1	J	D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-140RAB-10-12.7-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-05RE1
File ID: 9K22008-027
Sampled: 11/08/19 12:15
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:20
Solids: 79.57
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5468 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.00000617	1	U	D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-141RAB-00-10-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-06RE1
File ID: 9K22008-028
Sampled: 11/07/19 15:15
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:22
Solids: 87.86
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5173 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.0000321	1		D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-141RAB-10-17.7-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-07RE1
File ID: 9K22008-029
Sampled: 11/07/19 16:45
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:24
Solids: 82.86
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5153 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.000560	5	D	D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-08RE1
File ID: 9K22008-031
Sampled: 11/11/19 12:30
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:28
Solids: 92.62
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5006 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.00000540	1	U	D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-143RAB-10-20-191112

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-09RE1
File ID: 9K22008-036
Sampled: 11/12/19 14:05
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 11:38
Solids: 91.60
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5384 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.0000353	1		D7511-12

INORGANIC ANALYSIS DATA SHEET

D7511-12

PDI-143RAB-20-31.1-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-10RE3
File ID: 9K22008-083
Sampled: 11/11/19 15:30
Prepared: 11/21/19 16:08
Analyzed: 11/22/19 13:37
Solids: 90.19
Preparation: ASTM D7511-12mod (S)
Initial/Final: 2.5455 g / 50 mL
Batch: 9111083
Sequence: 9K22008
Calibration: A9K2201
Instrument: OIA FS3000-2

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	Q	Method
57-12-5	Total Cyanide	0.00105	25	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 - 3. Riverbank Angled Borin
Batch: 9111083 Batch Matrix: Soil
Preparation: ASTM D7511-12mod (S)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9111083-BLK1	9K22008-020	11/21/19 16:08	
LCS	9111083-BS1	9K22008-021	11/21/19 16:08	
LCS	9111083-BS2	9K22008-019	11/21/19 16:08	
PDI-140RAB-00-10-191108 (MS)	9111083-MS1	9K22008-024	11/21/19 16:08	
PDI-140RAB-00-10-191108 (MSD)	9111083-MSD1	9K22008-025	11/21/19 16:08	
PDI-140RAB-00-10-191108	A9K0332-04RE1	9K22008-023	11/21/19 16:08	
PDI-140RAB-10-12.7-191108	A9K0332-05RE1	9K22008-027	11/21/19 16:08	
PDI-141RAB-00-10-191107	A9K0332-06RE1	9K22008-028	11/21/19 16:08	
PDI-141RAB-10-17.7-191107	A9K0332-07RE1	9K22008-029	11/21/19 16:08	
PDI-143RAB-00-10-191111	A9K0332-08RE1	9K22008-031	11/21/19 16:08	
PDI-143RAB-10-20-191112	A9K0332-09RE1	9K22008-036	11/21/19 16:08	
PDI-143RAB-20-31.1-191111	A9K0332-10RE3	9K22008-083	11/21/19 16:08	

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
D7511-12

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil	Laboratory ID:	9111083-BLK1	File ID:	9K22008-020
Prepared:	11/21/19 16:08	Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5 g / 50 mL
Analyzed:	11/22/19 11:06	Instrument:	OIA FS3000-2		
Batch:	9111083	Sequence:	9K22008	Calibration:	A9K2201

CAS NO.	COMPOUND	CONC. (% wet)	Q
57-12-5	Total Cyanide	0.00000500	U

LCS / LCS DUPLICATE RECOVERY

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9111083	Laboratory ID:	9111083-BS1
Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5 g / 50 mL

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Total Cyanide	0.0000400	0.0000456	114	84 - 116

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9111083	Laboratory ID:	9111083-BS2
Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5 g / 50 mL

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Total Cyanide	0.000100	0.00000913	9	0 - 100

* = Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

D7511-12

PDI-140RAB-00-10-191108

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9111083	Laboratory ID:	9111083-MS1
Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.5192 g / 50 mL

Source Sample Name: PDI-140RAB-00-10-191108

COMPOUND	SPIKE ADDED (% dry)	SAMPLE CONCENTRATION (% dry)	MS CONCENTRATION (% dry)	MS % REC. (*=Out)	QC LIMITS REC.
Total Cyanide	0.0000490	0.00000956	0.0000589	101	64 - 136

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

D7511-12

PDI-140RAB-00-10-191108

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Soil		
Batch:	9111083	Laboratory ID:	9111083-MSD1
Preparation:	ASTM D7511-12mod (S)	Initial/Final:	2.549 g / 50 mL

Source Sample Name: PDI-140RAB-00-10-191108

COMPOUND	SPIKE ADDED (% dry)	MSD CONCENTRATION (% dry)	MSD % RECOVERY	% RPD	QC LIMITS RPD	QC LIMITS REC.
Total Cyanide	0.0000484	0.0000583	101	1	47	64 - 136

ANALYSIS BATCH (SEQUENCE) SUMMARY

D7511-12

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K22008	Instrument:	OIA FS3000-2
Matrix:	Soil	Calibration:	A9K2201

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	9K22008-CAL2	9K22008-008	11/22/19 10:41
Cal Standard	9K22008-CAL3	9K22008-009	11/22/19 10:43
Cal Standard	9K22008-CAL4	9K22008-010	11/22/19 10:45
Cal Standard	9K22008-CAL5	9K22008-011	11/22/19 10:47
Cal Standard	9K22008-CAL6	9K22008-012	11/22/19 10:49
Cal Standard	9K22008-CAL7	9K22008-013	11/22/19 10:51
Initial Cal Check	9K22008-ICV1	9K22008-016	11/22/19 10:58
Initial Cal Blank	9K22008-ICB1	9K22008-017	11/22/19 11:00
LCS	9111083-BS2	9K22008-019	11/22/19 11:04
Blank	9111083-BLK1	9K22008-020	11/22/19 11:06
LCS	9111083-BS1	9K22008-021	11/22/19 11:08
PDI-140RAB-00-10-191108	A9K0332-04RE1	9K22008-023	11/22/19 11:12
PDI-140RAB-00-10-191108 (MS)	9111083-MS1	9K22008-024	11/22/19 11:14
PDI-140RAB-00-10-191108 (MSD)	9111083-MSD1	9K22008-025	11/22/19 11:16
PDI-140RAB-10-12.7-191108	A9K0332-05RE1	9K22008-027	11/22/19 11:20
PDI-141RAB-00-10-191107	A9K0332-06RE1	9K22008-028	11/22/19 11:22
PDI-141RAB-10-17.7-191107	A9K0332-07RE1	9K22008-029	11/22/19 11:24
PDI-143RAB-00-10-191111	A9K0332-08RE1	9K22008-031	11/22/19 11:28
Calibration Check	9K22008-CCV1	9K22008-033	11/22/19 11:32
Calibration Blank	9K22008-CCB1	9K22008-034	11/22/19 11:34
PDI-143RAB-10-20-191112	A9K0332-09RE1	9K22008-036	11/22/19 11:38
Calibration Check	9K22008-CCV2	9K22008-049	11/22/19 12:04
Calibration Blank	9K22008-CCB2	9K22008-050	11/22/19 12:06
Calibration Check	9K22008-CCV3	9K22008-057	11/22/19 12:20
Calibration Blank	9K22008-CCB3	9K22008-058	11/22/19 12:22
Calibration Check	9K22008-CCV5	9K22008-080	11/22/19 13:19
Calibration Blank	9K22008-CCB5	9K22008-081	11/22/19 13:21
PDI-143RAB-20-31.1-191111	A9K0332-10RE3	9K22008-083	11/22/19 13:37
Calibration Check	9K22008-CCV6	9K22008-086	11/22/19 13:43
Calibration Blank	9K22008-CCB6	9K22008-087	11/22/19 13:45

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 - 3. Riverbank Angled Bor

Calibration: A9K2201 Date: 11/22/19 06:47 Instrument: OIA FS3000-2

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Total Cyanide	14062.52	Q **	54.35789				0.9996702		

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 - 3. Riverbank Angle
Calibration:	A9K2201	Instrument:	OIA FS3000-2
		Calibration Date:	11/22/19 06:47

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	1	2192	2	7607.5	5	14463.2	10	19260.8	25	19583.6	50	21268

INITIAL AND CONTINUING CALIBRATION CHECK

D7511-12

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Instrument ID: OIA FS3000-2
Calibration: A9K2201
Control Limt: +/- 10.00%
Sequence: 9K22008

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9K22008-ICV1	Total Cyanide	25.0	26.3	105	ug/L	D7511-12
9K22008-CCV1	Total Cyanide	25.0	24.9	100	ug/L	D7511-12
9K22008-CCV2	Total Cyanide	25.0	25.6	102	ug/L	D7511-12
9K22008-CCV3	Total Cyanide	25.0	25.8	103	ug/L	D7511-12
9K22008-CCV5	Total Cyanide	25.0	26.1	104	ug/L	D7511-12
9K22008-CCV6	Total Cyanide	25.0	26.1	104	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 - 3. Riverbank Angled Borings
Sequence: 9K22008
Calibration: A9K2201

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9K22008-ICB1	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
9K22008-CCB1	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
9K22008-CCB2	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
9K22008-CCB3	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
9K22008-CCB5	Total Cyanide	ND	2.50 (Inst)	ug/L		D7511-12
9K22008-CCB6	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 - 3. Riverbank Angled Bori

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-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/21/19 16:08	13.19	14.00	11/22/19 11:12	13.98	14.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/21/19 16:08	13.16	14.00	11/22/19 11:20	13.96	14.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/21/19 16:08	14.04	14.00	11/22/19 11:22	14.84	14.00	*
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/21/19 16:08	13.97	14.00	11/22/19 11:24	14.78	14.00	*
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/21/19 16:08	10.15	14.00	11/22/19 11:28	10.96	14.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/21/19 16:08	9.09	14.00	11/22/19 11:38	9.90	14.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/21/19 16:08	10.03	14.00	11/22/19 13:37	10.92	14.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: SM 5310 B MOD

ANALYSES DATA PACKAGE COVER PAGE

SM 5310 B MOD

Laboratory: Apex Laboratories

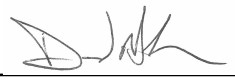
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019

Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM

Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

SM 5310 B MOD

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Total Organic Carbon	0.020	0.020	% by Weight

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

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-140RAB-00-10-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-04
Sampled: 11/08/19 11:40
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 14:50
Solids: 81.01
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.29	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-140RAB-10-12.7-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-05
Sampled: 11/08/19 12:15
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 16:00
Solids: 79.57
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.36	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-141RAB-00-10-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-06
Sampled: 11/07/19 15:15
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 16:30
Solids: 87.86
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.62	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-141RAB-10-17.7-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-07
Sampled: 11/07/19 16:45
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 16:58
Solids: 82.86
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	3.7	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-08
Sampled: 11/11/19 12:30
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 17:43
Solids: 92.62
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.026	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-143RAB-10-20-191112

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-09
Sampled: 11/12/19 14:05
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 18:09
Solids: 91.60
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.061	1		SM 5310 B MOD

INORGANIC ANALYSIS DATA SHEET

SM 5310 B MOD

PDI-143RAB-20-31.1-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-10
Sampled: 11/11/19 15:30
Prepared: 11/13/19 19:28
Analyzed: 11/15/19 19:00
Solids: 90.19
Preparation: PSEP-5310B TOC
Initial/Final: 0.2 N/A / 0.2 N/A
Batch: 9110807
Sequence: 9K15016
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.15	1		SM 5310 B MOD

PREPARATION BATCH SUMMARY

SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Batch: 9110807 Batch Matrix: Sediment Preparation: PSEP-5310B TOC

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9110807-BLK1		11/13/19 19:28	
LCS	9110807-BS1		11/13/19 19:28	
PDI-140RAB-00-10-191108 (Dup)	9110807-DUP1		11/13/19 19:28	
PDI-140RAB-00-10-191108	A9K0332-04		11/13/19 19:28	
PDI-140RAB-10-12.7-191108	A9K0332-05		11/13/19 19:28	
PDI-141RAB-00-10-191107	A9K0332-06		11/13/19 19:28	
PDI-141RAB-10-17.7-191107	A9K0332-07		11/13/19 19:28	
PDI-143RAB-00-10-191111	A9K0332-08		11/13/19 19:28	
PDI-143RAB-10-20-191112	A9K0332-09		11/13/19 19:28	
PDI-143RAB-20-31.1-191111	A9K0332-10		11/13/19 19:28	

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
SM 5310 B MOD

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Sediment	Laboratory ID:	9110807-BLK1	File ID:	
Prepared:	11/13/19 19:28	Preparation:	PSEP-5310B TOC	Initial/Final:	0.2 N/A / 0.2 N/A
Analyzed:	11/15/19 13:55	Instrument:	TOC		
Batch:	9110807	Sequence:	9K15016	Calibration:	A8B0203

CAS NO.	COMPOUND	CONC. (% by Weight)	Q
TOC	Total Organic Carbon	0.020	U

LCS / LCS DUPLICATE RECOVERY

SM 5310 B MOD

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Matrix:	Sediment		
Batch:	9110807	Laboratory ID:	9110807-BS1
Preparation:	PSEP-5310B TOC	Initial/Final:	0.2 N/A / 0.2 N/A

COMPOUND	SPIKE ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS % REC. (*=Out)	QC LIMITS REC.
Total Organic Carbon	10000	10000	100	90 - 110

* = Values outside of QC limits

PDI-140RAB-00-10-191108

DUPLICATES

SM 5310 B MOD

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 9110807
Preparation: PSEP-5310B TOC
Source Sample Name: PDI-140RAB-00-10-191108

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110807-DUP1
Lab Source ID: A9K0332-04
Initial/Final: 0.2 N/A / 0.2 N/A
% Solids: 81.01

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Organic Carbon	20	0.29		0.27		5		SM 5310 B MOD

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 B MOD

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	8B02022	Instrument:	TOC
Matrix:	Sediment	Calibration:	A8B0203

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	8B02022-CAL2		02/02/18 17:35
Cal Standard	8B02022-CAL3		02/02/18 17:35
Cal Standard	8B02022-CAL4		02/02/18 17:35
Cal Standard	8B02022-CAL5		02/02/18 17:35
Cal Standard	8B02022-CAL6		02/02/18 17:35
Cal Standard	8B02022-CAL7		02/02/18 17:35
Cal Standard	8B02022-CAL8		02/02/18 17:35
Cal Standard	8B02022-CAL9		02/02/18 17:35
Cal Standard	8B02022-CALA		02/02/18 17:35
Cal Standard	8B02022-CALB		02/02/18 17:35
Initial Cal Check	8B02022-ICV2		02/02/18 17:35
Initial Cal Blank	8B02022-ICB2		02/02/18 17:35

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

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 B MOD

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borin
Sequence:	9K15016	Instrument:	TOC
Matrix:	Sediment	Calibration:	A8B0203

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9K15016-CCV1		11/15/19 08:21
Calibration Blank	9K15016-CCB1		11/15/19 08:39
Calibration Check	9K15016-CCV2		11/15/19 13:28
Calibration Blank	9K15016-CCB2		11/15/19 13:48
Blank	9110807-BLK1		11/15/19 13:55
LCS	9110807-BS1		11/15/19 14:23
PDI-140RAB-00-10-191108	A9K0332-04		11/15/19 14:50
PDI-140RAB-00-10-191108 (Dup)	9110807-DUP1		11/15/19 15:25
PDI-140RAB-10-12.7-191108	A9K0332-05		11/15/19 16:00
PDI-141RAB-00-10-191107	A9K0332-06		11/15/19 16:30
PDI-141RAB-10-17.7-191107	A9K0332-07		11/15/19 16:58
PDI-143RAB-00-10-191111	A9K0332-08		11/15/19 17:43
PDI-143RAB-10-20-191112	A9K0332-09		11/15/19 18:09
Calibration Check	9K15016-CCV3		11/15/19 18:32
Calibration Blank	9K15016-CCB3		11/15/19 18:51
PDI-143RAB-20-31.1-191111	A9K0332-10		11/15/19 19:00
Calibration Check	9K15016-CCV4		11/15/19 19:30
Calibration Blank	9K15016-CCB4		11/15/19 19:54

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)

SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bor
Calibration: A8B0203
Date: 02/02/18 15:56
Instrument: TOC

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Total Organic Carbon		Lin				0.00000			

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

SM 5310 B MOD

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A8B0203	Instrument:	TOC
		Calibration Date:	02/02/18 15:56

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF
Total Organic Carbon	1000		2500		5000		10000		15000		20000	

INITIAL CALIBRATION DATA (Continued)

SM 5310 B MOD

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 3. Riverbank Angle
Calibration:	A8B0203	Instrument:	TOC
Matrix:		Calibration Date:	02/02/18 15:56

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF
Total Organic Carbon	25000		30000		35000		40000					

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Instrument ID: TOC
Calibration: A8B0203
Control Limt: +/- 10.00%
Sequence: 8B02022

Lab Sample ID	Analyte	True	Found	%R	Units	Method
8B02022-ICV2	Total Organic Carbon	10000	10000	104	mg/kg	SM 5310 B MOD

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Boring
Instrument ID: TOC
Calibration: A8B0203
Control Limt: +/- 10.00%
Sequence: 9K15016

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9K15016-CCV1	Total Organic Carbon	10000	9700	97	mg/kg	SM 5310 B MOD
9K15016-CCV2	Total Organic Carbon	10000	10000	103	mg/kg	SM 5310 B MOD
9K15016-CCV3	Total Organic Carbon	10000	10000	103	mg/kg	SM 5310 B MOD
9K15016-CCV4	Total Organic Carbon	10000	9700	97	mg/kg	SM 5310 B MOD

* Values outside of QC limits

INSTRUMENT BLANKS
SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: TOC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Sequence: 8B02022
Calibration: A8B0203

Lab Sample ID	Analyte	Found	RL	Units	C	Method
8B02022-ICB2	Total Organic Carbon	260	200 (Inst)	mg/kg	*	SM 5310 B MOD

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

INSTRUMENT BLANKS
SM 5310 B MOD

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: TOC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Sequence: 9K15016
Calibration: A8B0203

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9K15016-CCB1	Total Organic Carbon	ND	200 (Inst)	mg/kg		SM 5310 B MOD
9K15016-CCB2	Total Organic Carbon	ND	200 (Inst)	mg/kg		SM 5310 B MOD
9K15016-CCB3	Total Organic Carbon	ND	200 (Inst)	mg/kg		SM 5310 B MOD
9K15016-CCB4	Total Organic Carbon	ND	200 (Inst)	mg/kg		SM 5310 B MOD

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

HOLDING TIME SUMMARY

SM 5310 B MOD

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Bori

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-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/13/19 19:28	5.33	28.00	11/15/19 14:50	7.13	28.00	
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/13/19 19:28	5.30	28.00	11/15/19 16:00	7.16	28.00	
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/13/19 19:28	6.18	28.00	11/15/19 16:30	8.05	28.00	
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/13/19 19:28	6.11	28.00	11/15/19 16:58	8.01	28.00	
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/13/19 19:28	2.29	28.00	11/15/19 17:43	4.22	28.00	
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/13/19 19:28	1.22	28.00	11/15/19 18:09	3.17	28.00	
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/13/19 19:28	2.17	28.00	11/15/19 19:00	4.15	28.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: SM 2540 G

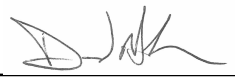
ANALYSES DATA PACKAGE COVER PAGE

SM 2540 G

Laboratory: Apex Laboratories
SDG: Gasco PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 3. Riverbank Angled Borin

Client Sample Id:	Lab Sample Id:	Matrix
PDI-140RAB-00-10-191108	A9K0332-04	SO
PDI-140RAB-10-12.7-191108	A9K0332-05	SO
PDI-141RAB-00-10-191107	A9K0332-06	SO
PDI-141RAB-10-17.7-191107	A9K0332-07	SO
PDI-143RAB-00-10-191111	A9K0332-08	SO
PDI-143RAB-10-20-191112	A9K0332-09	SO
PDI-143RAB-20-31.1-191111	A9K0332-10	SO

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: 1/7/2020 3:49PM
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 - 3. Riverbank Ang

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-140RAB-00-10-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-04
Sampled: 11/08/19 11:40
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 81.01
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	81.0	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-140RAB-10-12.7-191108

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-05
Sampled: 11/08/19 12:15
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 79.57
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	79.6	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-141RAB-00-10-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-06
Sampled: 11/07/19 15:15
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 87.86
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	87.9	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-141RAB-10-17.7-191107

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-07
Sampled: 11/07/19 16:45
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 82.86
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	82.9	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-143RAB-00-10-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-08
Sampled: 11/11/19 12:30
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 92.62
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	92.6	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-143RAB-10-20-191112

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-09
Sampled: 11/12/19 14:05
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 91.60
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	91.6	1		SM 2540 G

INORGANIC ANALYSIS DATA SHEET

SM 2540 G

PDI-143RAB-20-31.1-191111

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Angled Borings
Matrix: SO
Laboratory ID: A9K0332-10
Sampled: 11/11/19 15:30
Prepared: 11/13/19 13:30
Analyzed: 11/14/19 16:31
Solids: 90.19
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9110765
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	90.2	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 - 3. Riverbank Angled Borin
Batch: 9110765 Batch Matrix: Sediment Preparation: Total Solids (SM2540G/PSEP)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-140RAB-00-10-191108 (Dup)	9110765-DUP1		11/13/19 13:30	
PDI-140RAB-00-10-191108	A9K0332-04		11/13/19 13:30	
PDI-140RAB-10-12.7-191108	A9K0332-05		11/13/19 13:30	
PDI-141RAB-00-10-191107	A9K0332-06		11/13/19 13:30	
PDI-141RAB-10-17.7-191107	A9K0332-07		11/13/19 13:30	
PDI-143RAB-00-10-191111	A9K0332-08		11/13/19 13:30	
PDI-143RAB-10-20-191112	A9K0332-09		11/13/19 13:30	
PDI-143RAB-20-31.1-191111	A9K0332-10		11/13/19 13:30	

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.

PDI-140RAB-00-10-191108

DUPLICATES

SM 2540 G

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 9110765
Preparation: Total Solids (SM2540G/PSEP)
Source Sample Name: PDI-140RAB-00-10-191108

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 3. Riverbank Ang
Laboratory ID: 9110765-DUP1
Lab Source ID: A9K0332-04
Initial/Final: 1 N/A / 1 N/A
% Solids: 81.01

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Solids	10	81.0		81.4		0.5		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 - 3. Riverbank Angled Bori

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-140RAB-00-10-191108	11/08/19 11:40	11/12/19 16:00	11/13/19 13:30	5.08	180.00	11/14/19 16:31	1.13		
PDI-140RAB-10-12.7-191108	11/08/19 12:15	11/12/19 16:00	11/13/19 13:30	5.05	180.00	11/14/19 16:31	1.13		
PDI-141RAB-00-10-191107	11/07/19 15:15	11/12/19 16:00	11/13/19 13:30	5.93	180.00	11/14/19 16:31	1.13		
PDI-141RAB-10-17.7-191107	11/07/19 16:45	11/12/19 16:00	11/13/19 13:30	5.86	180.00	11/14/19 16:31	1.13		
PDI-143RAB-00-10-191111	11/11/19 12:30	11/12/19 16:00	11/13/19 13:30	2.04	180.00	11/14/19 16:31	1.13		
PDI-143RAB-10-20-191112	11/12/19 14:05	11/12/19 16:00	11/13/19 13:30	0.98	180.00	11/14/19 16:31	1.13		
PDI-143RAB-20-31.1-191111	11/11/19 15:30	11/12/19 16:00	11/13/19 13:30	1.92	180.00	11/14/19 16:31	1.13		

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 9110803
Sequence 9K14026 (A9K0332-04,05,06,07,08,09,10)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 1 5 2019

BATCH #: 9110803 (Soil)

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
	9110803-BLK1		QC	11/14/19 11:45	11	5				100					
	9110803-BS1		QC	11/14/19 11:45	10	5	A19J426		100	100					
	A9K0332-04	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.55	5				100	PDI-140RAB-00-10-191108				
	9110803-DUP1		QC	11/14/19 11:45	10.59	5		A9K0332-04		100					
	A9K0332-05	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.63	5				100	PDI-140RAB-10-12.7-191108				
	A9K0332-06	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.8	5				100	PDI-141RAB-00-10-191107				
	A9K0332-07	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.7	5				100	PDI-141RAB-10-17.7-191107				
	A9K0332-08	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.21	5				100	PDI-143RAB-00-10-191111				
	A9K0332-09	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.34	5				100	PDI-143RAB-10-20-191112				
	A9K0332-10	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.85	5				100	PDI-143RAB-20-31.1-191111				
	A9K0333-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.81	5				100	45.4259-122.582 1BG				
	A9K0333-01RE1	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.81	5				100	45.4259-122.582 1BG	Added 11/15/2019 by BLL			
	A9K0334-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.09	5				100	N 45.663232° W122.567394°	mineral oil only			
	A9K0349-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.32	5				100	North				
	A9K0349-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.38	5				100	43.582886 W 123.259537				
	A9K0349-03	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.1	5				100	Middle				
	A9K0349-04	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.27	5				100	43.582830 W 123.259655				
	A9K0349-05	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.1	5				100	South				
	A9K0349-06	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.46	5				100	Background				

Prepared By: Date

Ben Hattig 11-15-19
Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
	A9K0360-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.16	5				100	8063-SS1	include Mineral Oil			
	A9K0361-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.24	5				100	8065-SS1	include Mineral Oil			
	A9K0361-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.31	5				100	8065-SS2	include Mineral Oil			
	A9K0362-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.36	5				100	8048-SS1	include Mineral Oil			
	A9K0363-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.38	5				100	SS-1				
	9110803-DUP2		QC	11/14/19 11:45	10.36	5		A9K0363-01		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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J426	03/30/20	NWTPH-DX Spike in Methanol

Surrogate(s)

Std ID	Exp. Date	Description
A19K049	04/27/20	NWTPH-DX Soil Surrogate in DCM

Method 3546 digestion time and temperature achieved.
Initial:

Witness: _____

Prepared By: _____ Date

Reviewed By: [signature] 11.15.19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
1	9110803-BLK1		QC	11/14/19 11:45	~~10~~ 11	5				100					
2	9110803-BS1		QC	11/14/19 11:45	10	5	~~A19K160~~ A19U426		100	100					
3	A9K0332-04	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.35	5		JAG 11/14/19		100	PDI-140RAB-00-10-191108	soil, small rocks			
4	9110803-DUP1		QC	11/14/19 11:45	~~10~~ 10.59	5		A9K0332-04		100		soil, small rocks			
5	A9K0332-05	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.63	5				100	PDI-140RAB-10-12.7-191108	soil, small rocks			
6	A9K0332-06	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.80	5				100	PDI-141RAB-00-10-191107	soil, small rocks			
7	A9K0332-07	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.70	5				100	PDI-141RAB-10-17.7-191107	soil, small rocks, odor			
8	A9K0332-08	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.21	5				100	PDI-143RAB-00-10-191111	soil			
9	A9K0332-09	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.34	5				100	PDI-143RAB-10-20-191112	soil			
10	A9K0332-10	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.85	5				100	PDI-143RAB-20-31.1-191111	soil			
11	A9K0333-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.81	5				100	45.4259-122.5821BG	soil			
12	A9K0334-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.09	5				100	N 45.663232° W122.567394°	mineral oil only soil			
13	A9K0349-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.37	5				100	North	soil			
14	A9K0349-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.38	5				100	43.582886 W 123.259537	soil			
15	A9K0349-03	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.10	5				100	Middle	soil			
16	A9K0349-04	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.27	5				100	43.582830 W 123.259655	soil			
17	A9K0349-05	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.10	5				100	South	soil			
18	A9K0349-06	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.46	5				100	Background	soil			
19	A9K0360-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	~~10~~ 10.16	5				100	8063-SS1	include Mineral Oil small rocks			

JAG — Prepared By: — 11/14/19 Date

11/14/19 — 11/14/19 Date

CAS — Reviewed By: — 11/14/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
20	A9K0361-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:24	5				100	8065-SS1	include Mineral Oil Soil			
21	A9K0361-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:31	5				100	8065-SS2	include Mineral Oil Soil			
22	A9K0362-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:36	5				100	8048-SS1	include Mineral Oil Soil			
23	A9K0363-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:38	5				100	SS-1	Soil			
24	9110803-DUP2		QC	11/14/19 11:45	10 10:36	5		A9K0363-01		100		Soil			

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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
~~A19K160~~ A19U426	~~04/16/20~~ 03/30/20	NWTPH-DX Spike in Methanol

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19K049	04/27/20	NWTPH-DX Soil Surrogate in DCM

JAG

Method 3546 digestion time and temperature achieved.

Initial: JAG

Witness: 11/14/19

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9K14026** Instrument: **DUALFID4F**

Date: **11/14/19 11:21** Calibration: **A9K1401**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14026-RES1	Soil	QC	QC				A19J322
2	9K14026-CCV1	Soil	QC	QC				A19K121
3	9K14026-CCV2	Soil	QC	QC				A19K122
4	9K14026-CCB1	Soil	QC	QC				
5	9110803-BLK1	Soil	QC	QC		9110803		
6	9110803-BS1	Soil	QC	QC		9110803		
7	A9K0332-04	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
8	9110803-DUP1	Soil	QC	QC		9110803		
9	A9K0332-05	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
10	A9K0332-06	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
11	A9K0332-07	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
12	A9K0332-08	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
13	A9K0332-09	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
14	A9K0332-10	Soil	NWTPH-Dx (Diesel/Oil)	Anchor QEA, LLC	11/19/19	9110803		
15	A9K0333-01	Soil	NWTPH-Dx (Diesel/Oil)		11/19/19	9110803		
16	A9K0334-01	Soil	NWTPH-Dx (Diesel/Oil)		11/19/19	9110803		
17	9K14026-CCV3	Soil	QC	QC				A19K121
18	9K14026-CCV4	Soil	QC	QC				A19K122

Data Entered By: BR 11.15.19

Comments:

Data Reviewed By: 9/2 11/15/19

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111402.D Vial: 94
Acq On : 14 Nov 2019 16:40 Operator: BLL
Sample : 9K14026-RES1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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

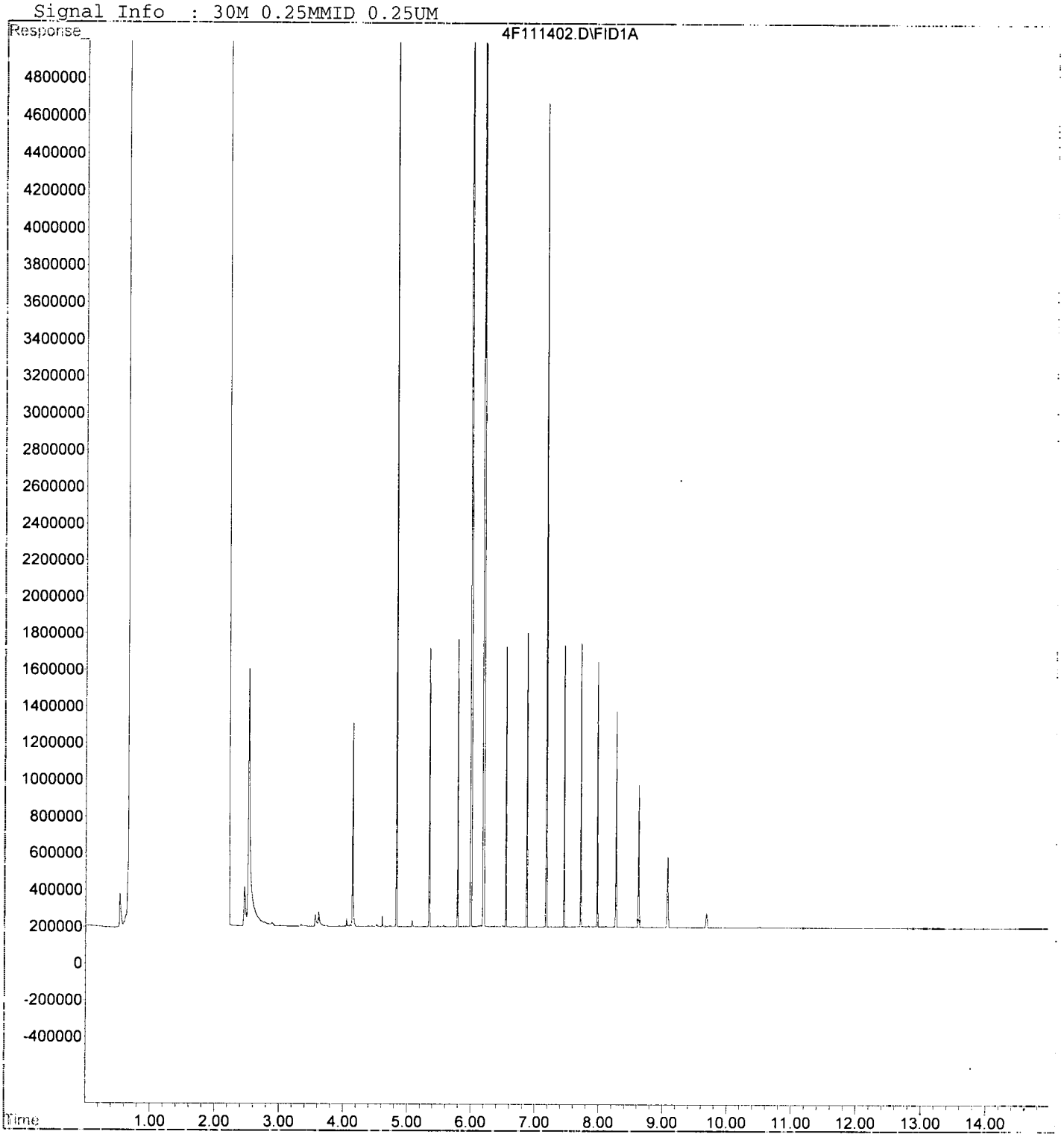
		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.54f	9876262	7.983	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	302509406	278.700	ug/mL
2)	H	Diesel	6.00	302509406	278.700	ug/mL
3)	H	DRO(C12-C24)	6.00	247194955	227.739	ug/mL
4)	H	TPHd (C10-C25)	6.00	258115398	266.344	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	217008759	283.207	ug/ml
7)	H	Oil	9.00	170236607	159.244	ug/mL
8)	H	RRO (C24-C40)	9.00	53888255	50.409	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	70911281	103.646	ug/mL
10)	H	TPHmo (C25-C36)	8.00	52534772	77.418	ug/mL

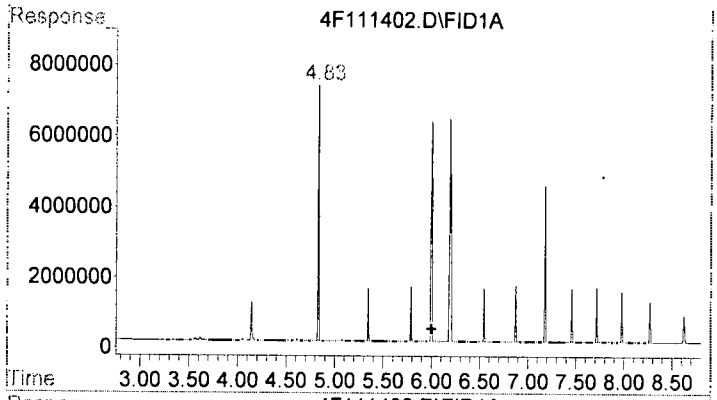
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111402.D Vial: 94
Acq On : 14 Nov 2019 16:40 Operator: BLL
Sample : 9K14026-RES1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

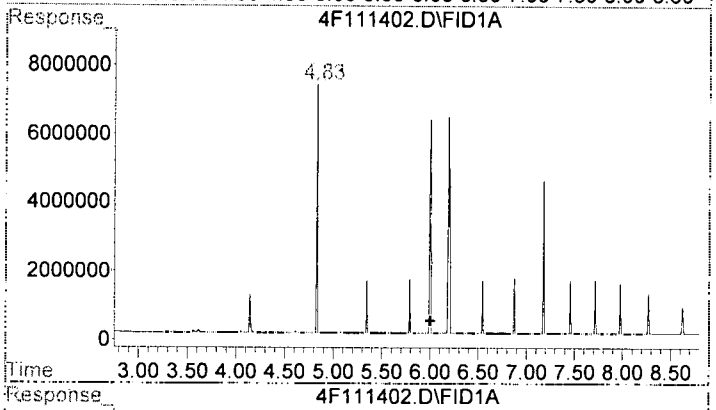
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





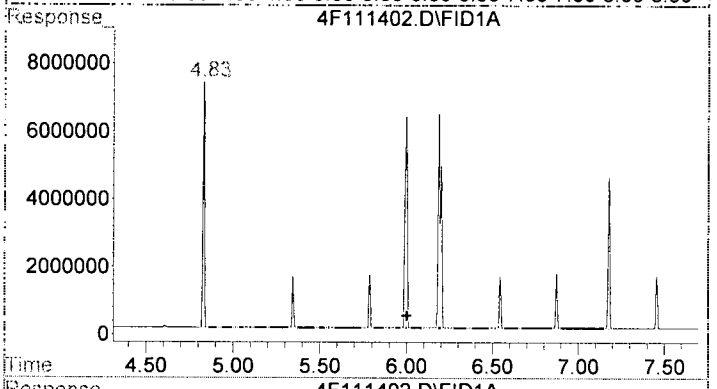
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 302509406
Conc: 278.70 ug/mL m



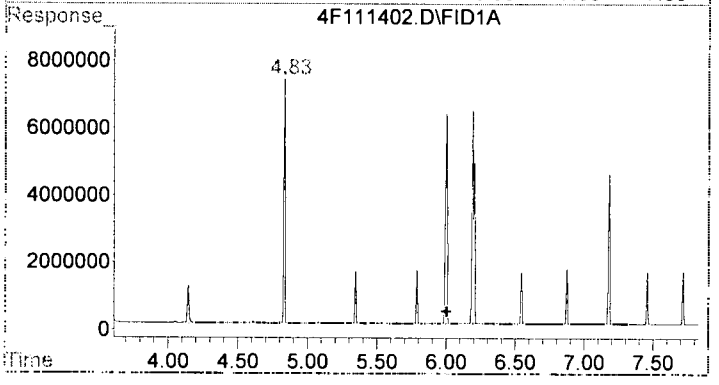
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 302509406
Conc: 278.70 ug/mL m



#3 DRO(C12-C24)

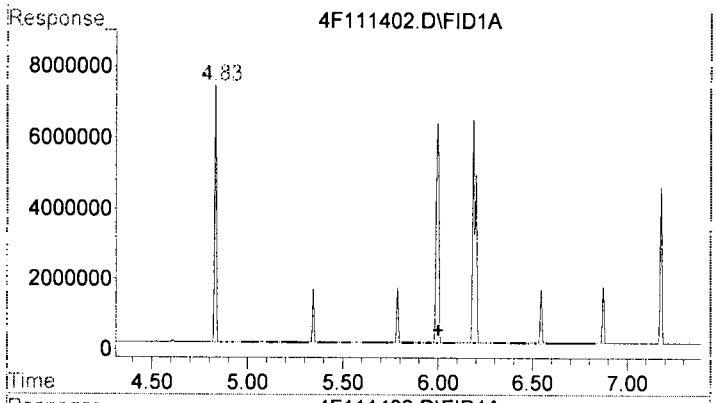
R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 247194955
Conc: 227.74 ug/mL m



#4 TPHd (C10-C25)

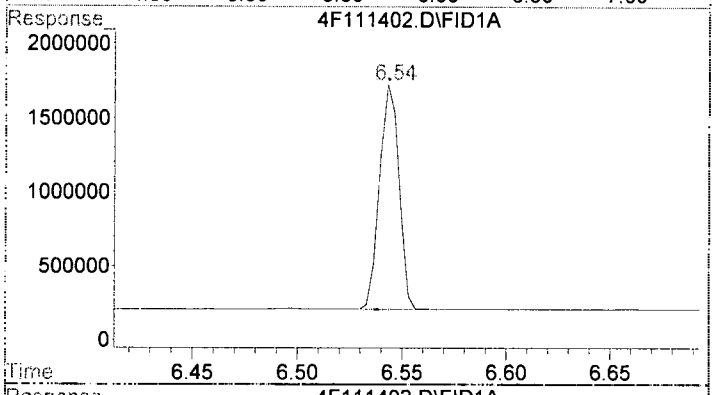
R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 258115398
Conc: 266.34 ug/ml m

/ AM 11.15.19



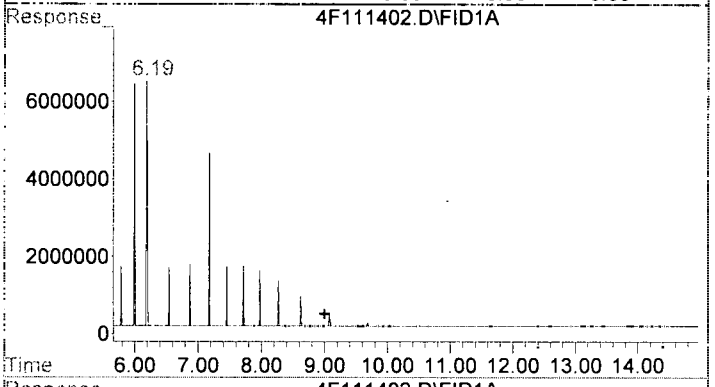
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 217008759
Conc: 283.21 ug/ml m



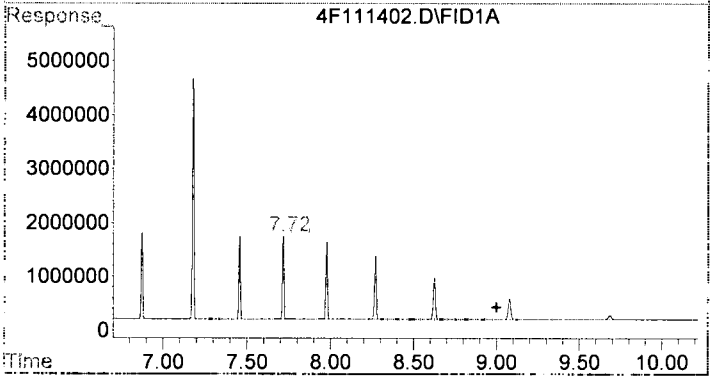
#6 o-Terphenyl

R.T.: 6.545 min
Delta R.T.: 0.135 min
Response: 9876262
Conc: 7.98 ug/mL



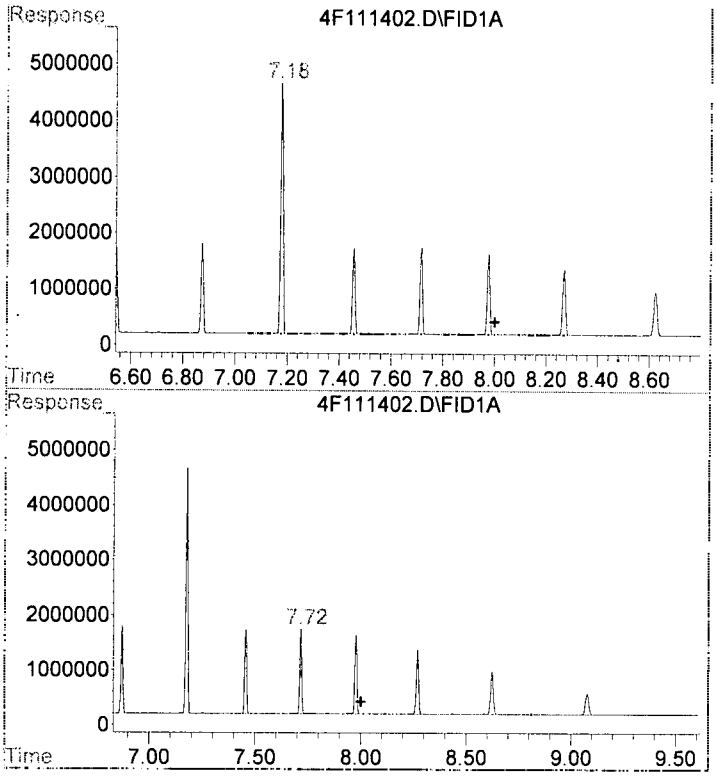
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 170236607
Conc: 159.24 ug/mL m



#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 53888255
Conc: 50.41 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	70911281
Conc:	103.65 ug/mL m

#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	52534772
Conc:	77.42 ug/mL m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K14026\4F111403.D Vial: 1
Acq On : 14 Nov 2019 17:01 Operator: BLL
Sample : 9K14026-CCV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	962.108	3.8	96	0.00
2	H	Diesel	1000.000	962.108	3.8	96	0.00
3	H	DRO(C12-C24)	1000.000	746.288	25.4#	74	0.00
4	H	TPHd (C10-C25)	1000.000	997.592	0.2	95	0.00
5	H	CA LUFT DRO (C12-C22)	1000.000	1009.098	-0.9	95	0.00
6	S	o-Terphenyl	-1.000	49.633	0.0	0	0.00
7	H	Oil	-1.000	247.109	0.0	95	0.00
8	H	RRO (C24-C40)	-1.000	16.944	0.0	7	0.00
9	H	CA LUFT ORO (C23-C32)	-1.000	42.931	0.0	100	0.00
10	H	TPHmo (C25-C36)	-1.000	17.000	0.0	99	0.00

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✓

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111403.D Vial: 1
Acq On : 14 Nov 2019 17:01 Operator: BLL
Sample : 9K14026-CCV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.42	61404094	49.633	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	1044300284	962.108	ug/mL
2)	H	Diesel	6.00	1044300284	962.108	ug/mL
3)	H	DRO(C12-C24)	6.00	810043243	746.288	ug/mL
4)	H	TPHd (C10-C25)	6.00	966771998	997.592	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	773227308	1009.098	ug/ml
7)	H	Oil	9.00	264167458	247.109	ug/mL
8)	H	RRO (C24-C40)	9.00	18113954	16.944	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	29371999	42.931	ug/mL
10)	H	TPHmo (C25-C36)	8.00	11536028	17.000	ug/mL

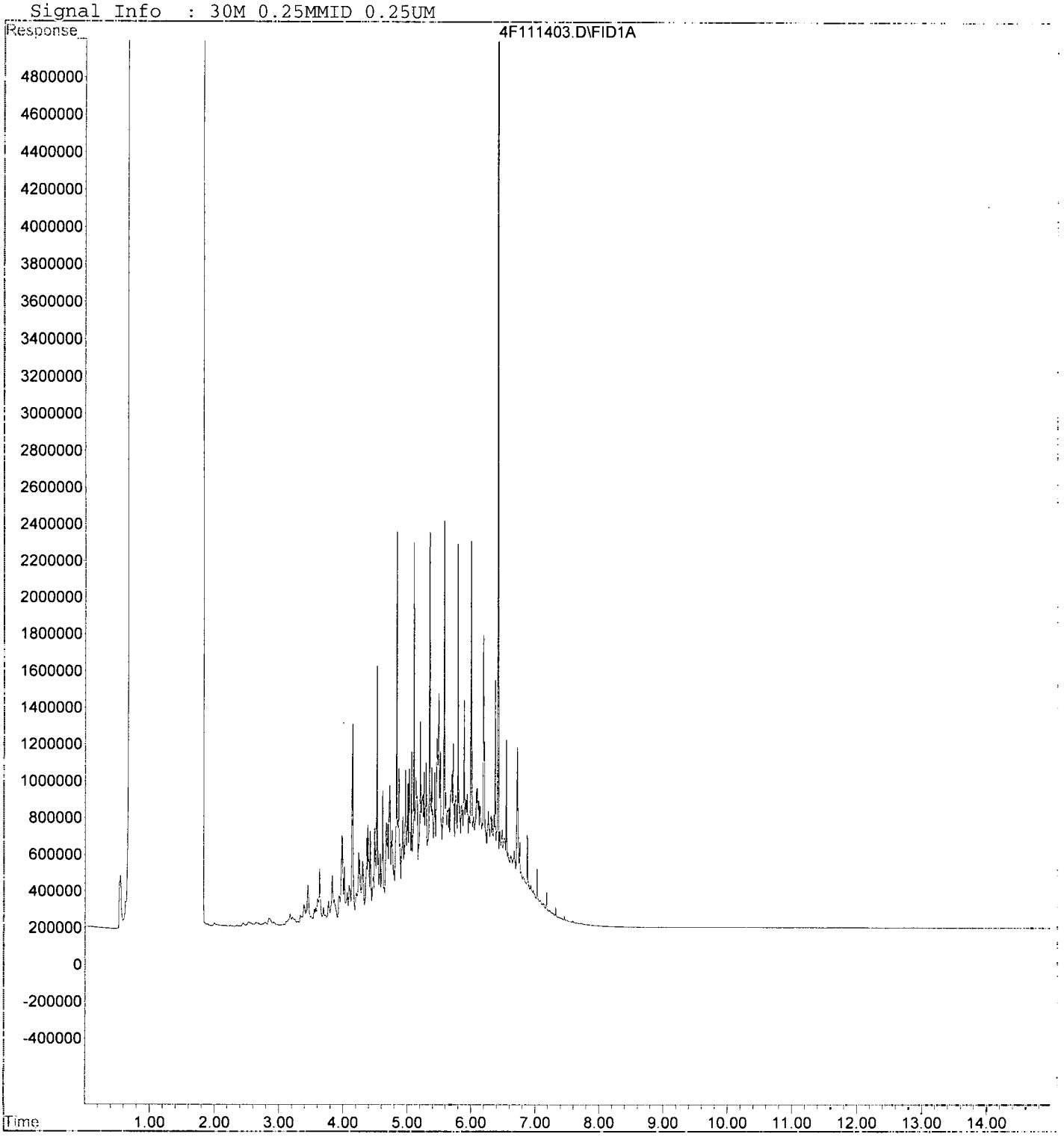
AM 11.15.19

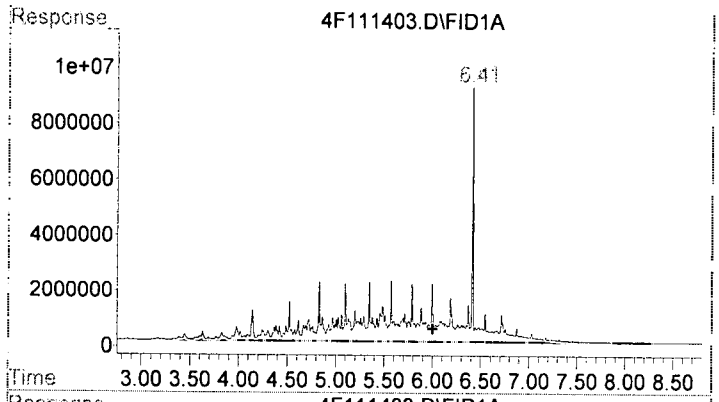
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111403.D Vial: 1
Acq On : 14 Nov 2019 17:01 Operator: BLL
Sample : 9K14026-CCV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

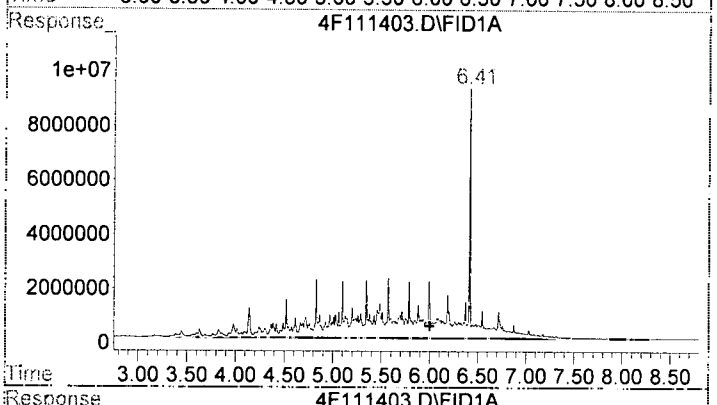
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





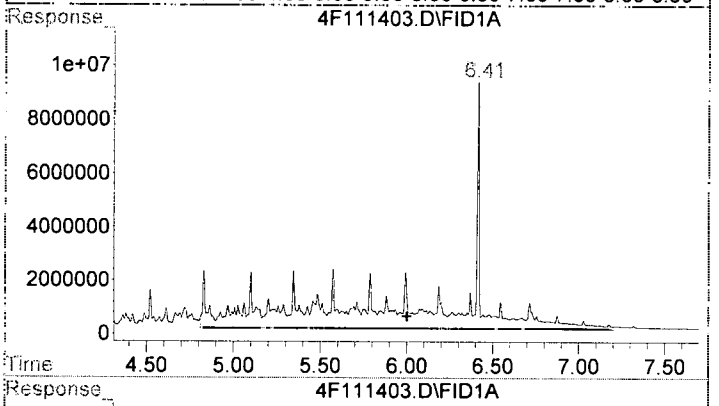
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1044300284
Conc: 962.11 ug/mL m



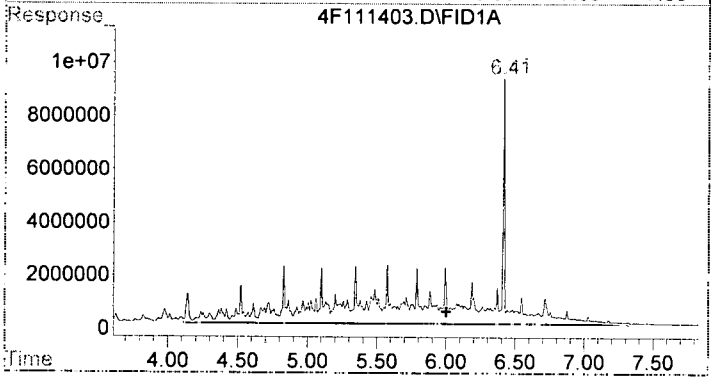
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1044300284
Conc: 962.11 ug/mL m



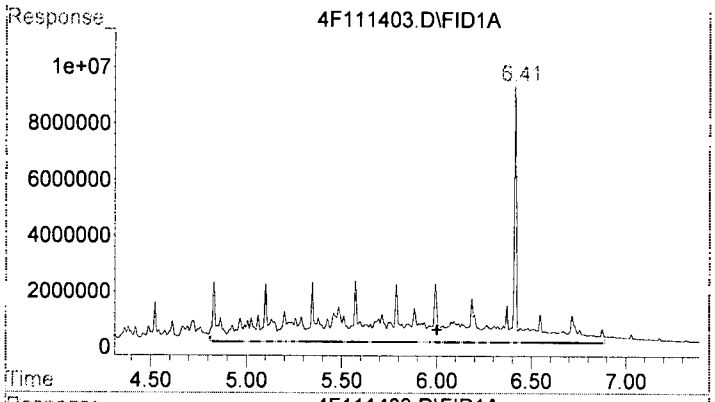
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 810043243
Conc: 746.29 ug/mL m



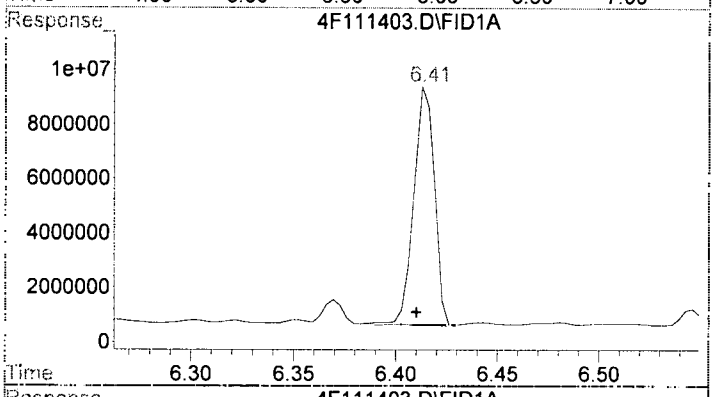
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 966771998
Conc: 997.59 ug/ml m



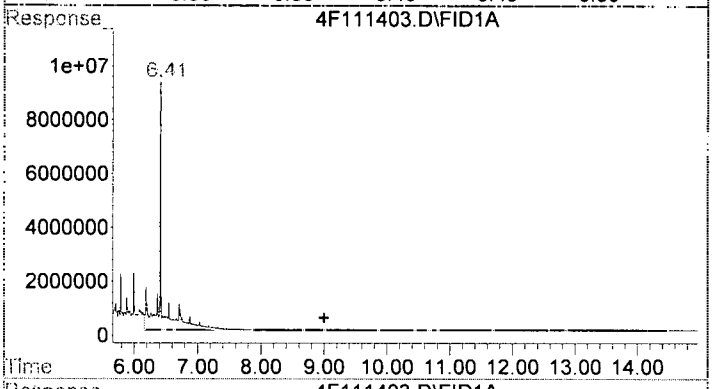
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 773227308
Conc: 1009.10 ug/ml m



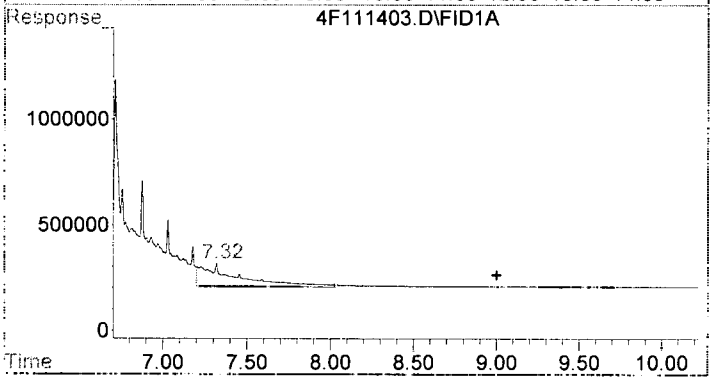
#6 o-Terphenyl

R.T.: 6.415 min
Delta R.T.: 0.005 min
Response: 61404094
Conc: 49.63 ug/mL



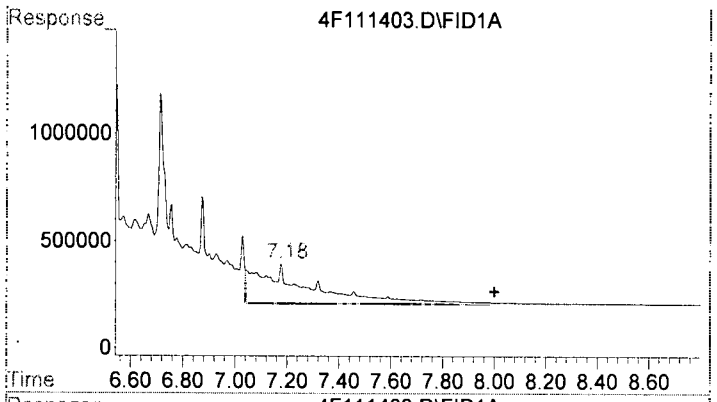
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 264167458
Conc: 247.11 ug/mL m



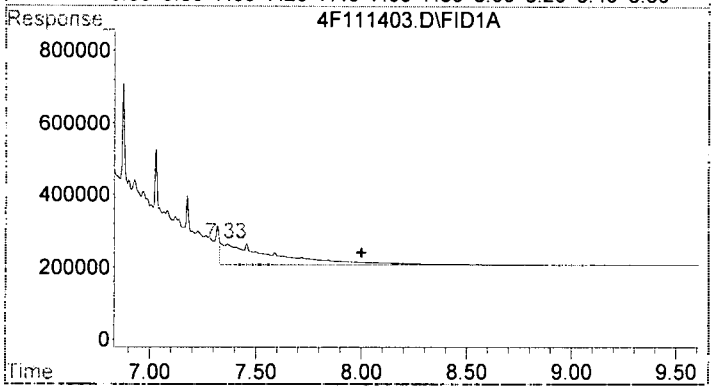
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 18113954
Conc: 16.94 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 29371999
Conc: 42.93 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 11536028
Conc: 17.00 ug/mL m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K14026\4F111404.D Vial: 2
Acq On : 14 Nov 2019 17:23 Operator: BLL
Sample : 9K14026-CCV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	335.214	0.0	91	0.00
2	H	Diesel	-1.000	335.214	0.0	91	0.00
3	H	DRO(C12-C24)	-1.000	76.029	0.0	21	0.00
4	H	TPHd (C10-C25)	-1.000	121.638	0.0	90	0.00
5	H	CA LUFT DRO (C12-C22)	-1.000	34.812	0.0	89	0.00
6	S	o-Terphenyl	-1.000	48.880	0.0	0	0.00
7	H	Oil	500.000	428.050	14.4	92	0.00
8	H	RRO (C24-C40)	500.000	340.043	32.0#	73	0.00
9	H	CA LUFT ORO (C23-C32)	500.000	454.258	9.1	91	0.00
10	H	TPHmo (C25-C36)	500.000	453.275	9.3	92	0.00

AR 11.15.19

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111404.D Vial: 2
Acq On : 14 Nov 2019 17:23 Operator: BLL
Sample : 9K14026-CCV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	60472212	48.880	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	363850646	335.214	ug/mL
2)	H	Diesel	6.00	363850646	335.214	ug/mL
3)	H	DRO(C12-C24)	6.00	82524221	76.029	ug/mL
4)	H	TPHd (C10-C25)	6.00	117880095	121.638	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	26674536	34.812	ug/ml
7)	H	Oil	9.00	457598436	428.050	ug/mL
8)	H	RRO (C24-C40)	9.00	363516054	340.043	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	310787860	454.258	ug/mL
10)	H	TPHmo (C25-C36)	8.00	307585383	453.275	ug/mL

AA 11.15.19

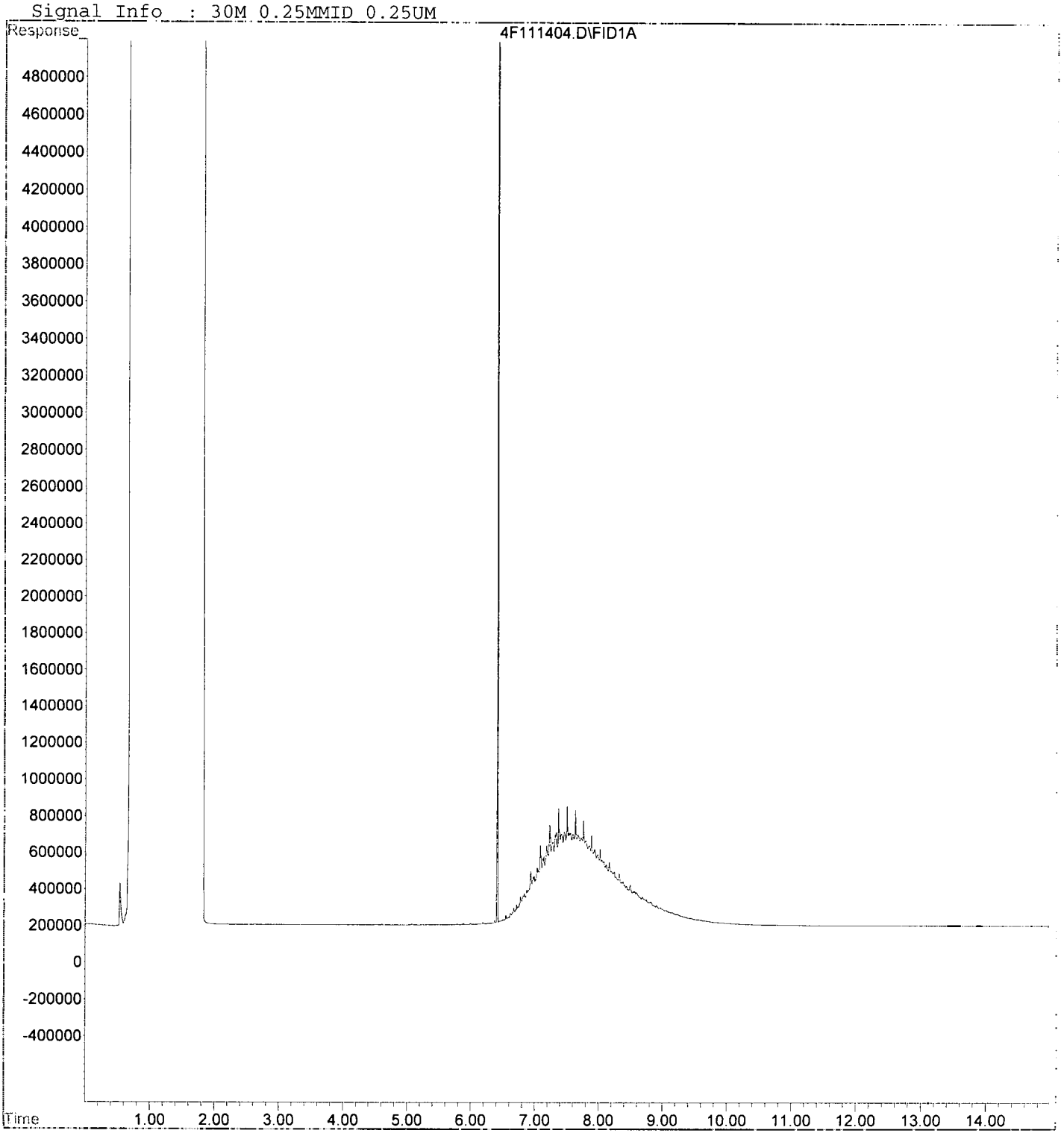
(f)=RT Delta > 1/2 window (m)=manual int.

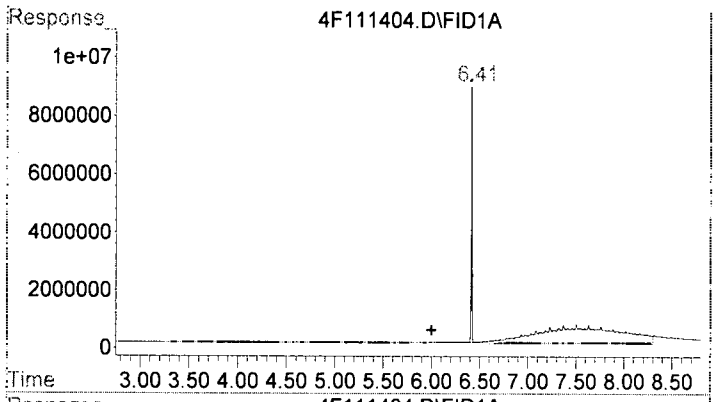
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111404.D Vial: 2
Acq On : 14 Nov 2019 17:23 Operator: BLL
Sample : 9K14026-CCV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

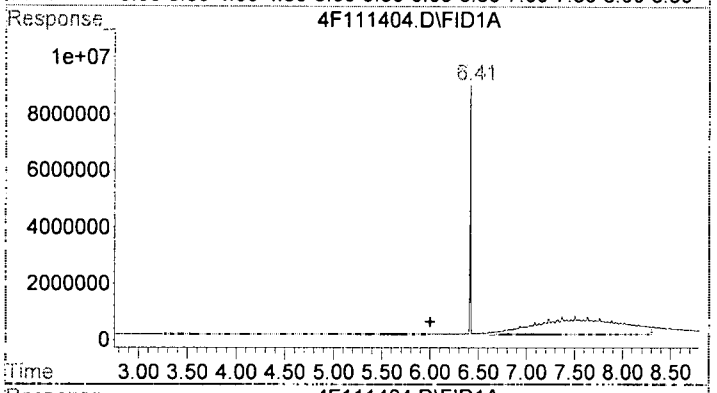
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





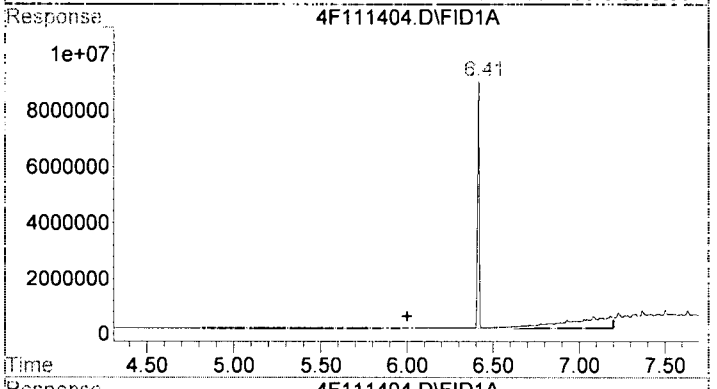
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 363850646
Conc: 335.21 ug/mL m



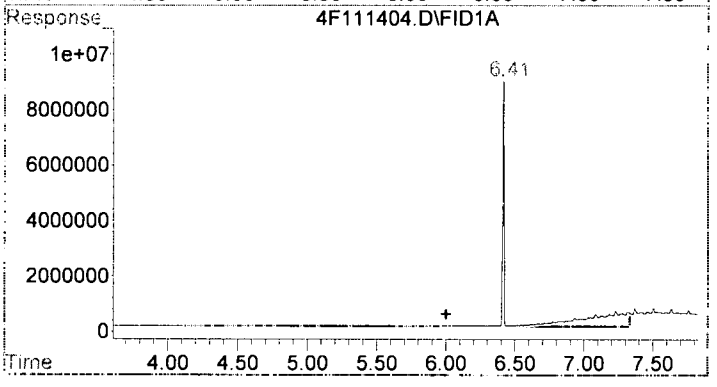
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 363850646
Conc: 335.21 ug/mL m



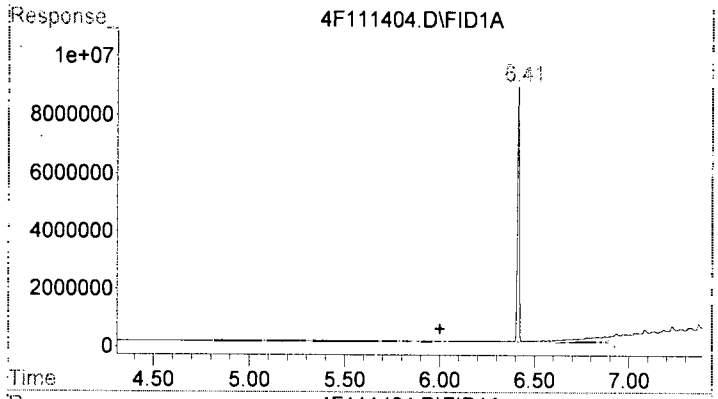
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 82524221
Conc: 76.03 ug/mL m



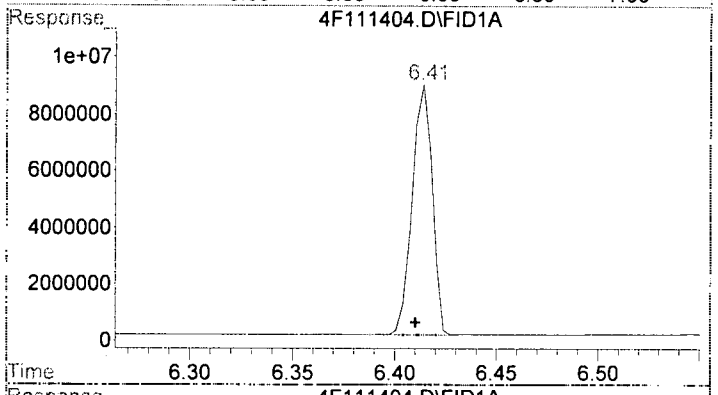
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 117880095
Conc: 121.64 ug/ml m



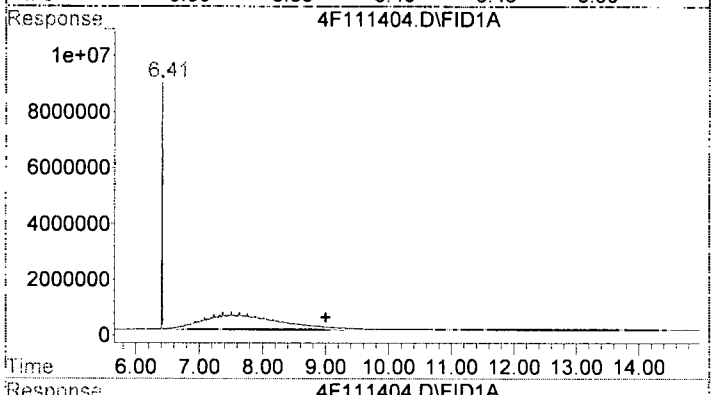
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 26674536
Conc: 34.81 ug/ml m



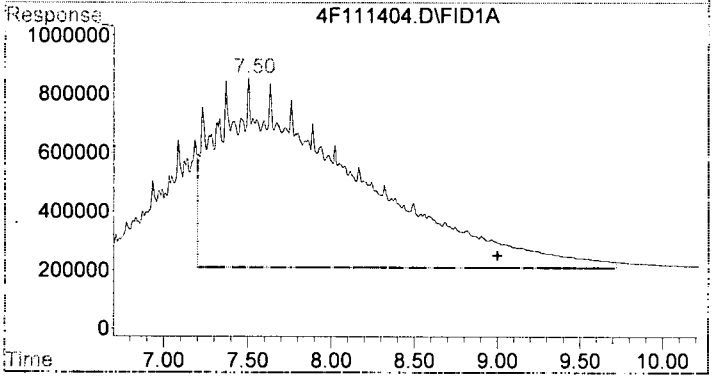
#6 o-Terphenyl

R.T.: 6.415 min
Delta R.T.: 0.005 min
Response: 60472212
Conc: 48.88 ug/mL



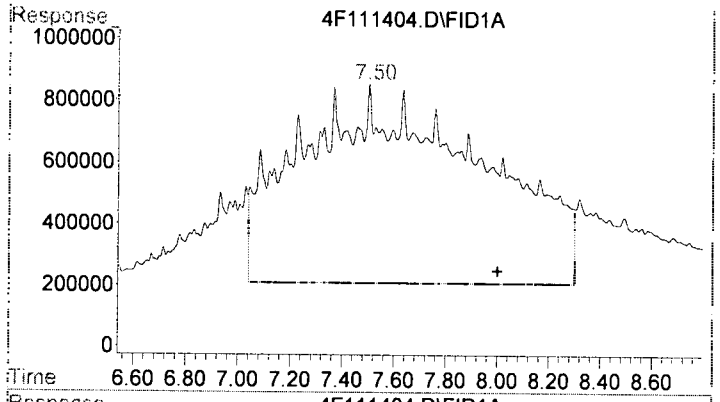
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 457598436
Conc: 428.05 ug/mL m



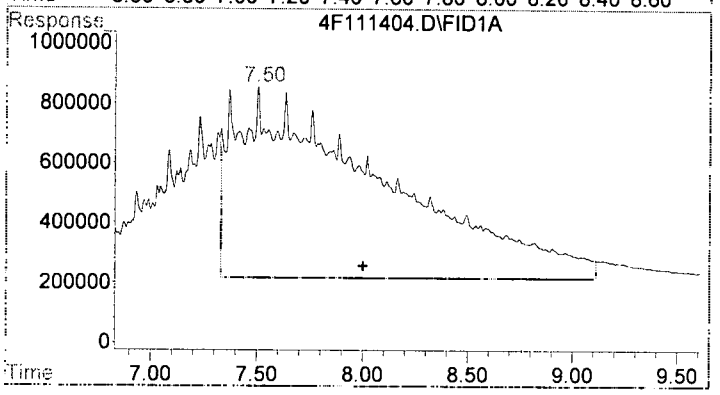
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 363516054
Conc: 340.04 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 310787860
Conc: 454.26 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 307585383
Conc: 453.27 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111405.D Vial: 99
Acq On : 14 Nov 2019 18:52 Operator: BLL
Sample : 9K14026-CCB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	7093131	6.535	ug/mL
2)	H	Diesel	6.00	7093131	6.535	ug/mL
3)	H	DRO(C12-C24)	6.00	2403092	2.214	ug/mL
4)	H	TPHd (C10-C25)	6.00	4647229	4.795	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	2214830	2.890	ug/ml
7)	H	Oil	9.00	3954204	3.699	ug/mL
8)	H	RRO (C24-C40)	9.00	1477552	1.382	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	1108473	1.620	ug/mL
10)	H	TPHmo (C25-C36)	8.00	1314208	1.937	ug/mL

$\leq 1/2$ RL

AN 11.15.19

J

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

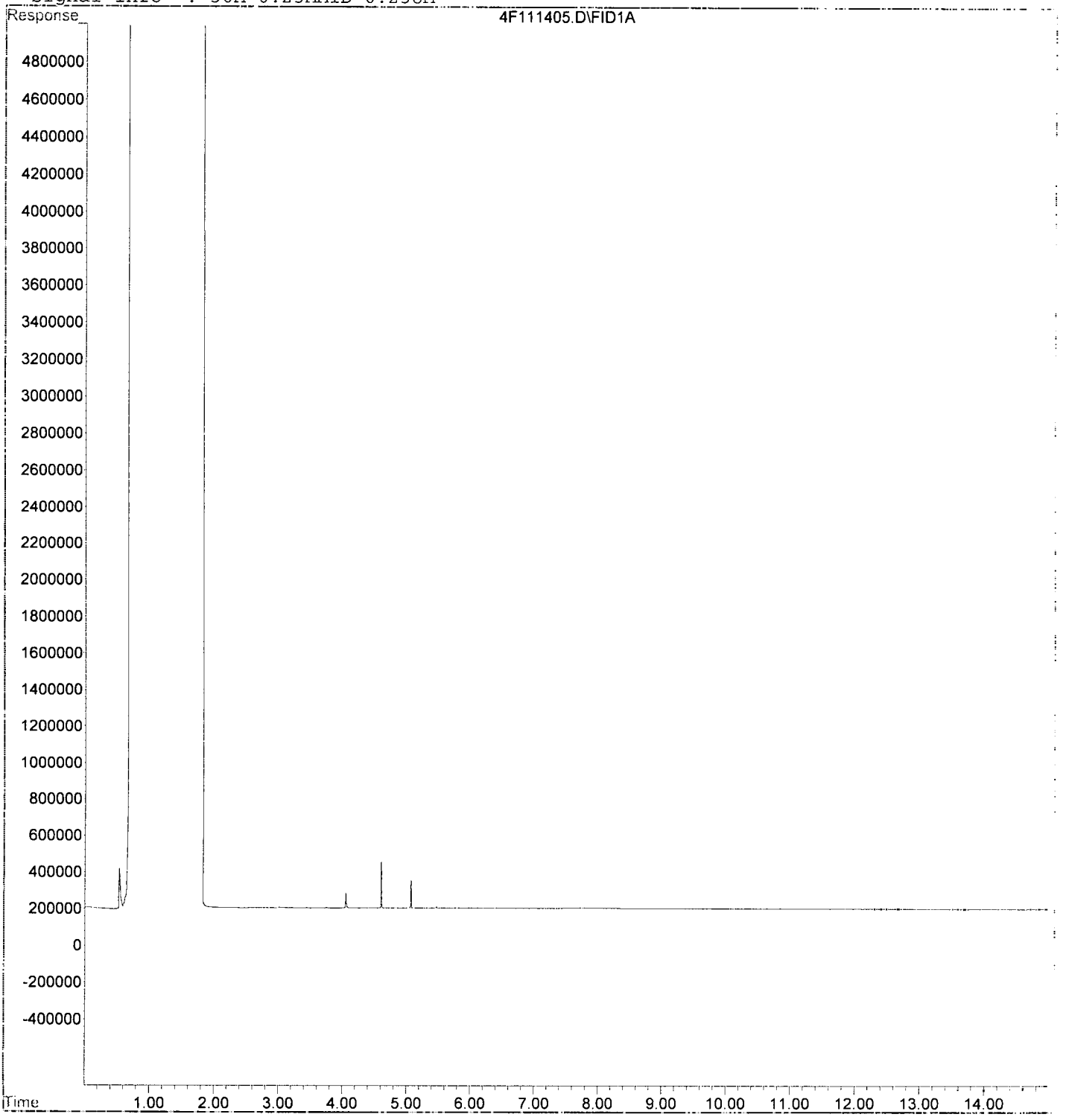
4F111405.D 4F91113D.M Fri Nov 15 05:16:08 2019 SV-GCMS3 Page 1

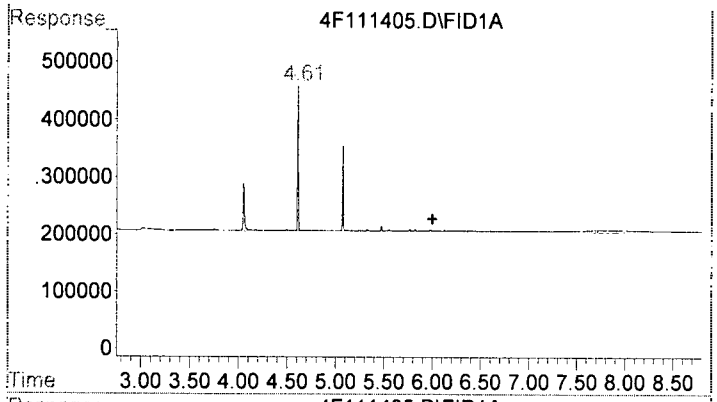
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111405.D Vial: 99
Acq On : 14 Nov 2019 18:52 Operator: BLL
Sample : 9K14026-CCB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

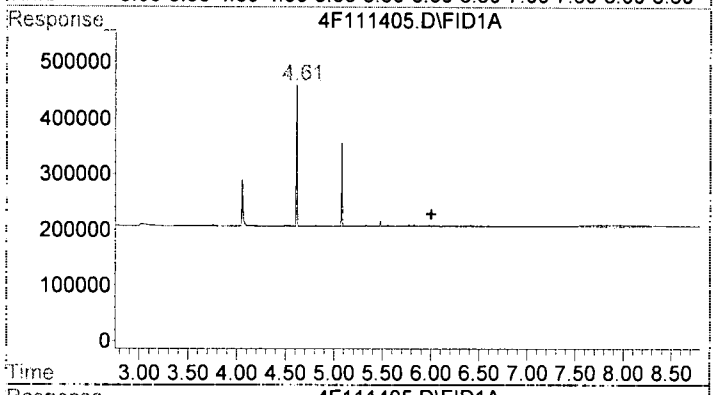
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





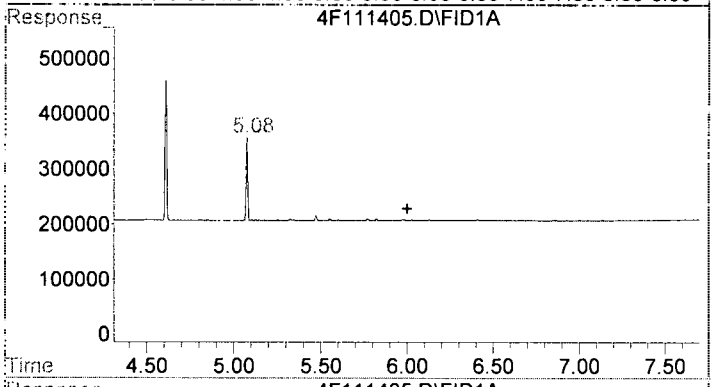
#1 Mineral Oil

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	7093131
Conc:	6.53 ug/mL m



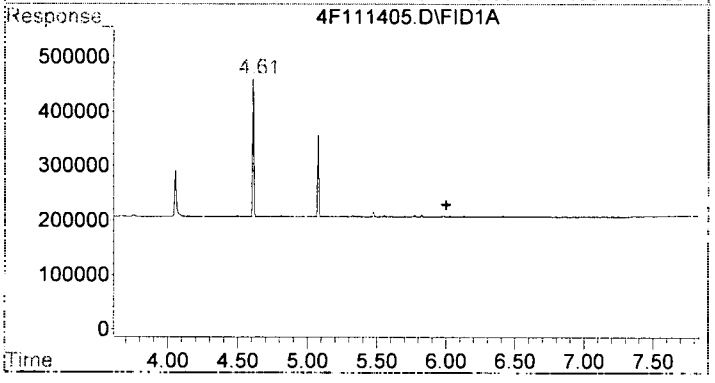
#2 Diesel

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	7093131
Conc:	6.53 ug/mL m



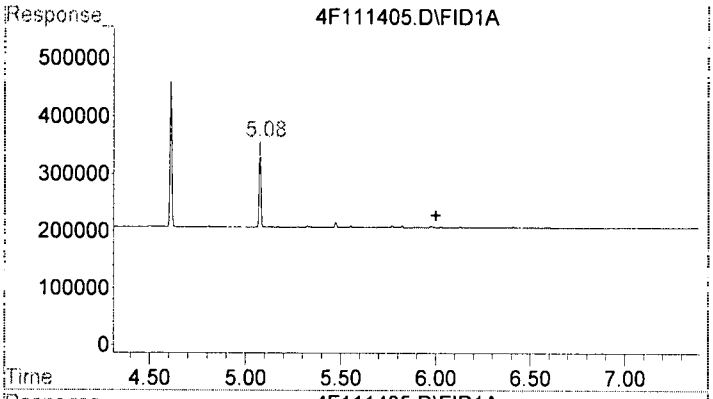
#3 DRO(C12-C24)

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	2403092
Conc:	2.21 ug/mL m



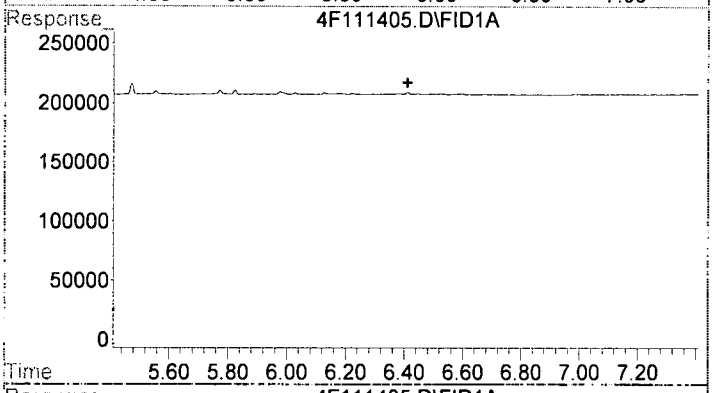
#4 TPHd (C10-C25)

R.T.:	6.000 min
Delta R.T.:	0.000 min
Response:	4647229
Conc:	4.80 ug/ml m



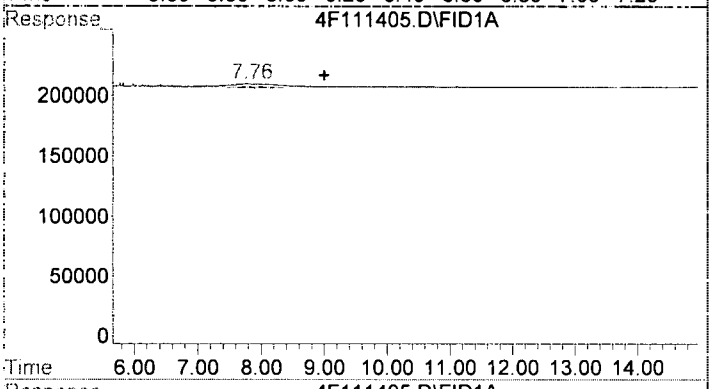
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 2214830
Conc: 2.89 ug/ml m



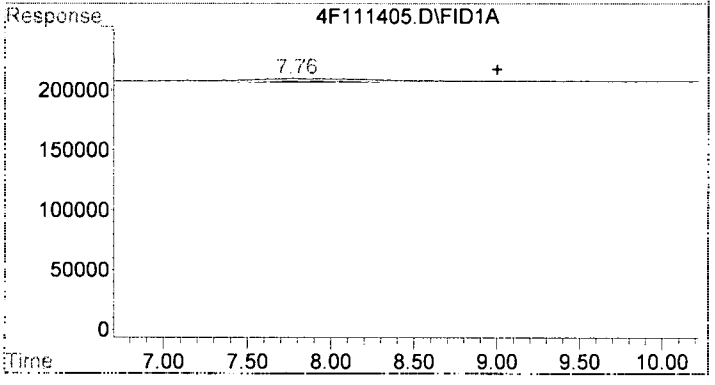
#6 o-Terphenyl

R.T.: 0.000 min
Exp R.T. : 6.410 min
Response: 0
Conc: N.D.



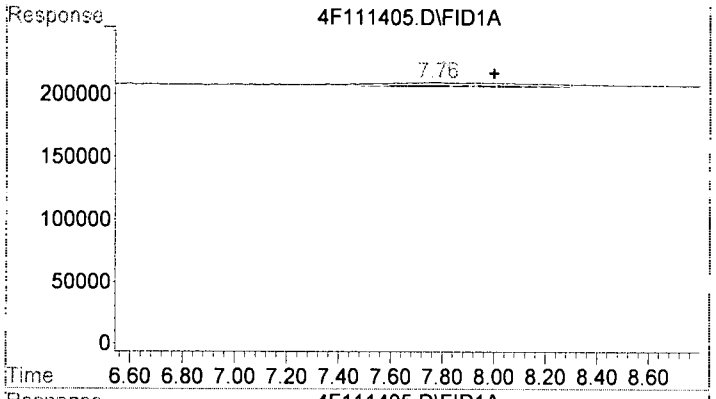
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 3954204
Conc: 3.70 ug/mL m



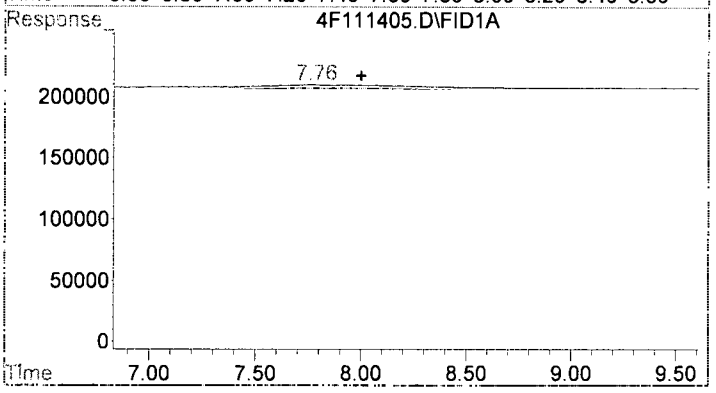
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 1477552
Conc: 1.38 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1108473
Conc:	1.62 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1314208
Conc:	1.94 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111406.D Vial: 3
Acq On : 14 Nov 2019 19:13 Operator: BLL
Sample : 9110803-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	57932362	46.827 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	3035977	2.797 ug/mL
2)	H	Diesel	6.00	3035977	2.797 ug/mL
3)	H	DRO(C12-C24)	6.00	1034736	0.953 ug/mL
4)	H	TPHd (C10-C25)	6.00	1405041	1.450 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	923541	1.205 ug/ml
7)	H	Oil	9.00	4364239	4.082 ug/mL
8)	H	RRO (C24-C40)	9.00	1969654	1.842 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	1271281	1.858 ug/mL
10)	H	TPHmo (C25-C36)	8.00	1688350	2.488 ug/mL

< 1/2 RL

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11.15.19

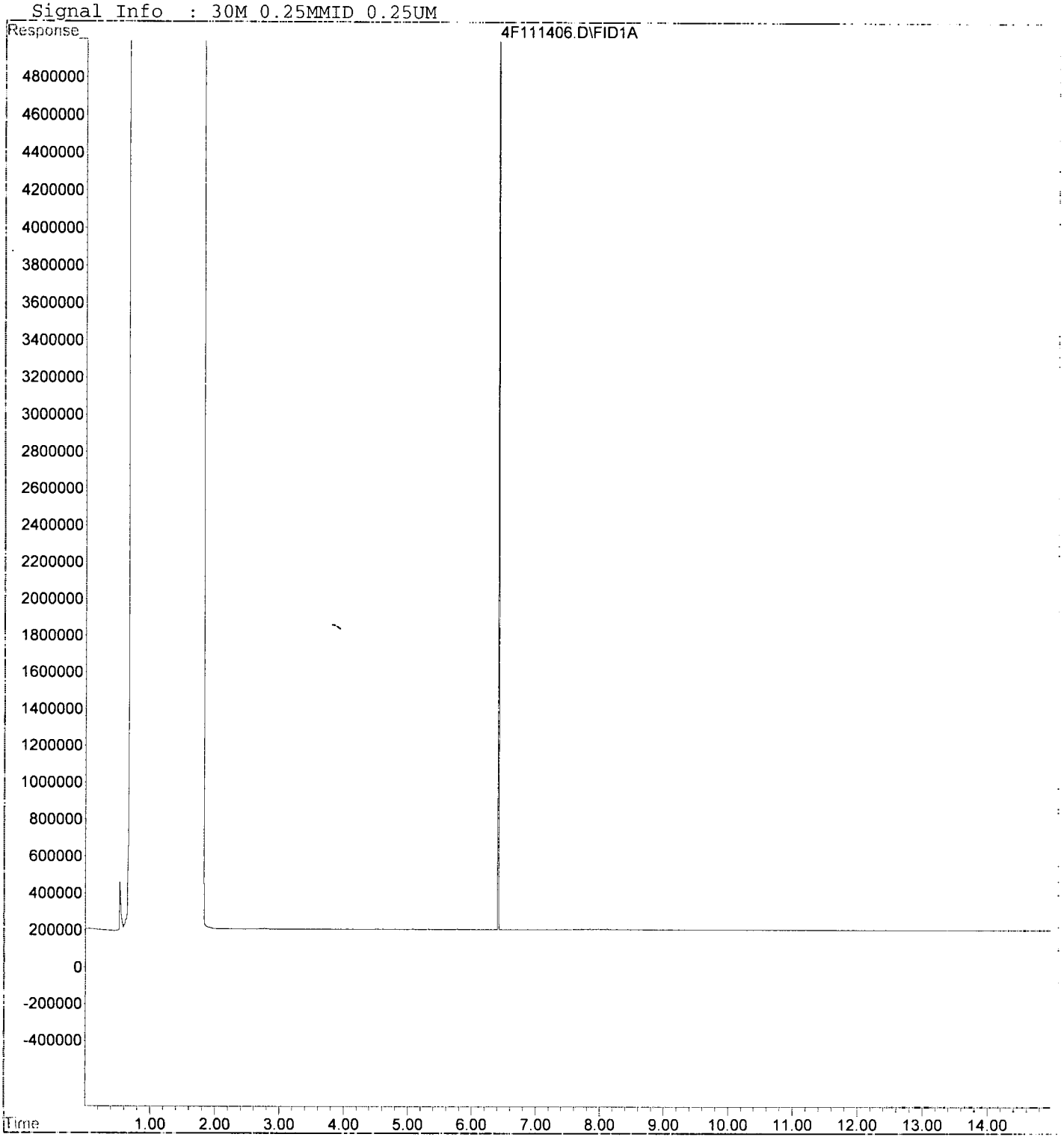
(f)=RT Delta > 1/2 Window (m)=Manual Int.

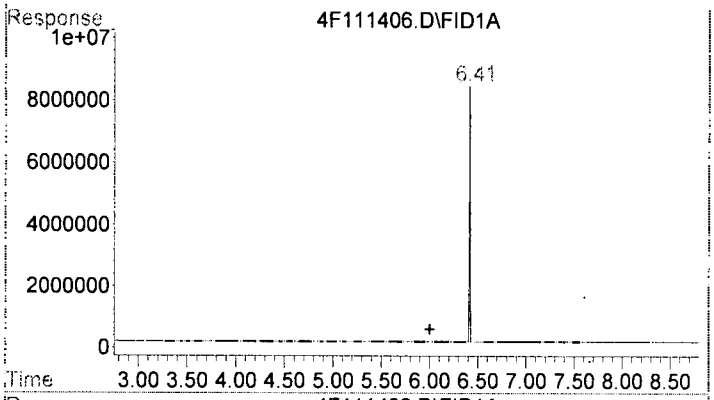
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111406.D Vial: 3
Acq On : 14 Nov 2019 19:13 Operator: BLL
Sample : 9110803-BLK1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

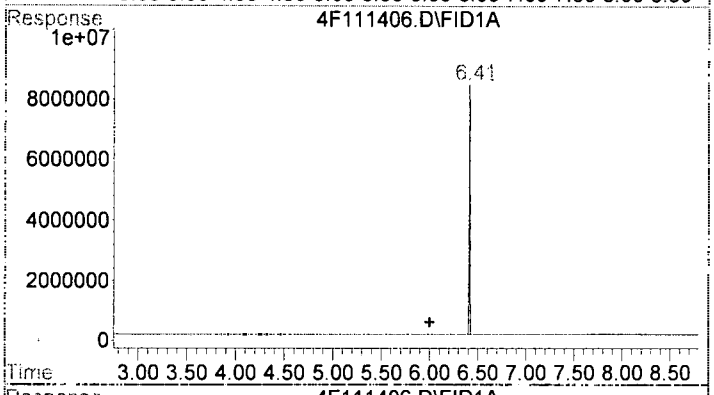
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





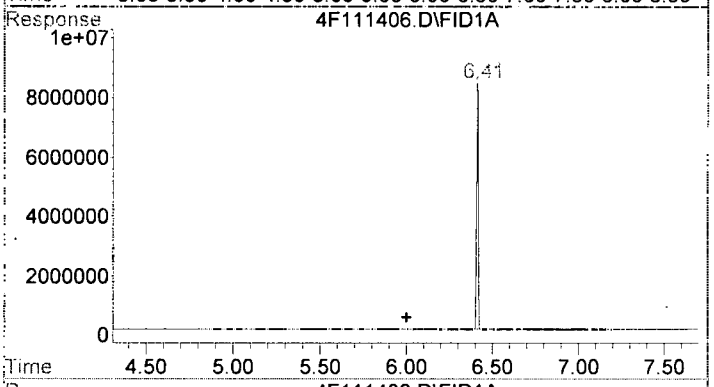
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 3035977
Conc: 2.80 ug/mL m



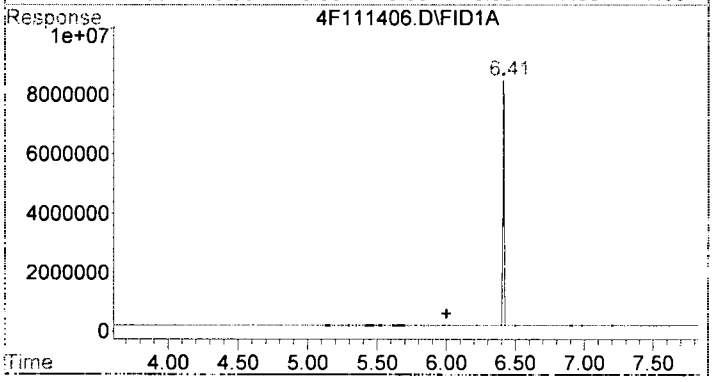
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 3035977
Conc: 2.80 ug/mL m



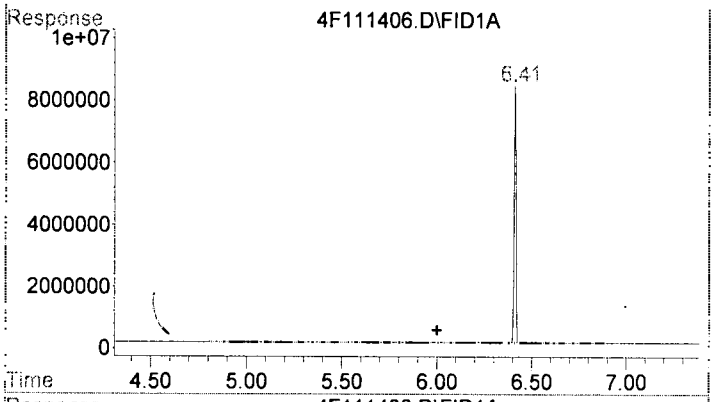
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1034736
Conc: 0.95 ug/mL m



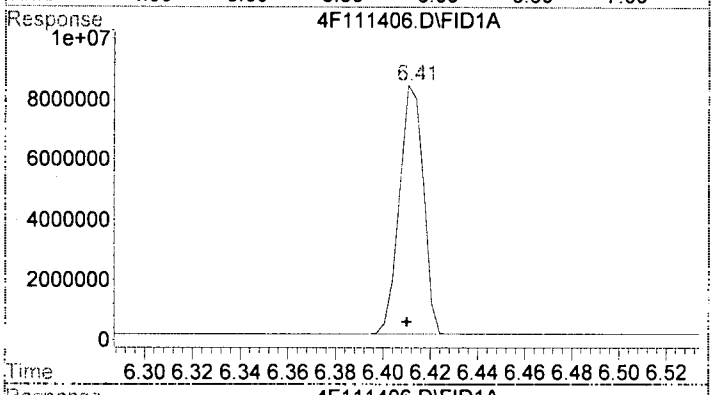
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1405041
Conc: 1.45 ug/ml m



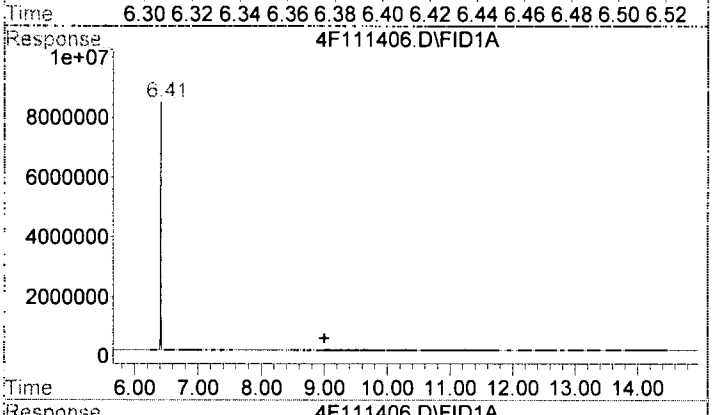
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 923541
Conc: 1.21 ug/ml m



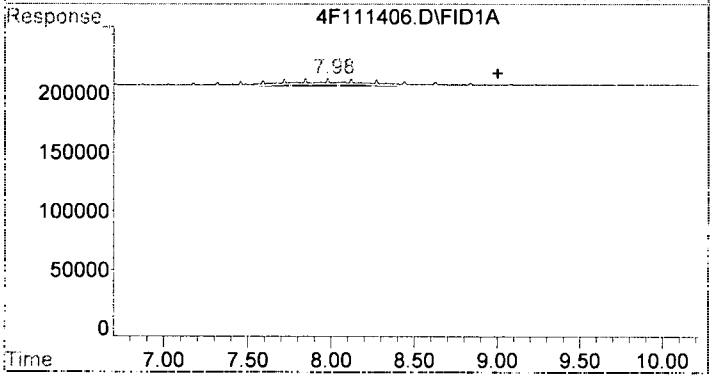
#6 o-Terphenyl

R.T.: 6.413 min
Delta R.T.: 0.003 min
Response: 57932362
Conc: 46.83 ug/mL



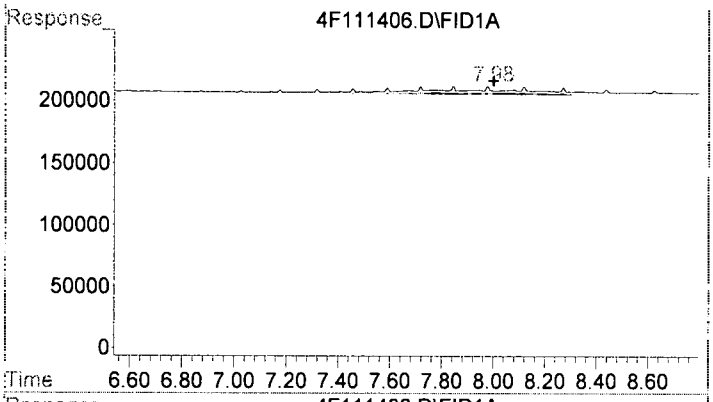
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 4364239
Conc: 4.08 ug/mL m



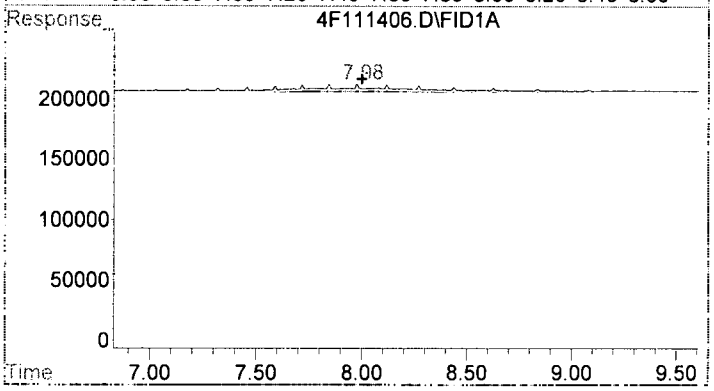
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 1969654
Conc: 1.84 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1271281
Conc:	1.86 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	1688350
Conc:	2.49 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111407.D Vial: 4
Acq On : 14 Nov 2019 19:35 Operator: BLL
Sample : 9110803-BS1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	58905525	47.613 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	251573116	231.773 ug/mL
2)	H	Diesel	6.00	251573116	231.773 ug/mL
3)	H	DRO(C12-C24)	6.00	196405730	180.948 ug/mL
4)	H	TPHd (C10-C25)	6.00	231975630	239.371 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	187053743	244.114 ug/ml
7)	H	Oil	9.00	70974371	66.391 ug/mL
8)	H	RRO (C24-C40)	9.00	6278675	5.873 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	8355335	12.212 ug/mL
10)	H	TPHmo (C25-C36)	8.00	4396350	6.479 ug/mL

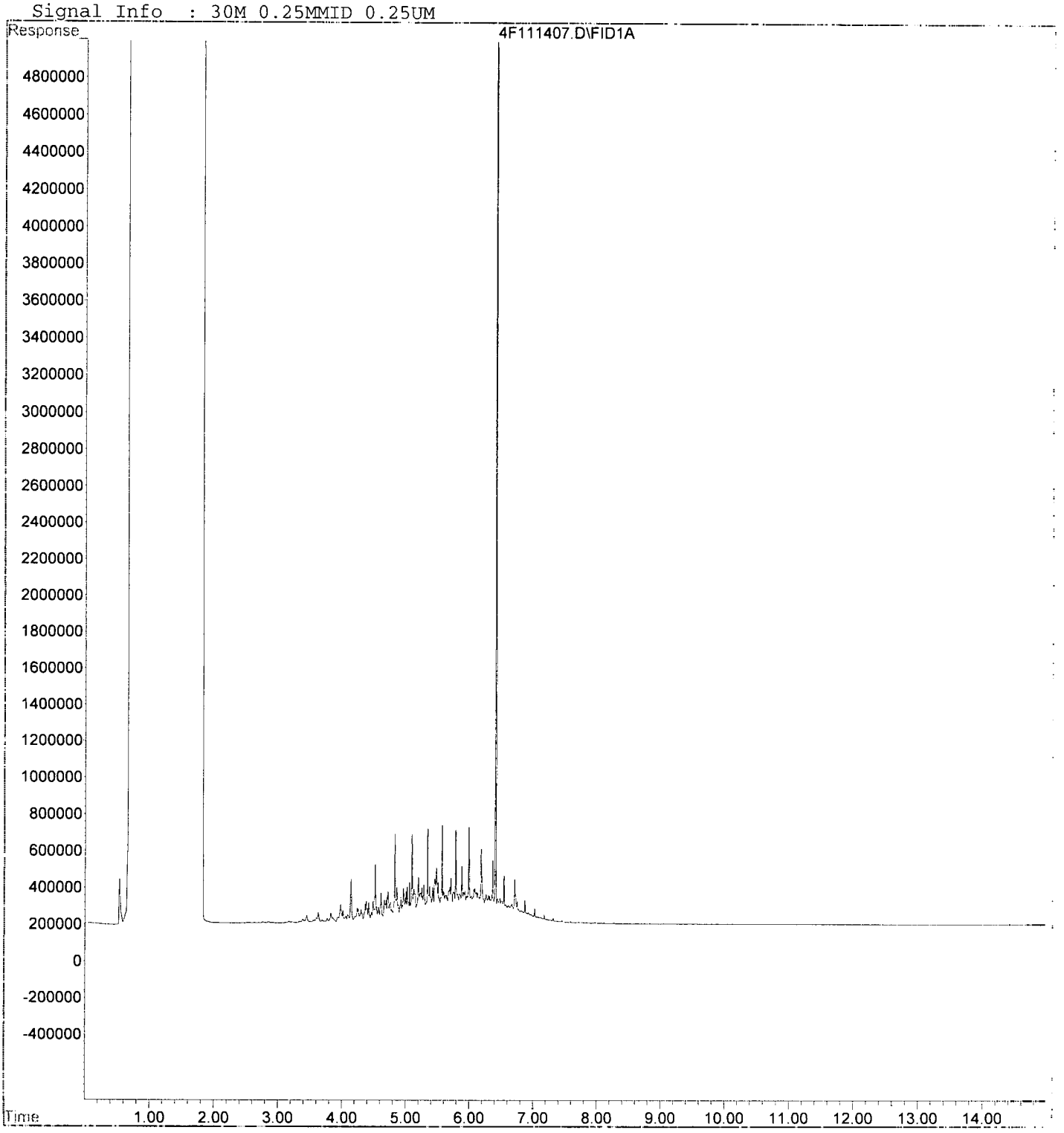
AL 11.15.19

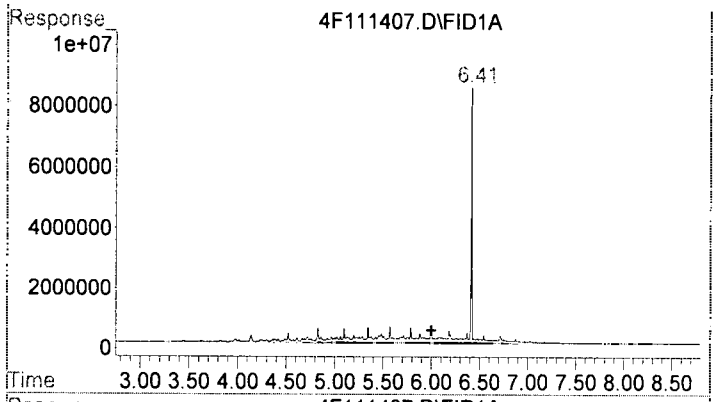
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111407.D Vial: 4
Acq On : 14 Nov 2019 19:35 Operator: BLL
Sample : 9110803-BS1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

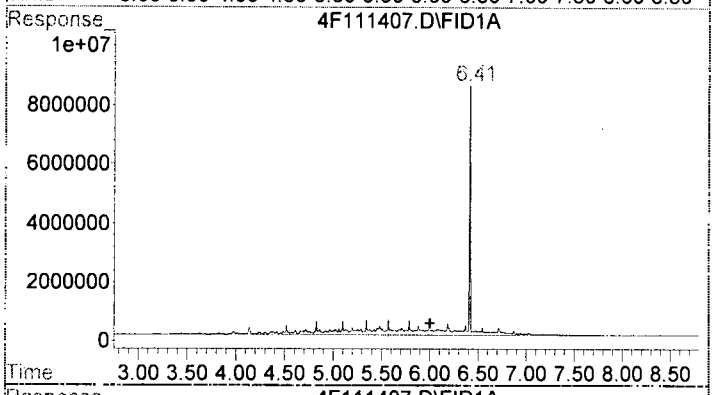
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





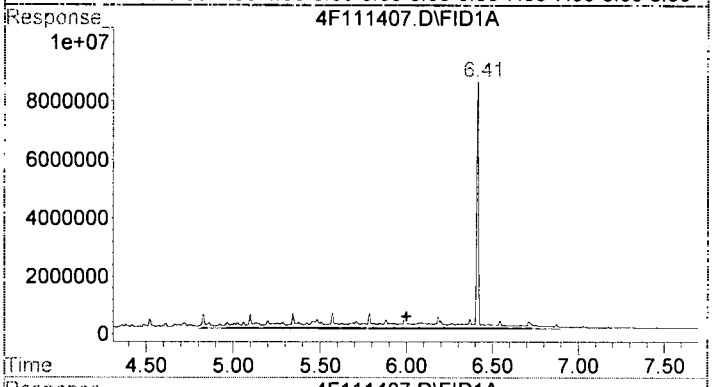
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 251573116
Conc: 231.77 ug/mL m



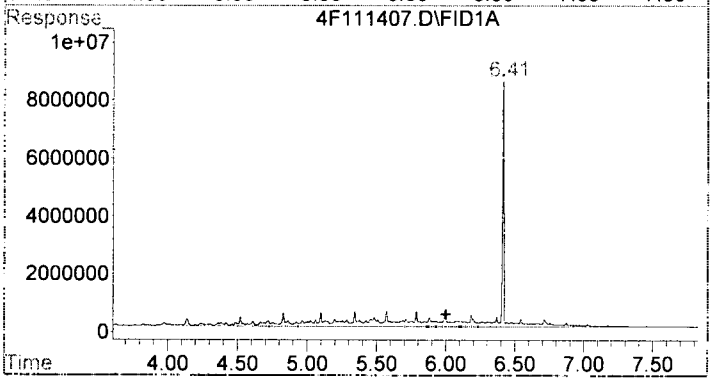
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 251573116
Conc: 231.77 ug/mL m



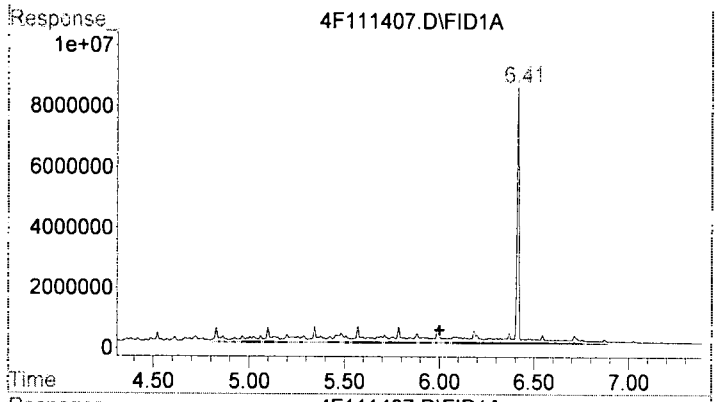
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 196405730
Conc: 180.95 ug/mL m



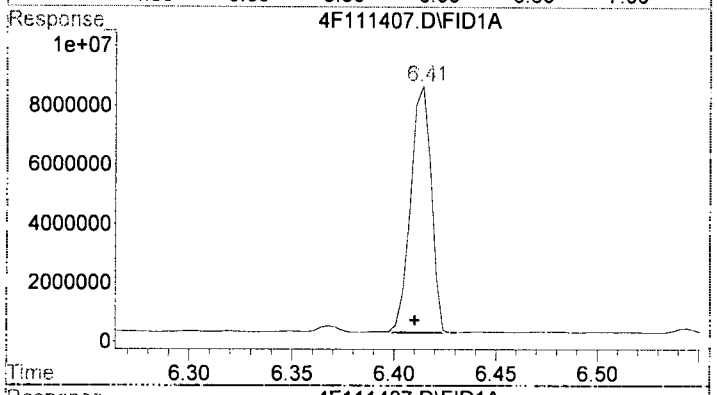
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 231975630
Conc: 239.37 ug/ml m



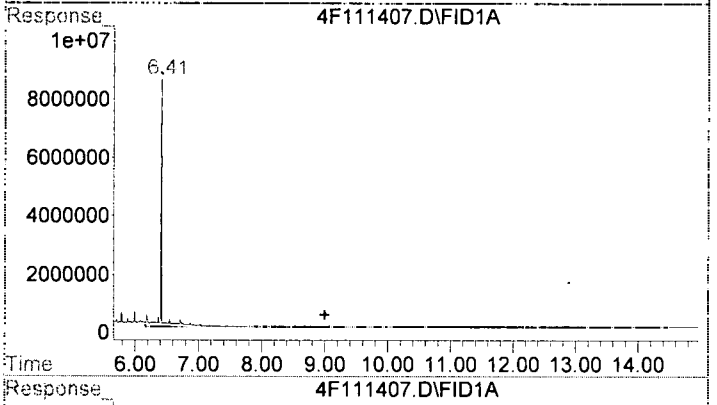
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 187053743
Conc: 244.11 ug/ml m



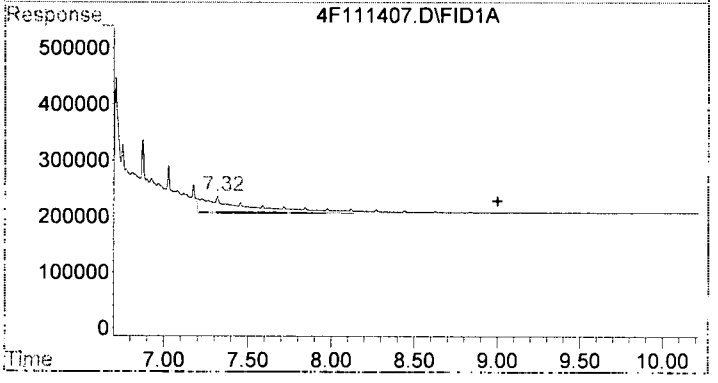
#6 o-Terphenyl

R.T.: 6.414 min
Delta R.T.: 0.004 min
Response: 58905525
Conc: 47.61 ug/mL



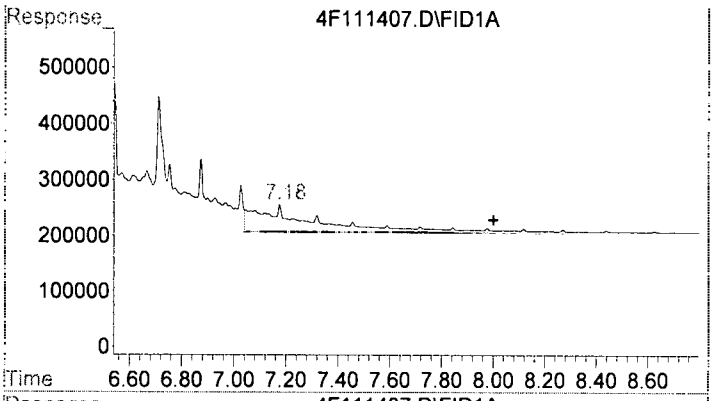
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 70974371
Conc: 66.39 ug/mL m



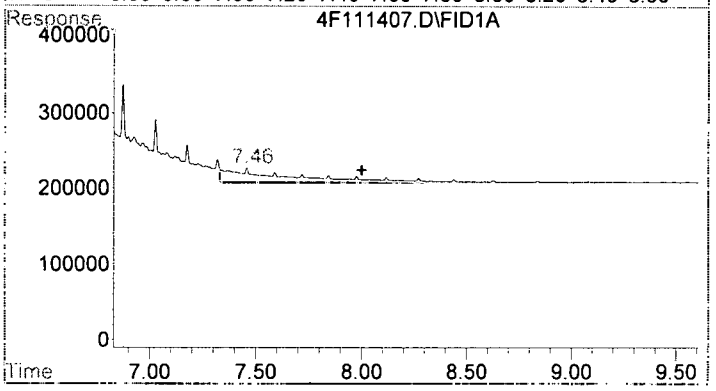
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 6278675
Conc: 5.87 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	8355335
Conc:	12.21 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	4396350
Conc:	6.48 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111408.D Vial: 5
Acq On : 14 Nov 2019 19:55 Operator: BLL
Sample : A9K0332-04 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	53591381	43.318 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	67895644	62.552 ug/mL
2)	H	Diesel	6.00	67895644	62.552 ug/mL
3)	H	DRO(C12-C24)	6.00	33994016	31.319 ug/mL
4)	H	TPHd (C10-C25)	6.00	38119379	39.335 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	28162912	36.754 ug/ml
7)	H	Oil	9.00	67718868	63.346 ug/mL
8)	H	RRO (C24-C40)	9.00	39908007	37.331 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	31765774	46.430 ug/mL
10)	H	TPHmo (C25-C36)	8.00	35006850	51.588 ug/mL

< RL

Report DRO 1/4.0

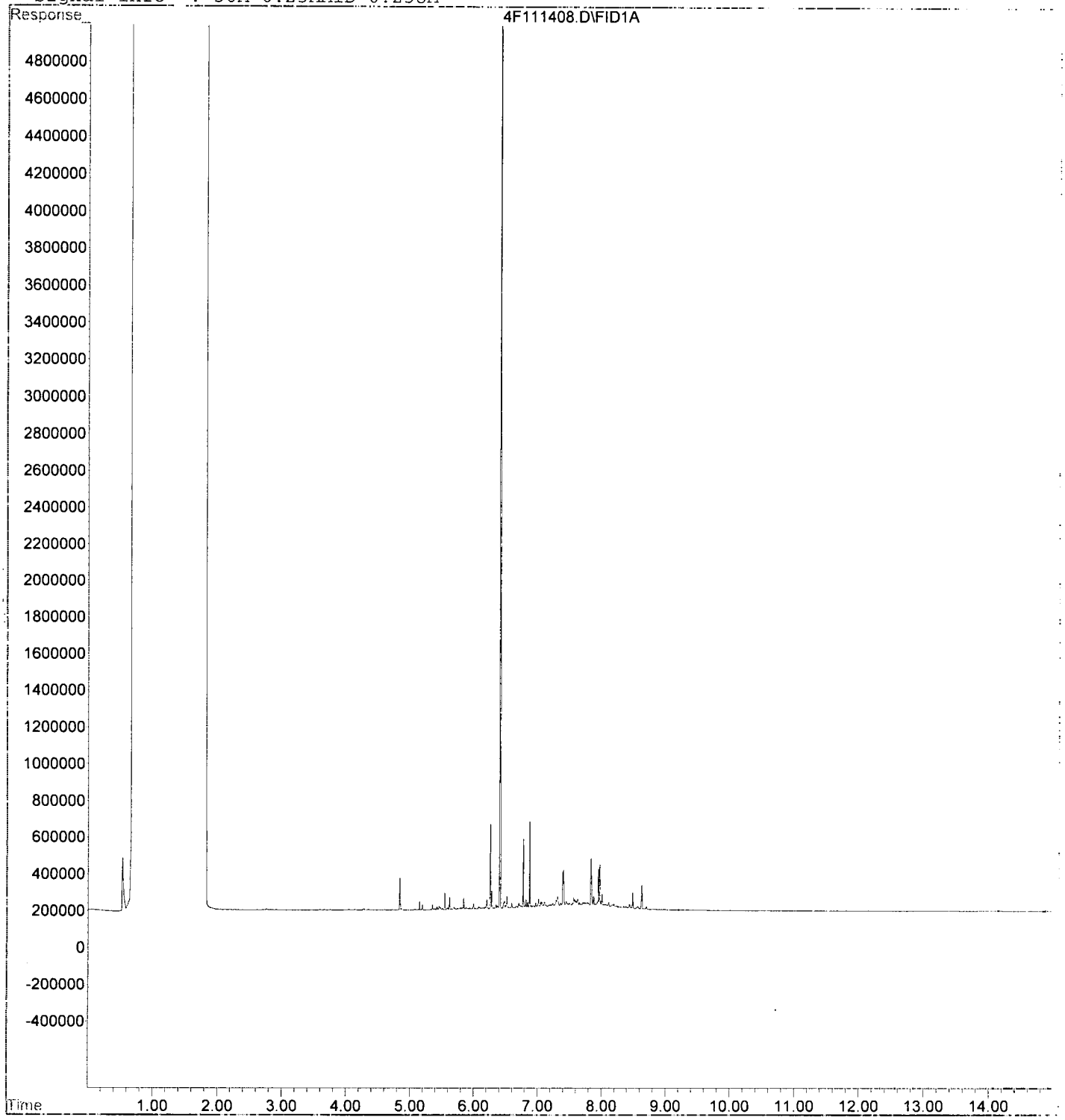
AM 11.15.19

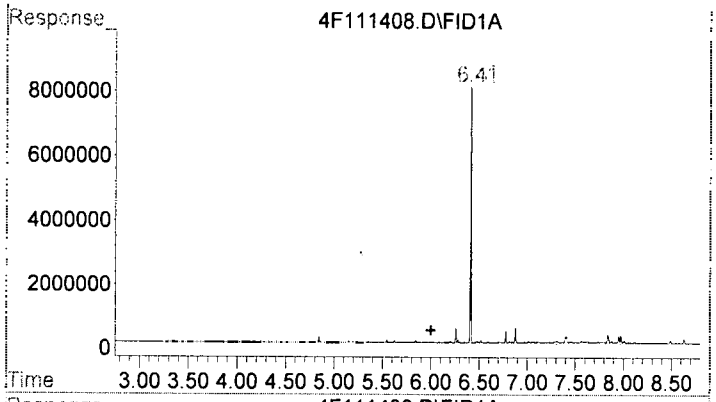
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111408.D Vial: 5
Acq On : 14 Nov 2019 19:55 Operator: BLL
Sample : A9K0332-04 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

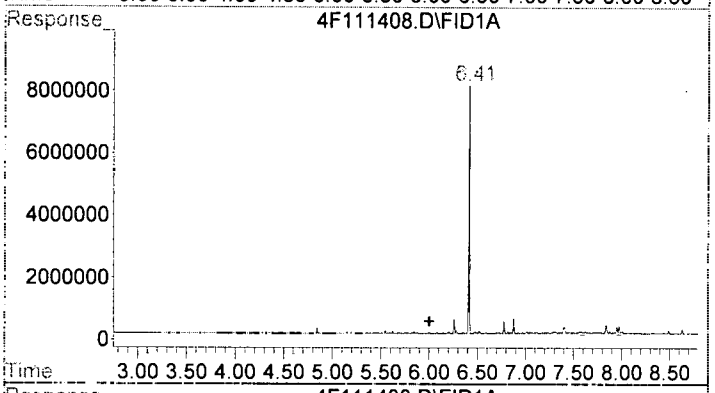
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





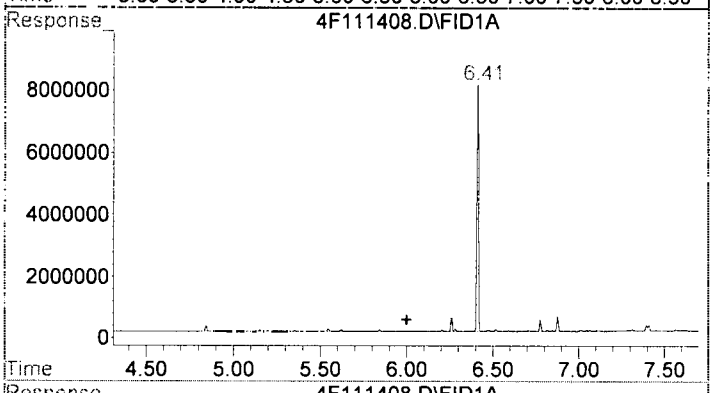
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 67895644
Conc: 62.55 ug/mL m



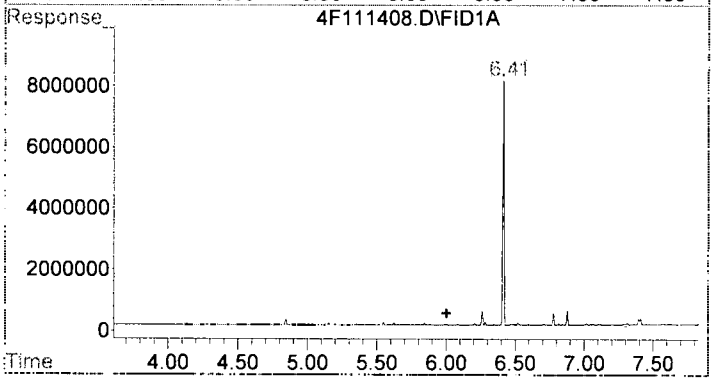
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 67895644
Conc: 62.55 ug/mL m



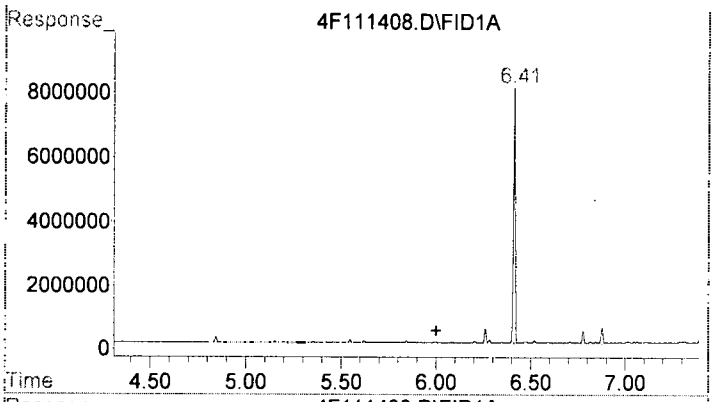
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 33994016
Conc: 31.32 ug/mL m



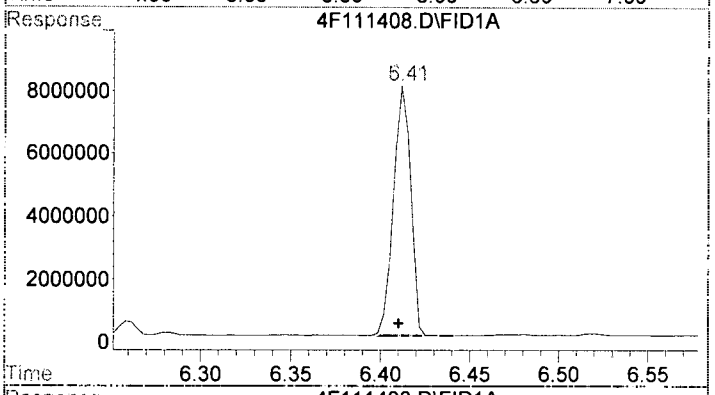
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 38119379
Conc: 39.33 ug/ml m



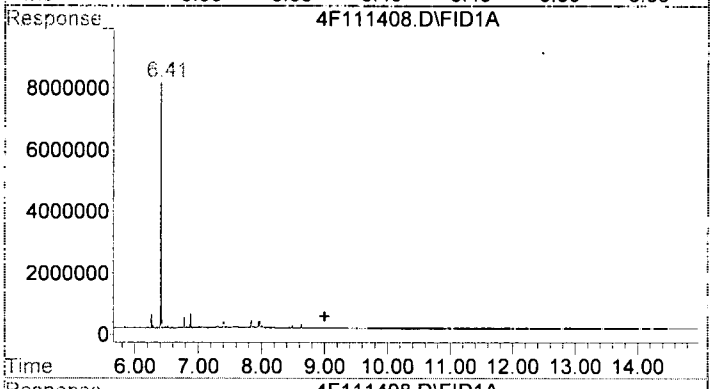
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 28162912
Conc: 36.75 ug/ml m



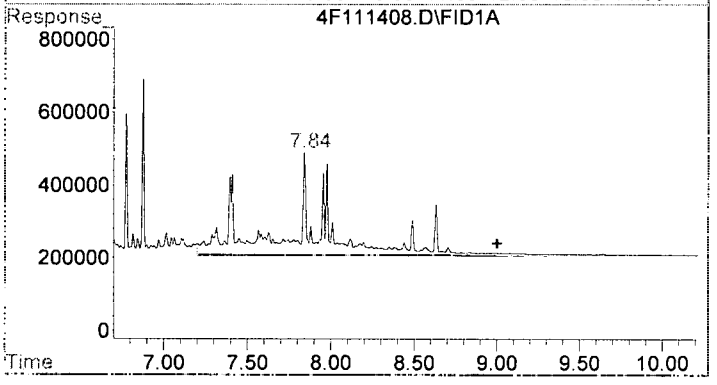
#6 o-Terphenyl

R.T.: 6.413 min
Delta R.T.: 0.003 min
Response: 53591381
Conc: 43.32 ug/mL



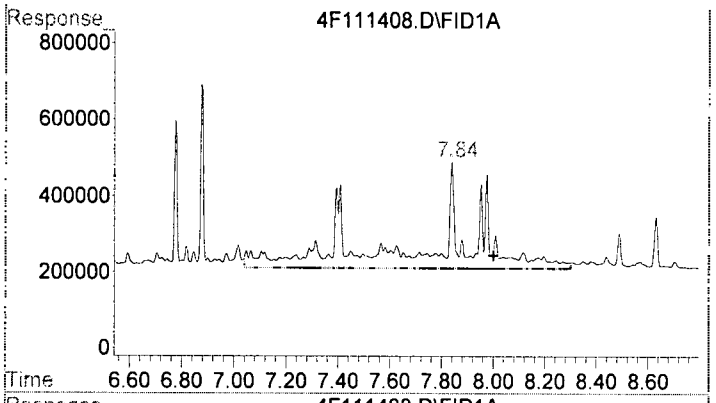
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 67718868
Conc: 63.35 ug/mL m



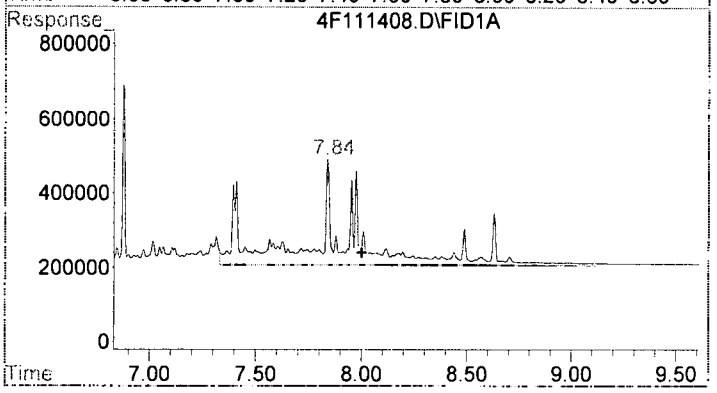
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 39908007
Conc: 37.33 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	31765774
Conc:	46.43 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	35006850
Conc:	51.59 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111409.D Vial: 6
Acq On : 14 Nov 2019 20:16 Operator: BLL
Sample : 9110803-DUP1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

AAK0332 04

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	49434139	39.958 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	57357301	52.843 ug/mL
2)	H	Diesel	6.00	57357301	52.843 ug/mL
3)	H	DRO(C12-C24)	6.00	28992228	26.710 ug/mL
4)	H	TPHd (C10-C25)	6.00	33070023	34.124 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	24408639	31.854 ug/ml
7)	H	Oil	9.00	56171965	52.545 ug/mL
8)	H	RRO (C24-C40)	9.00	31713868	29.666 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	25804659	37.717 ug/mL
10)	H	TPHmo (C25-C36)	8.00	27971590	41.220 ug/mL

< RL

Repeat DRO/ORO
AL 11.15.19

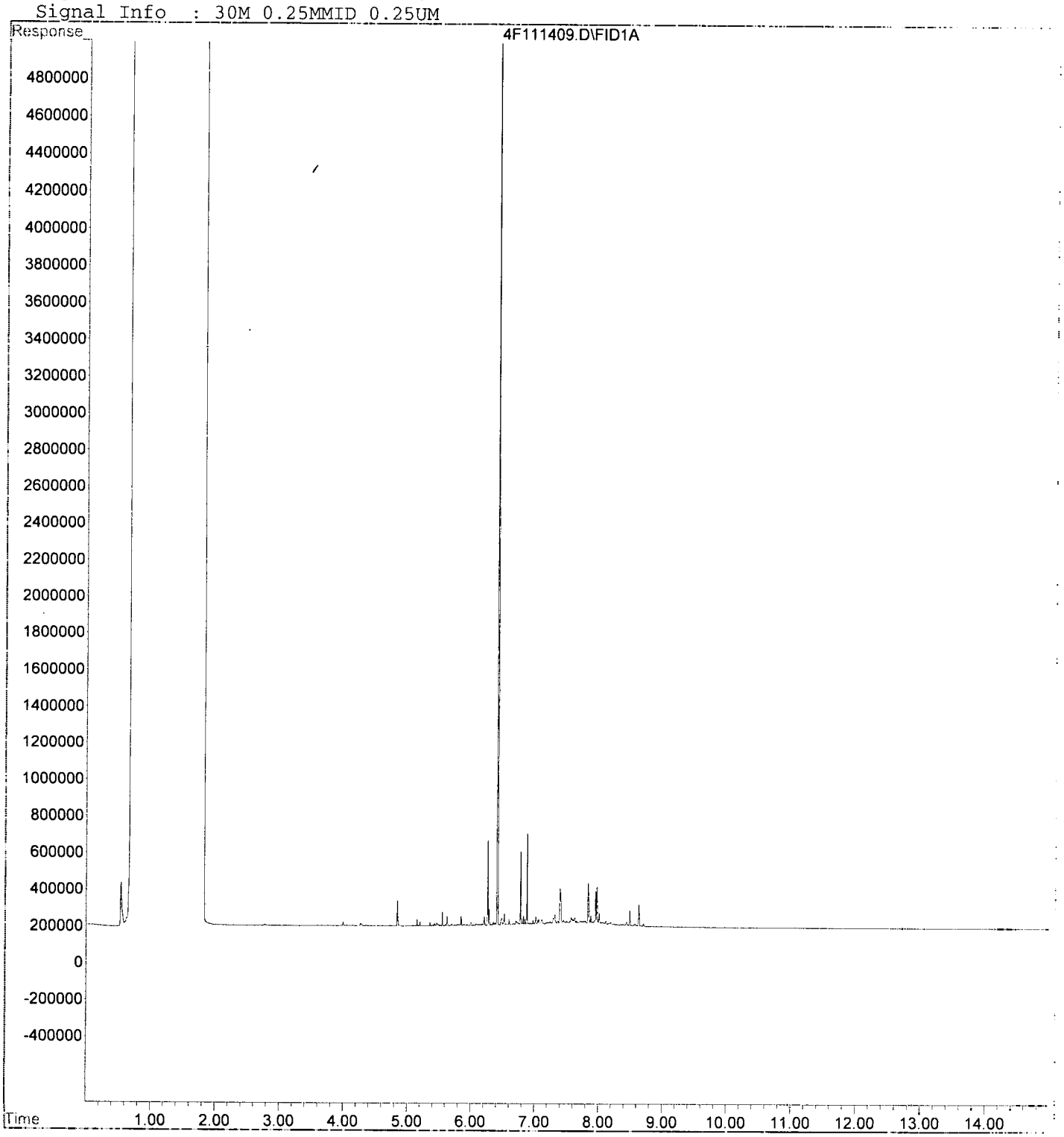
(f)=RT Delta > 1/2 window (m)=manual int.

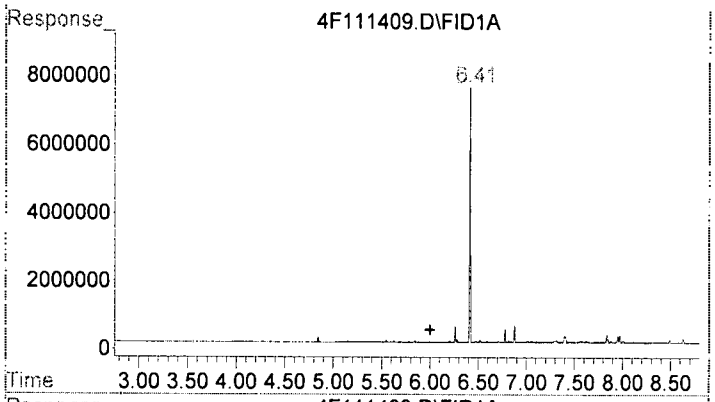
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111409.D Vial: 6
Acq On : 14 Nov 2019 20:16 Operator: BLL
Sample : 9110803-DUP1 , Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

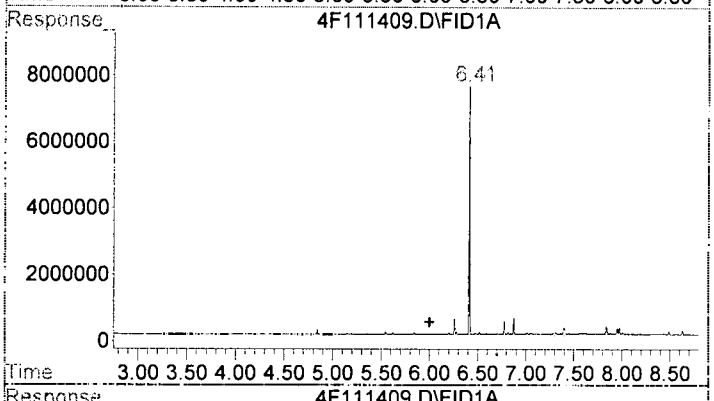
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





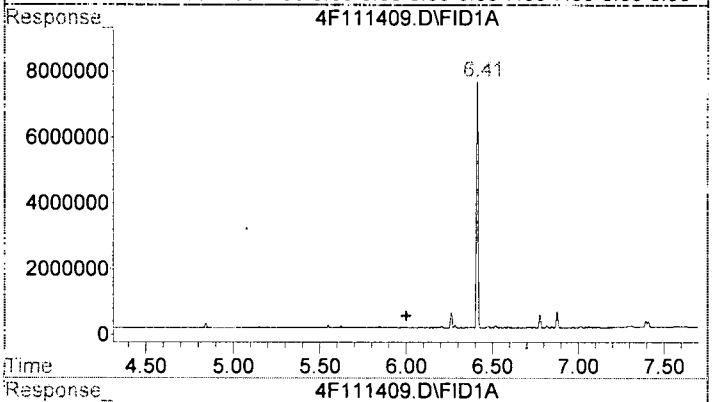
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 57357301
Conc: 52.84 ug/mL m



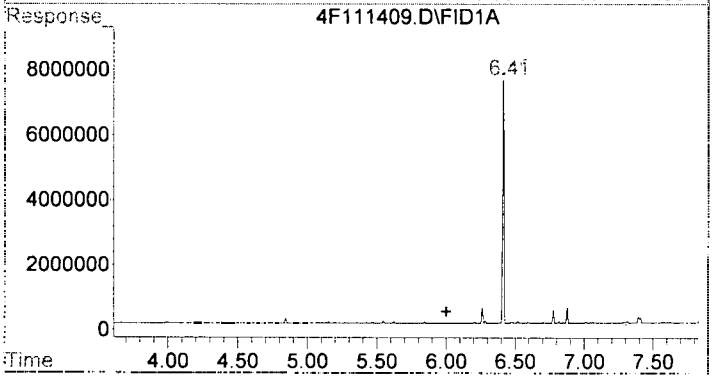
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 57357301
Conc: 52.84 ug/mL m



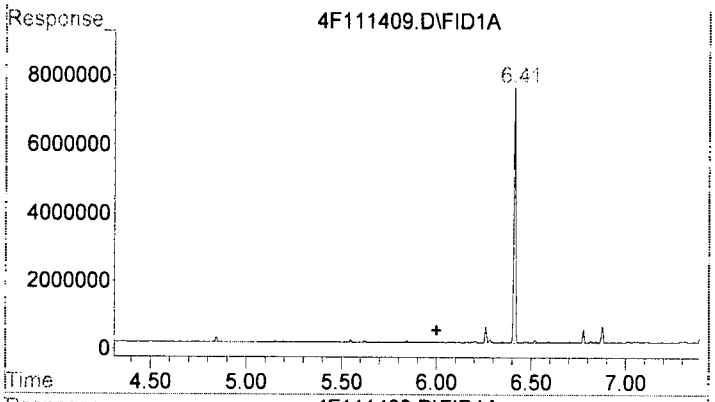
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 28992228
Conc: 26.71 ug/mL m



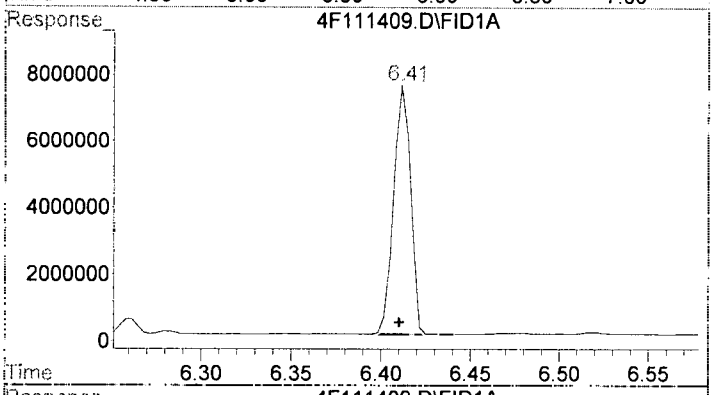
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 33070023
Conc: 34.12 ug/ml m



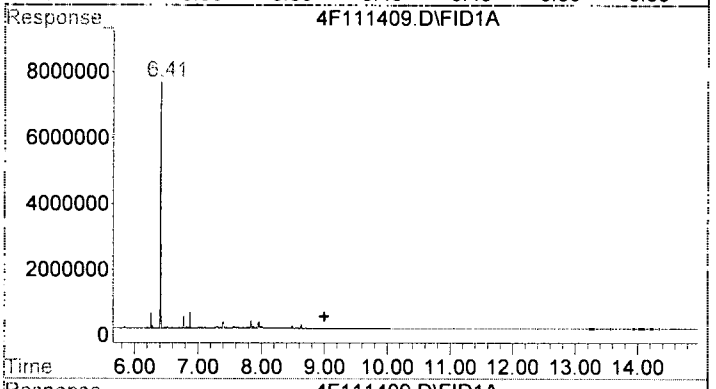
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 24408639
Conc: 31.85 ug/ml m



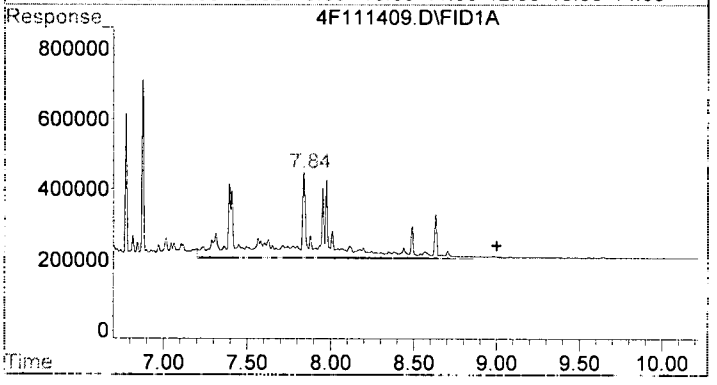
#6 o-Terphenyl

R.T.: 6.413 min
Delta R.T.: 0.003 min
Response: 49434139
Conc: 39.96 ug/mL



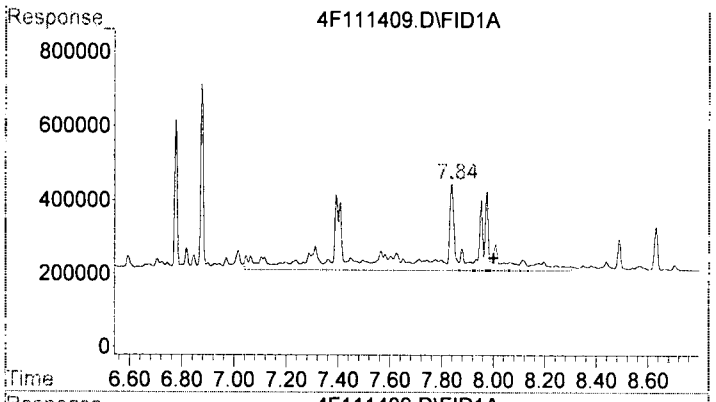
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 56171965
Conc: 52.54 ug/mL m



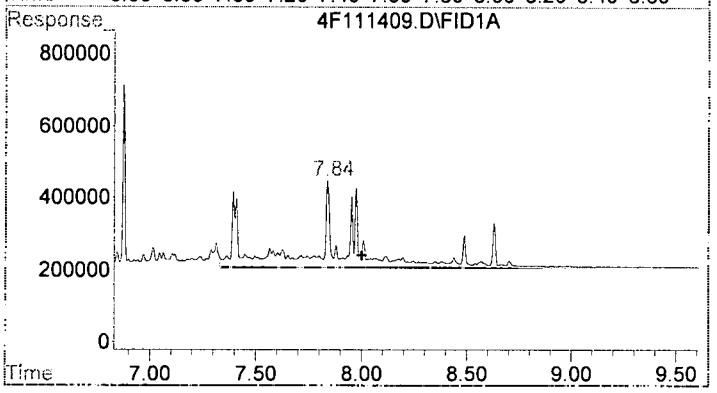
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 31713868
Conc: 29.67 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	25804659
Conc:	37.72 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	27971590
Conc:	41.22 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111411.D Vial: 7
Acq On : 14 Nov 2019 20:58 Operator: BLL
Sample : A9K0332-05 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	44383327	35.875 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	19951927	18.382 ug/mL
2)	H	Diesel	6.00	19951927	18.382 ug/mL
3)	H	DRO(C12-C24)	6.00	7777913	7.166 ug/mL
4)	H	TPHd (C10-C25)	6.00	10794516	11.139 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	6417539	8.375 ug/ml
7)	H	Oil	9.00	18215915	17.040 ug/mL
8)	H	RRO (C24-C40)	9.00	10670411	9.981 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	8066189	11.790 ug/mL
10)	H	TPHmo (C25-C36)	8.00	9143460	13.474 ug/mL

< FL

AA 11.15.19

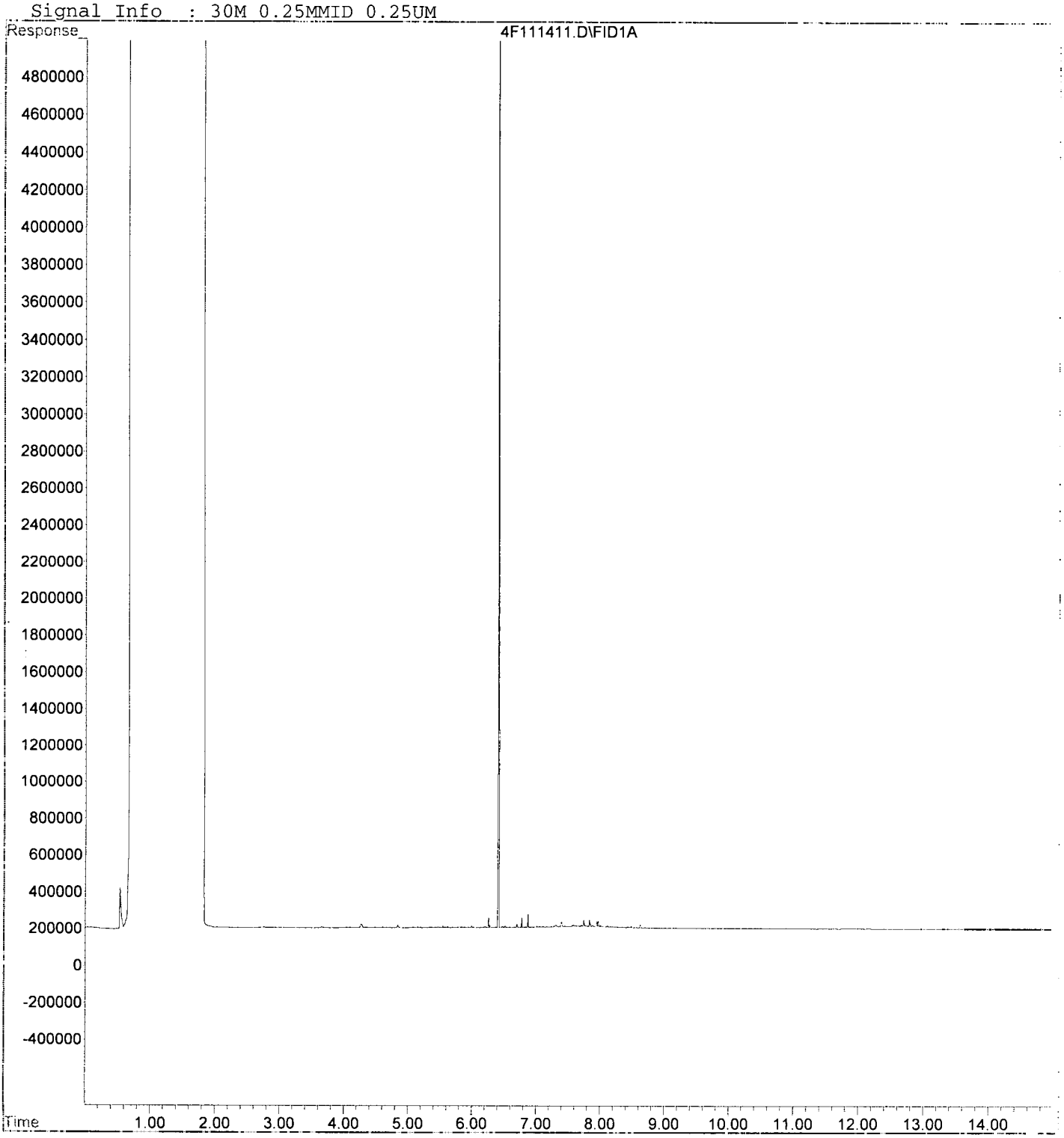
✓

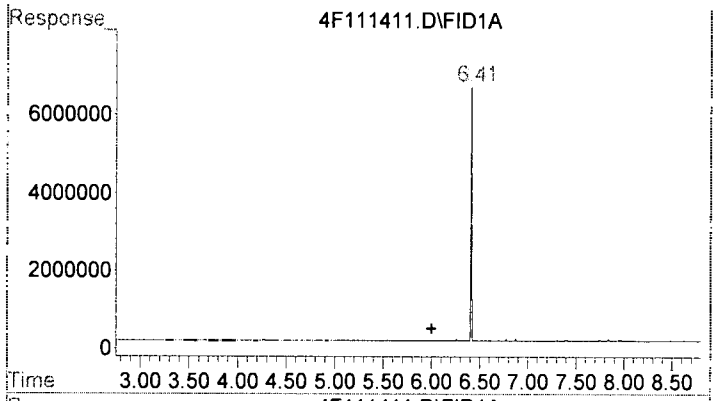
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111411.D Vial: 7
Acq On : 14 Nov 2019 20:58 Operator: BLL
Sample : A9K0332-05 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

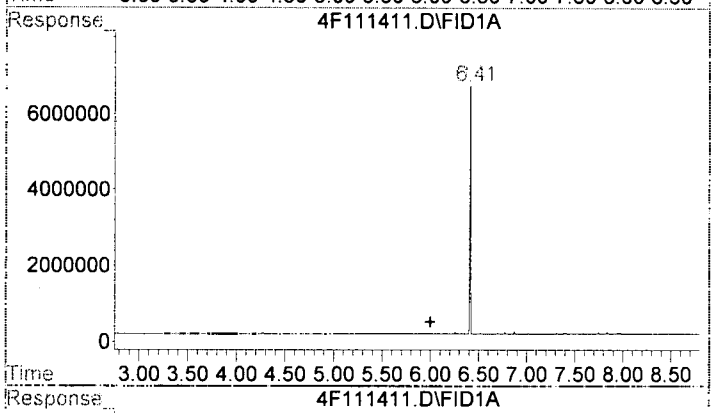
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





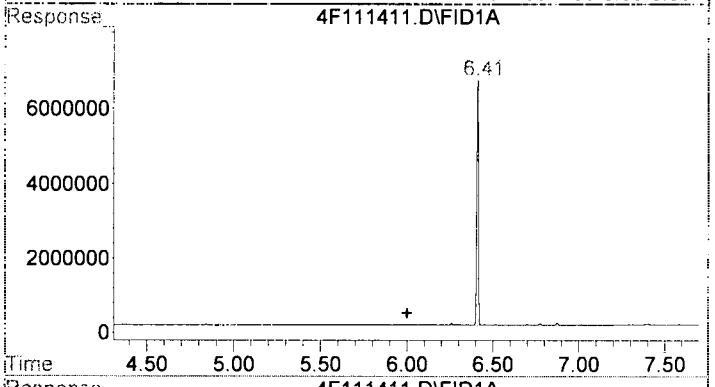
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 19951927
Conc: 18.38 ug/mL m



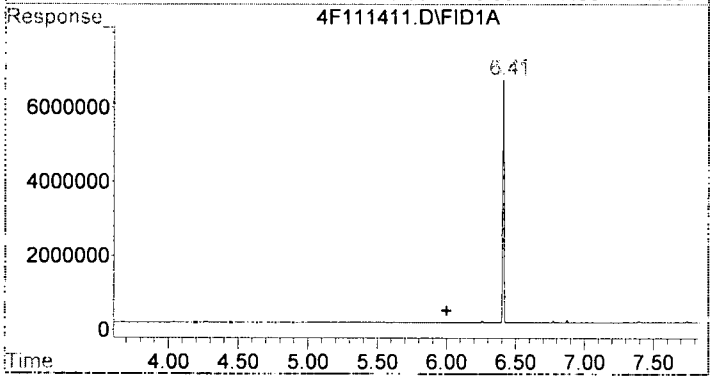
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 19951927
Conc: 18.38 ug/mL m



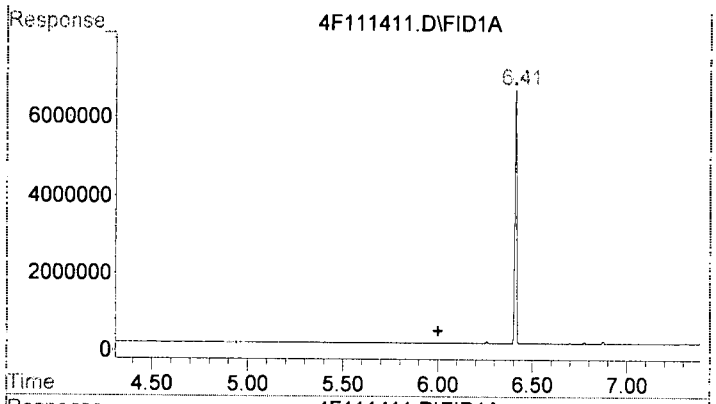
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 7777913
Conc: 7.17 ug/mL m



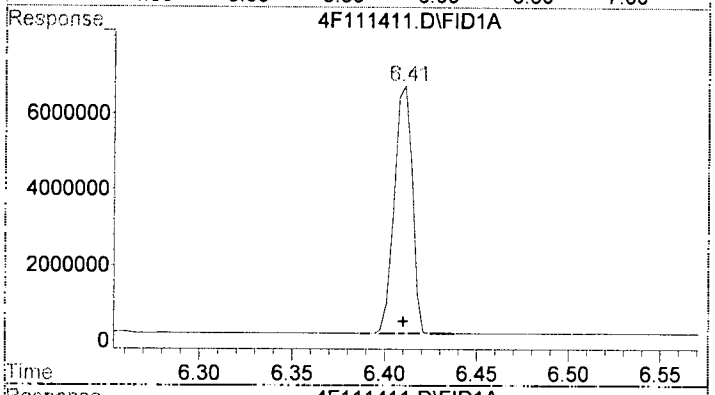
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 10794516
Conc: 11.14 ug/ml m



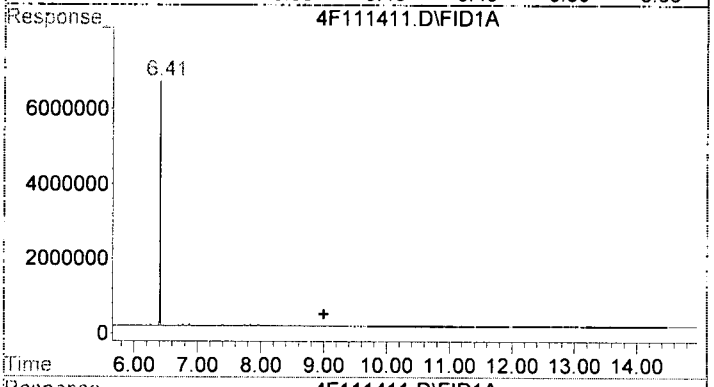
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 6417539
Conc: 8.38 ug/ml m



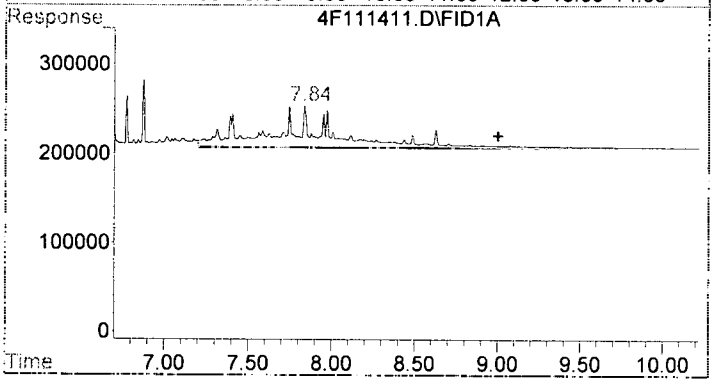
#6 o-Terphenyl

R.T.: 6.411 min
Delta R.T.: 0.000 min
Response: 44383327
Conc: 35.88 ug/mL



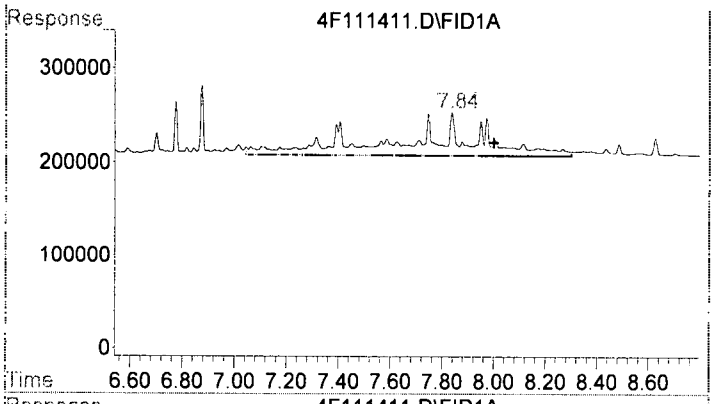
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 18215915
Conc: 17.04 ug/mL m



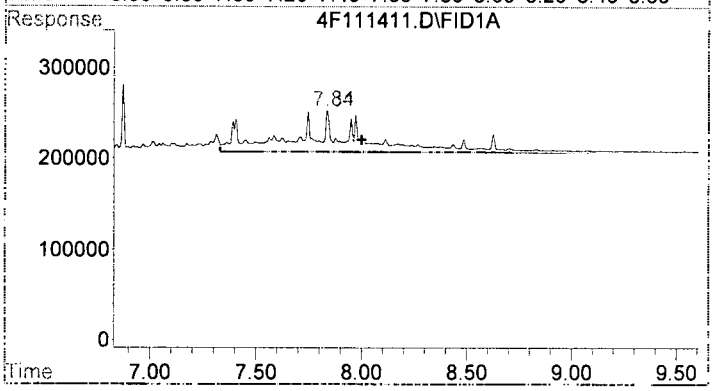
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 10670411
Conc: 9.98 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	8066189
Conc:	11.79 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	9143460
Conc:	13.47 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111412.D Vial: 8
Acq On : 14 Nov 2019 21:20 Operator: BLL
Sample : A9K0332-06 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	50089766	40.488 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	87755008	80.848 ug/mL
2)	H	Diesel	~~6.00~~	~~87755008~~	~~80.848 ug/mL~~
3)	H	DRO(C12-C24)	6.00	22513899	20.742 ug/mL
4)	H	TPHd (C10-C25)	6.00	29257068	30.190 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	14669897	~~19.145 ug/ml~~
7)	H	Oil	9.00	116034336	108.542 ug/mL
8)	H	RRO (C24-C40)	9.00	84370823	~~78.923 ug/mL~~
9)	H	CA LUFT ORO (C23-C32)	8.00	61652480	90.113 ug/mL
10)	H	TPHmo (C25-C36)	8.00	70112640	103.322 ug/mL

Q - Del

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(f)=RT Delta > 1/2 window (m)=Manual Int.

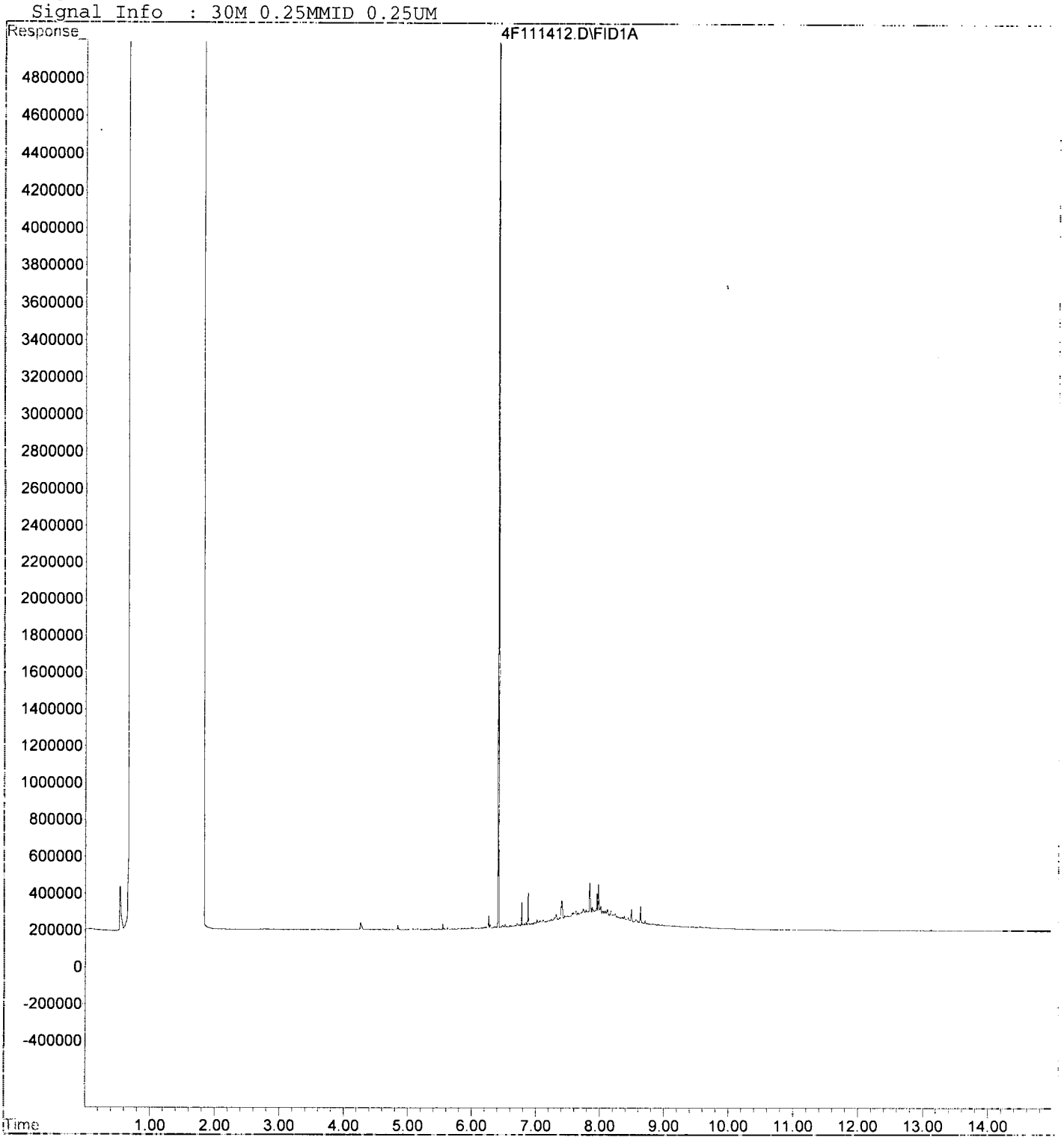
4F111412.D 4F91113D.M Fri Nov 15 05:16:26 2019 SV-GCMS3 Page 1

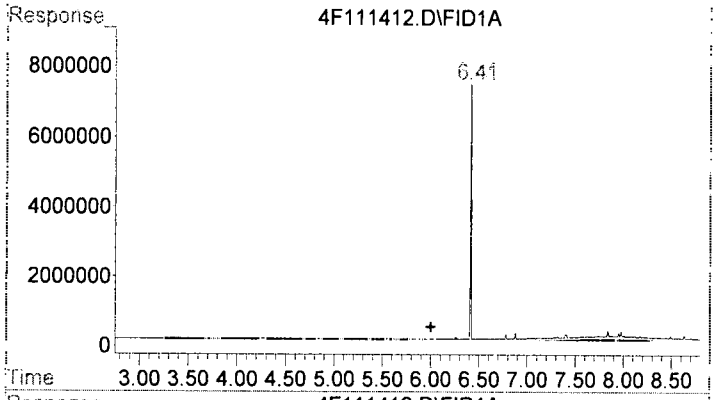
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111412.D Vial: 8
Acq On : 14 Nov 2019 21:20 Operator: BLL
Sample : A9K0332-06 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

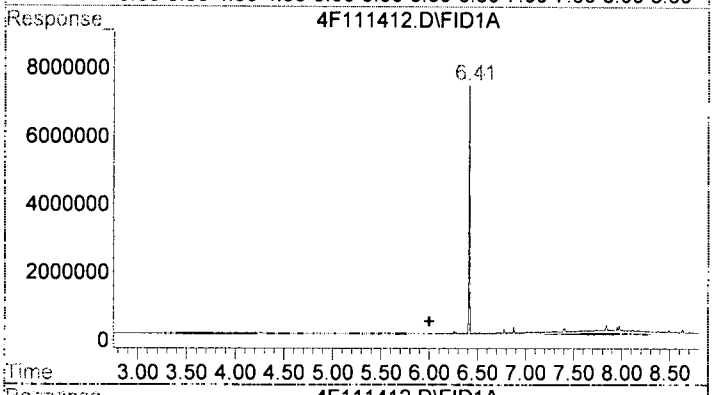
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





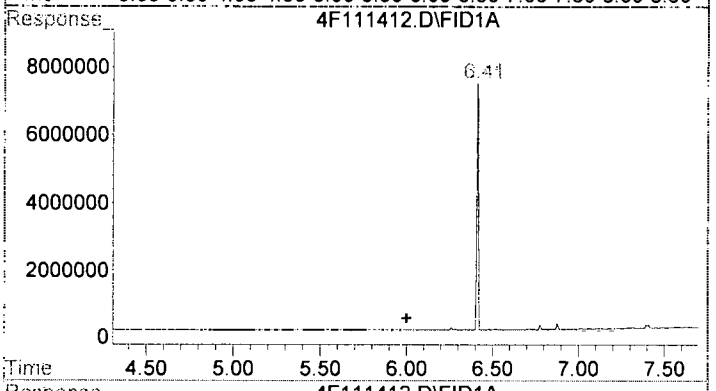
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 87755008
Conc: 80.85 ug/mL m



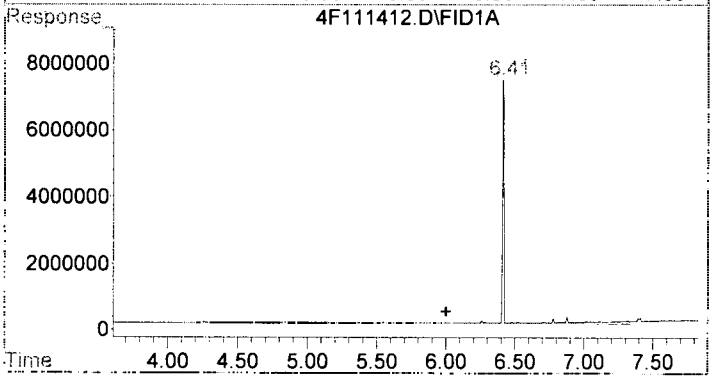
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 87755008
Conc: 80.85 ug/mL m



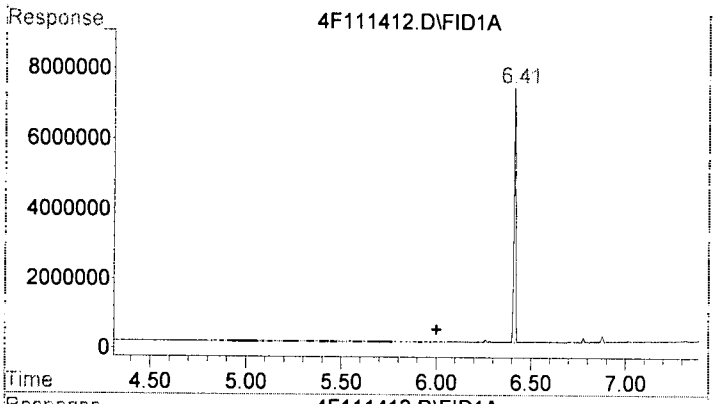
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 22513899
Conc: 20.74 ug/mL m



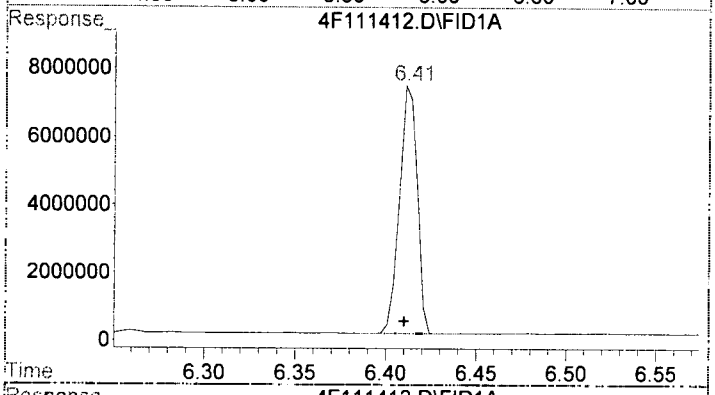
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 29257068
Conc: 30.19 ug/ml m



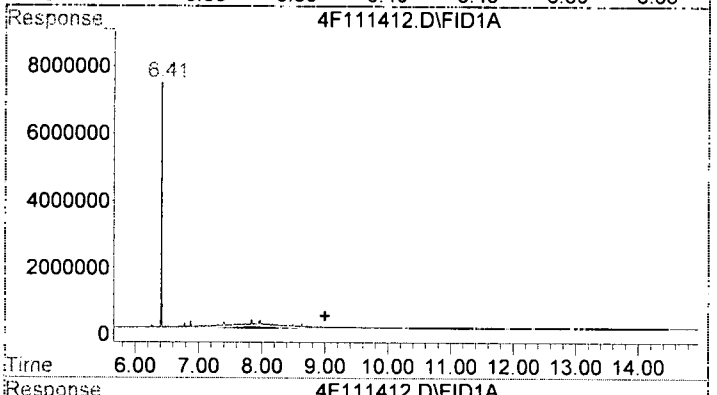
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 14669897
Conc: 19.14 ug/ml m



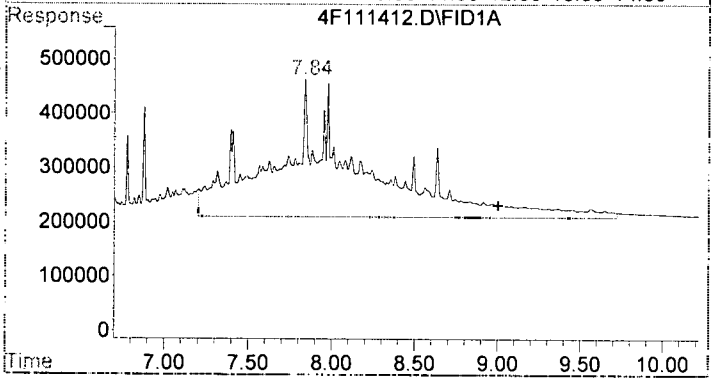
#6 o-Terphenyl

R.T.: 6.413 min
Delta R.T.: 0.003 min
Response: 50089766
Conc: 40.49 ug/mL



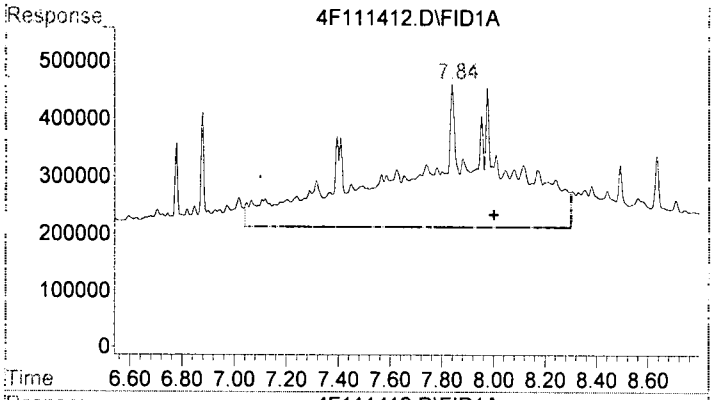
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 116034336
Conc: 108.54 ug/mL m



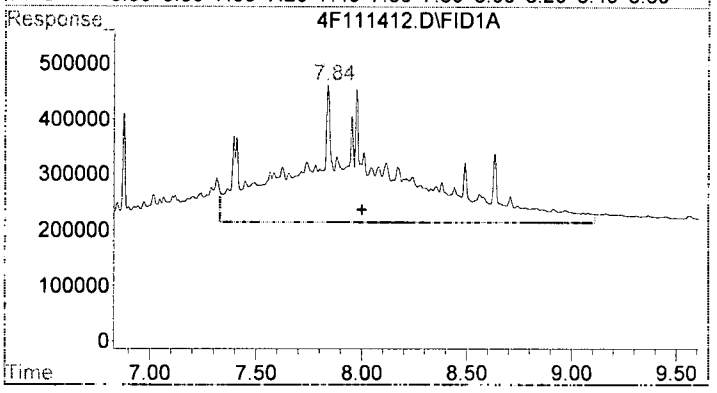
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 84370823
Conc: 78.92 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 61652480
Conc: 90.11 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 70112640
Conc: 103.32 ug/mL m

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111413.D Vial: 9
Acq On : 14 Nov 2019 21:41 Operator: BLL
Sample : A9K0332-07@100 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	185143614	170.572	ug/mL
2)	H	Diesel	6.00	185143614	170.572	ug/mL
3)	H	DRO(C12-C24)	6.00	134975813	124.352	ug/mL
4)	H	TPHd (C10-C25)	6.00	143417078	147.989	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	124415507	162.368	ug/ml
7)	H	Oil	9.00	133704812	125.071	ug/mL
8)	H	RRO (C24-C40)	9.00	55684139	52.088	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	48679606	71.152	ug/mL
10)	H	TPHmo (C25-C36)	8.00	49319314	72.680	ug/mL

5.01

F.17

Report DRO/RRO

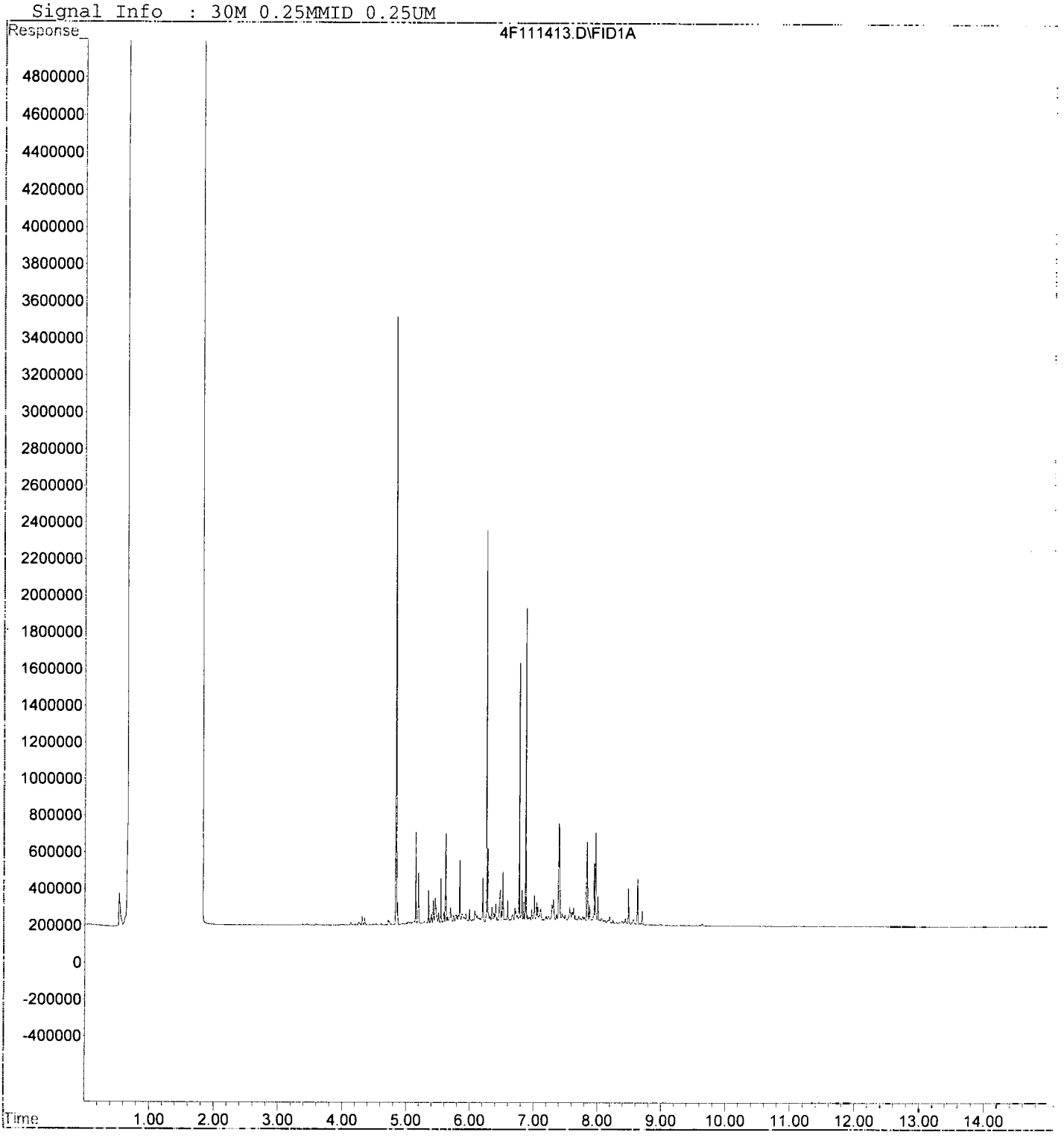
RL 11.15.19

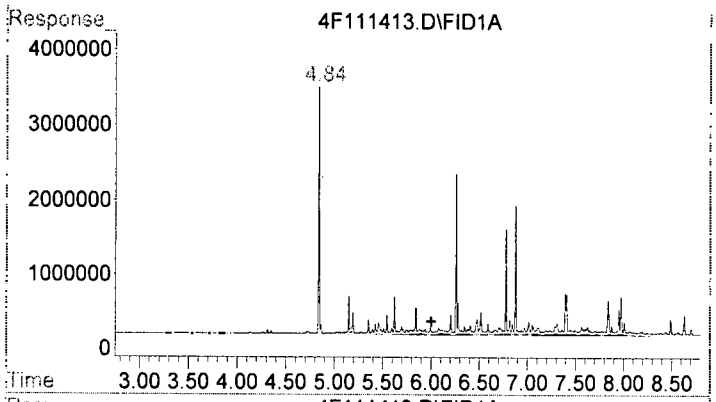
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111413.D Vial: 9
Acq On : 14 Nov 2019 21:41 Operator: BLL
Sample : A9K0332-07@100 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

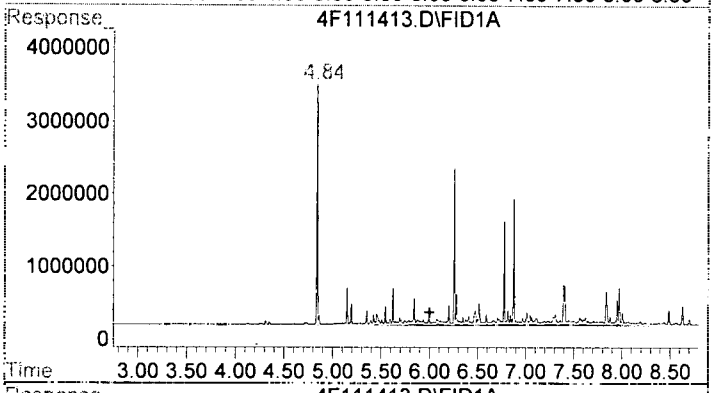
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





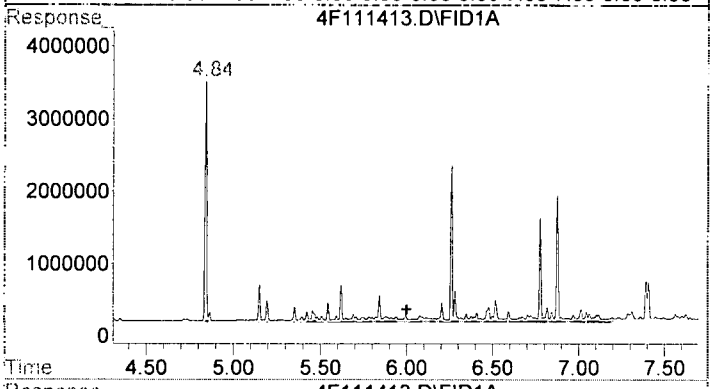
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 185143614
Conc: 170.57 ug/mL m



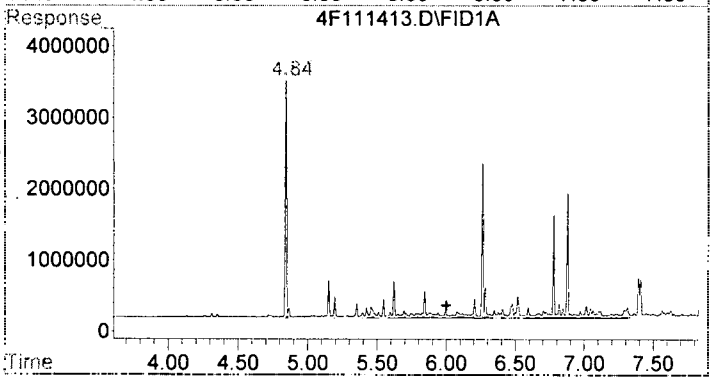
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 185143614
Conc: 170.57 ug/mL m



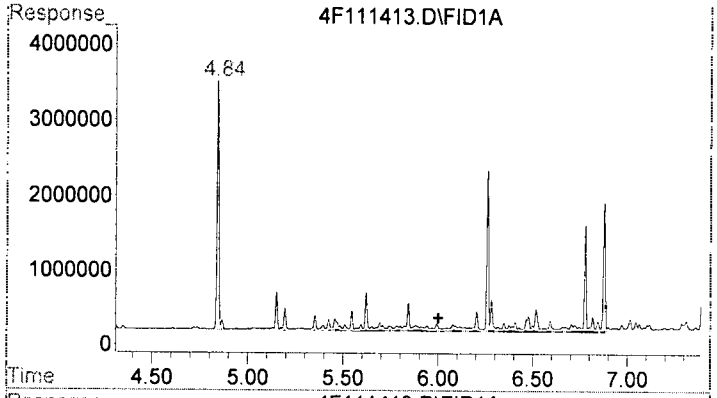
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 134975813
Conc: 124.35 ug/mL m



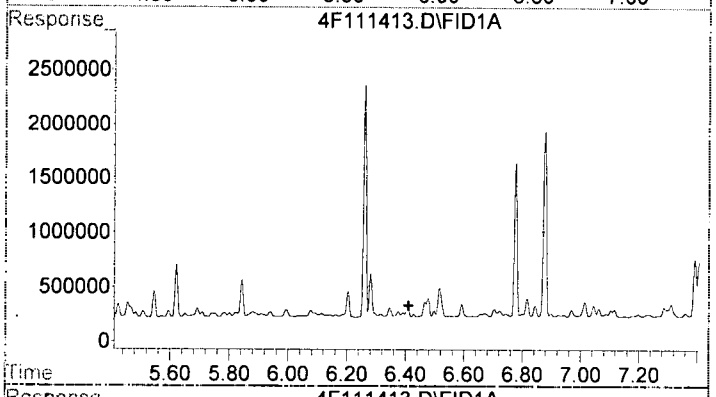
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 143417078
Conc: 147.99 ug/ml m



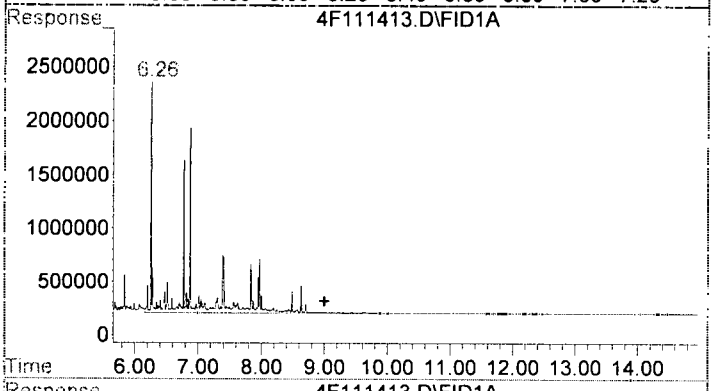
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 124415507
Conc: 162.37 ug/ml m



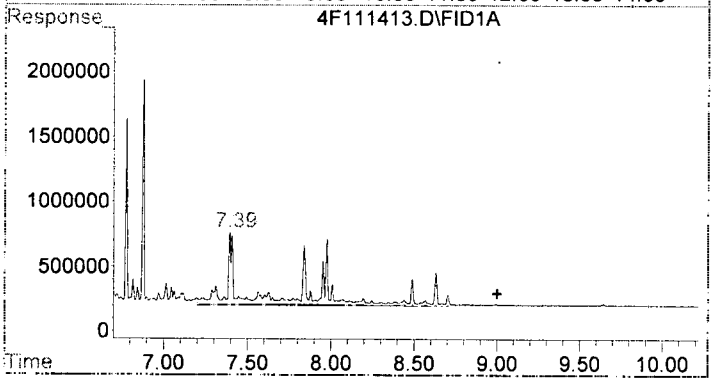
#6 o-Terphenyl

R.T.: 0.000 min
Exp R.T. : 6.410 min
Response: 0
Conc: N.D.



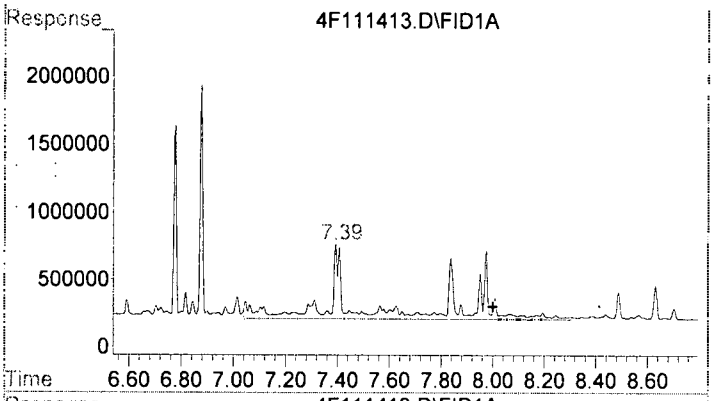
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 133704812
Conc: 125.07 ug/mL m



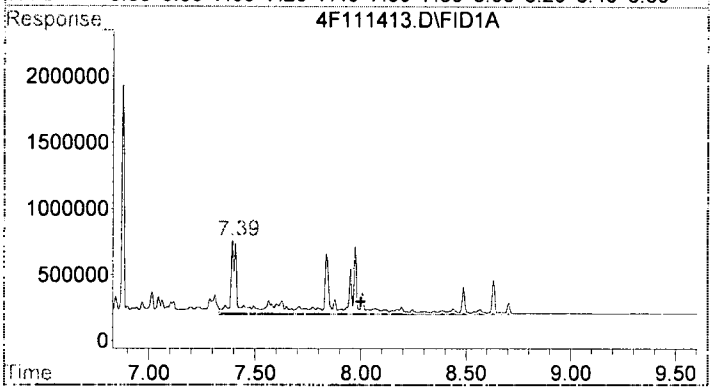
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 55684139
Conc: 52.09 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	48679606
Conc:	71.15 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	49319314
Conc:	72.68 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111415.D Vial: 10
Acq On : 14 Nov 2019 22:24 Operator: BLL
Sample : A9K0332-08 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	57275982	46.296	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	11515881	10.610	ug/mL
2)	H	Diesel	6.00	11515881	10.610	ug/mL
3)	H	DRO(C12-C24)	6.00	6248147	5.756	ug/mL
4)	H	TPHd (C10-C25)	6.00	7382143	7.617	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	5398962	7.046	ug/ml
7)	H	Oil	9.00	9672092	9.048	ug/mL
8)	H	RRO (C24-C40)	9.00	5610962	5.249	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	4252973	6.216	ug/mL
10)	H	TPHmo (C25-C36)	8.00	4563969	6.726	ug/mL

< RL

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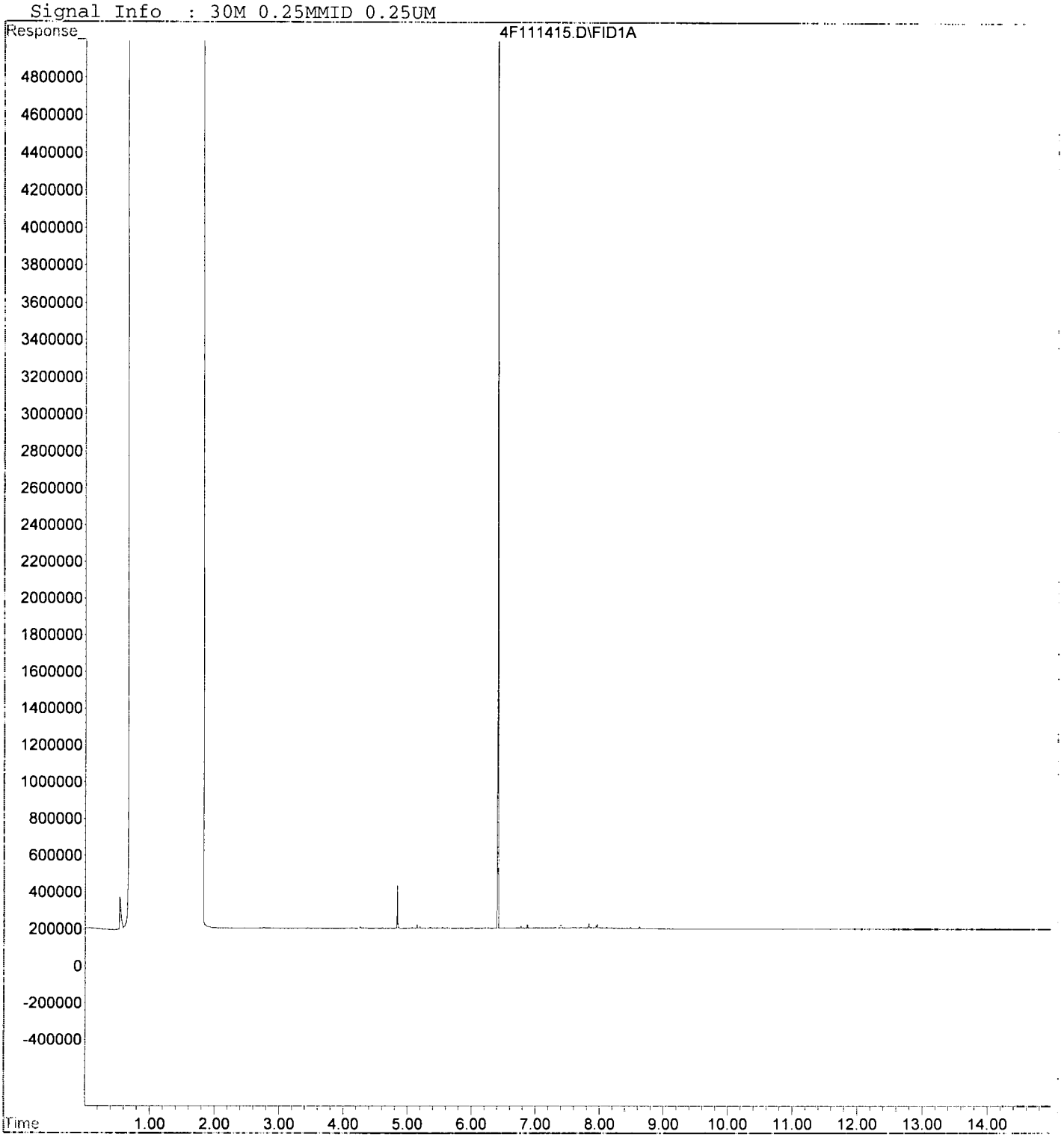
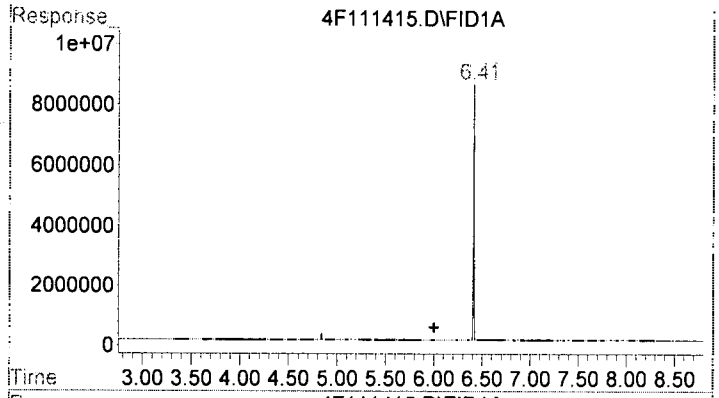
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111415.D Vial: 10
Acq On : 14 Nov 2019 22:24 Operator: BLL
Sample : A9K0332-08 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

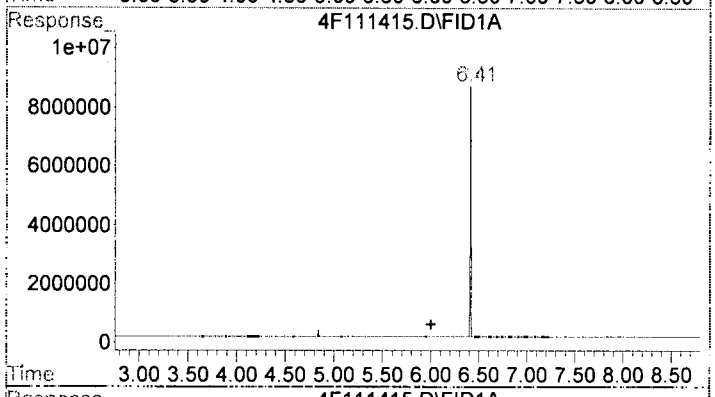
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





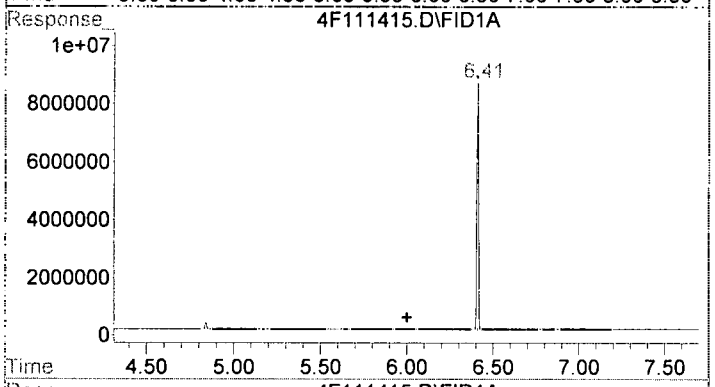
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 11515881
Conc: 10.61 ug/mL m



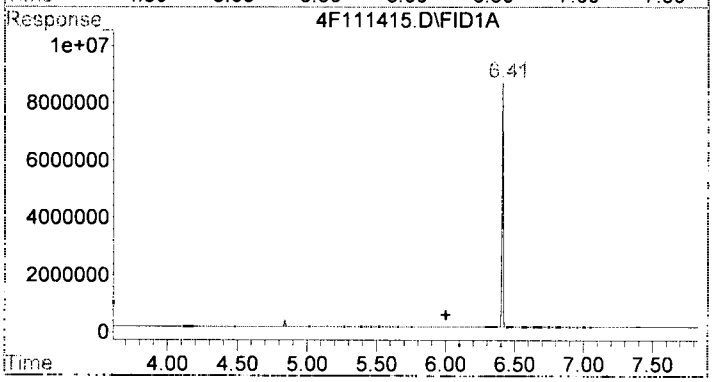
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 11515881
Conc: 10.61 ug/mL m



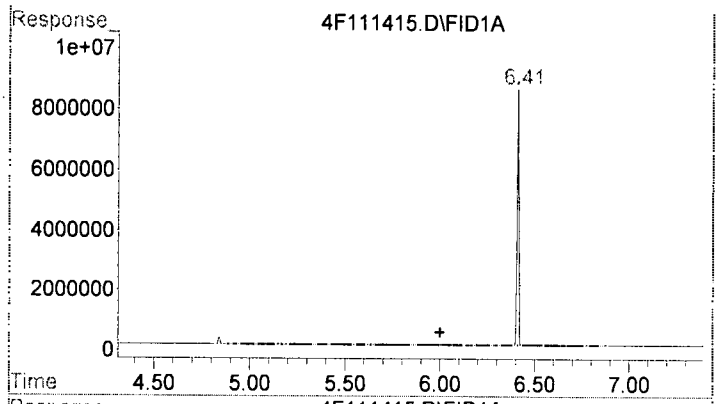
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 6248147
Conc: 5.76 ug/mL m



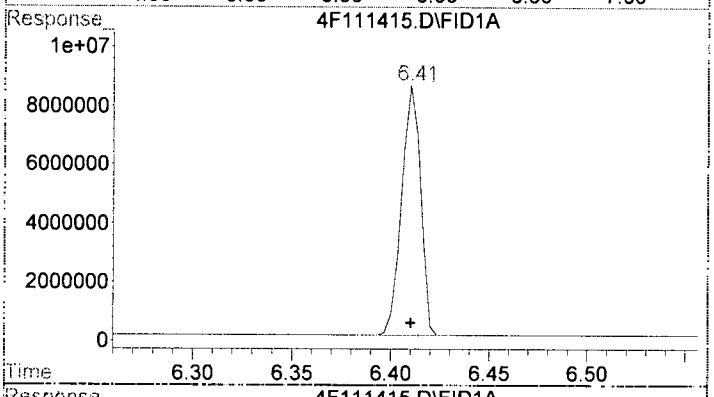
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 7382143
Conc: 7.62 ug/ml m



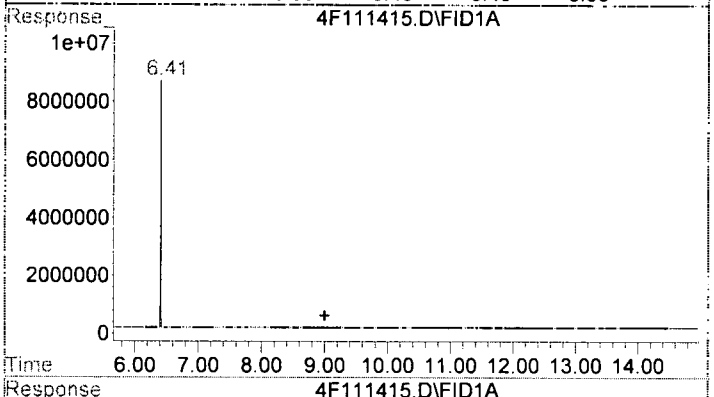
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 5398962
Conc: 7.05 ug/ml m



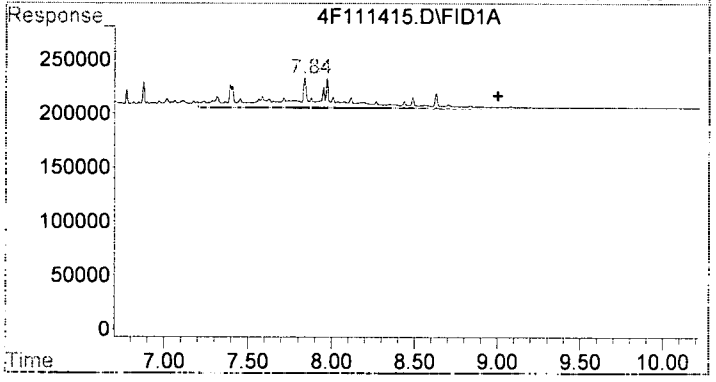
#6 o-Terphenyl

R.T.: 6.411 min
Delta R.T.: 0.001 min
Response: 57275982
Conc: 46.30 ug/mL



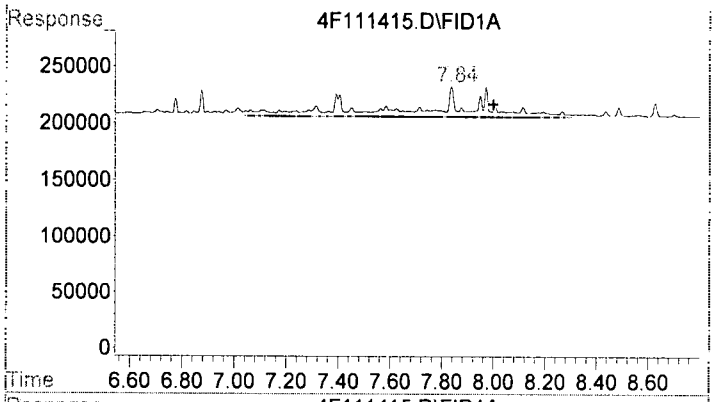
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 9672092
Conc: 9.05 ug/mL m



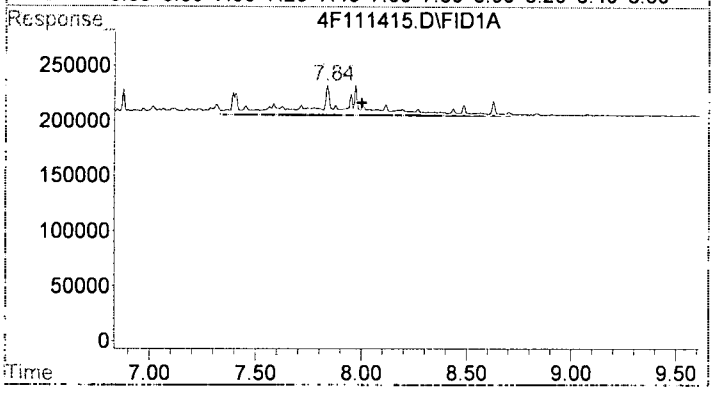
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 5610962
Conc: 5.25 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	4252973
Conc:	6.22 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	4563969
Conc:	6.73 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111416.D Vial: 11
Acq On : 14 Nov 2019 22:46 Operator: BLL
Sample : A9K0332-09 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	53130543	42.945 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	18538895	17.080 ug/mL
2)	H	Diesel	6.00	18538895	17.080 ug/mL
3)	H	DRO(C12-C24)	6.00	7638134	7.037 ug/mL
4)	H	TPHd (C10-C25)	6.00	9390590	9.690 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	5698312	7.437 ug/ml
7)	H	Oil	9.00	20982224	19.627 ug/mL
8)	H	RRO (C24-C40)	9.00	12920322	12.086 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	9366974	13.691 ug/mL
10)	H	TPHmo (C25-C36)	8.00	10777517	15.882 ug/mL

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(f)=RT Delta > 1/2 window (m)=Manual Int.

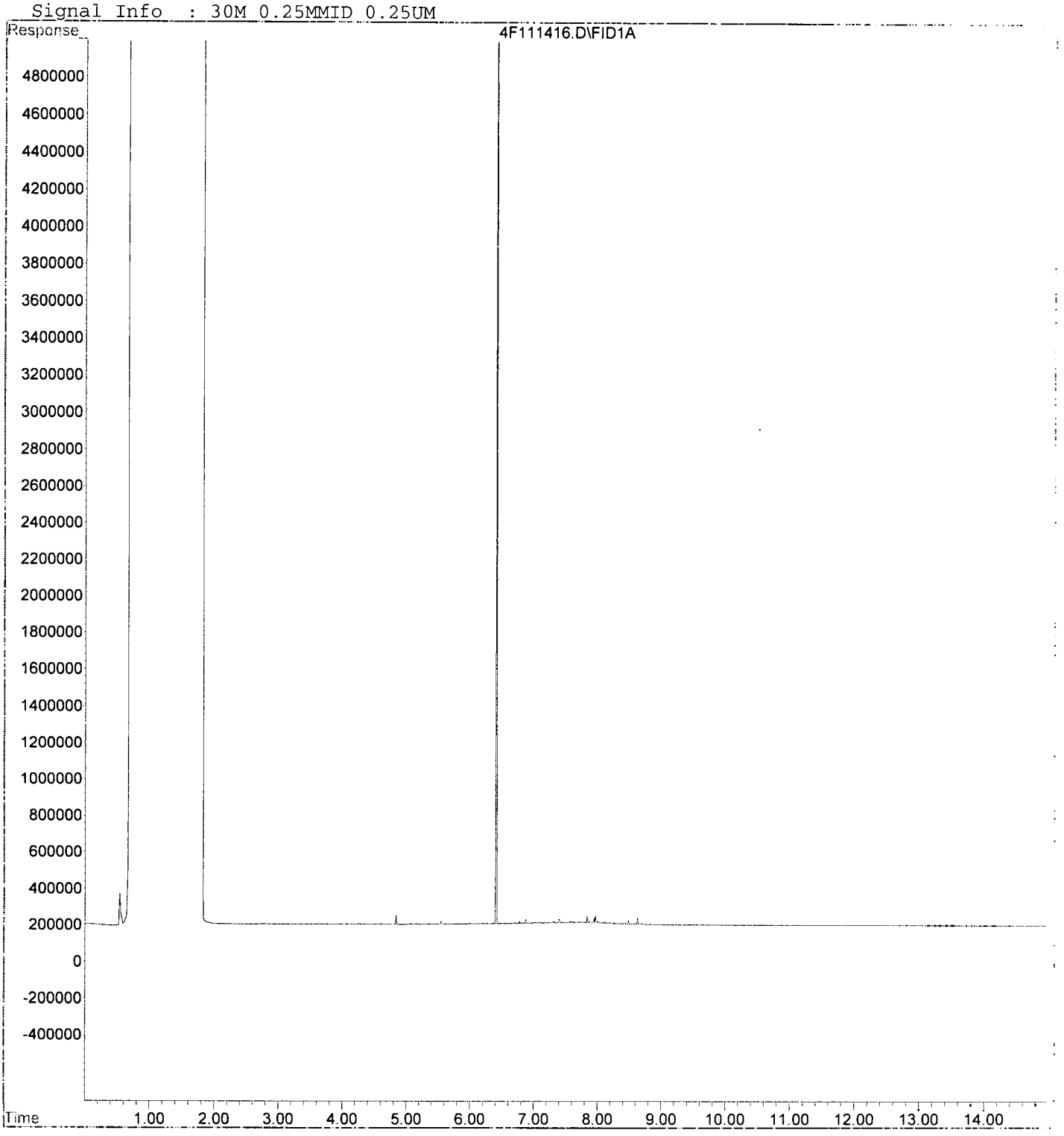
4F111416.D 4F91113D.M Fri Nov 15 05:16:36 2019 SV-GCMS3 Page 1

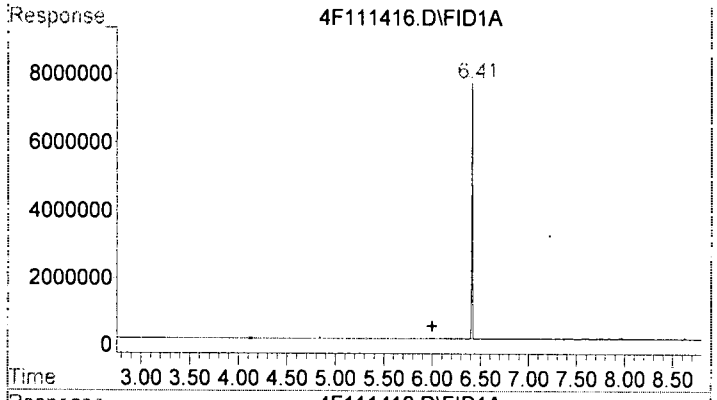
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111416.D Vial: 11
Acq On : 14 Nov 2019 22:46 Operator: BLL
Sample : A9K0332-09 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

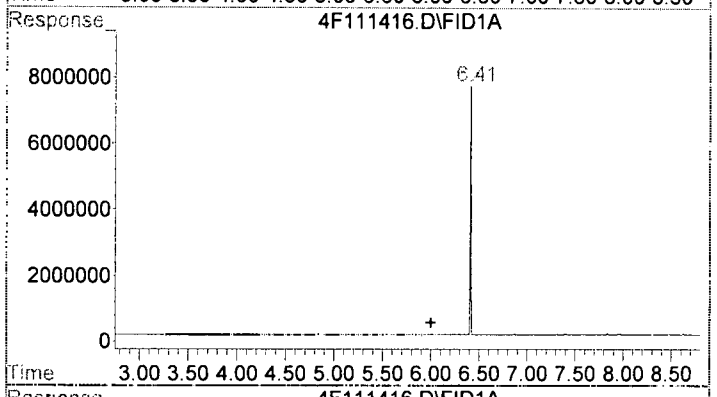
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





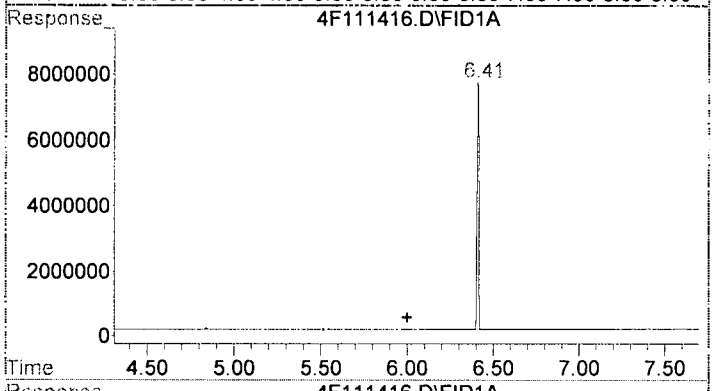
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 18538895
Conc: 17.08 ug/mL m



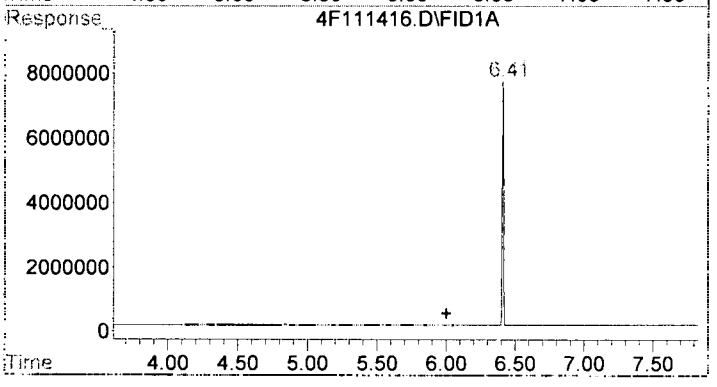
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 18538895
Conc: 17.08 ug/mL m



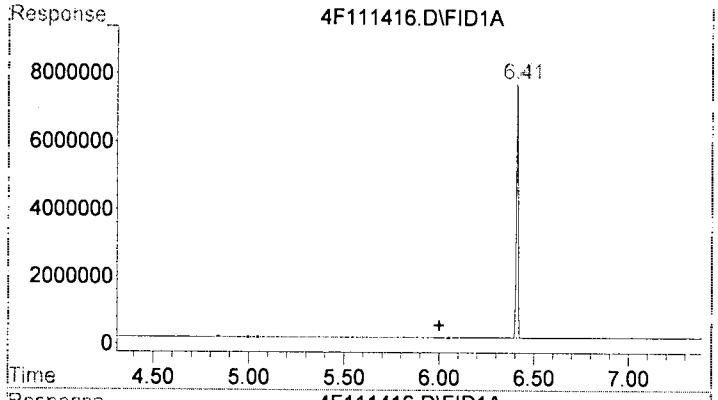
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 7638134
Conc: 7.04 ug/mL m



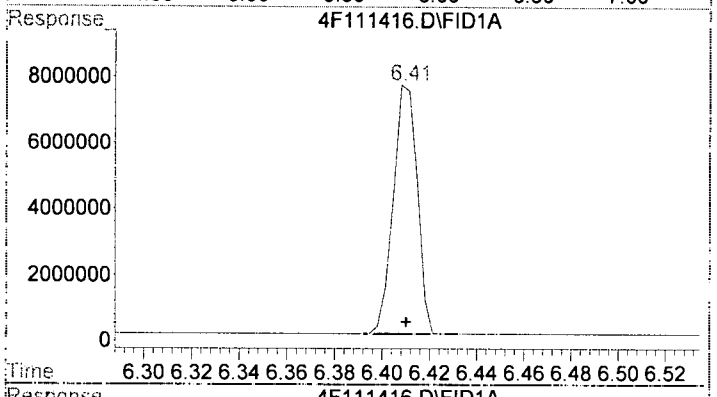
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 9390590
Conc: 9.69 ug/ml m



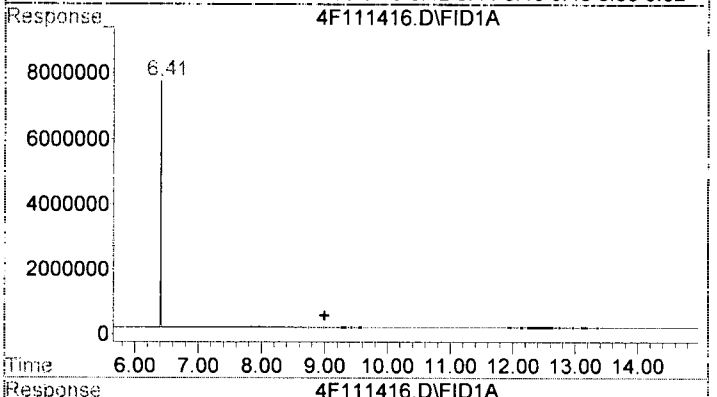
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 5698312
Conc: 7.44 ug/ml m



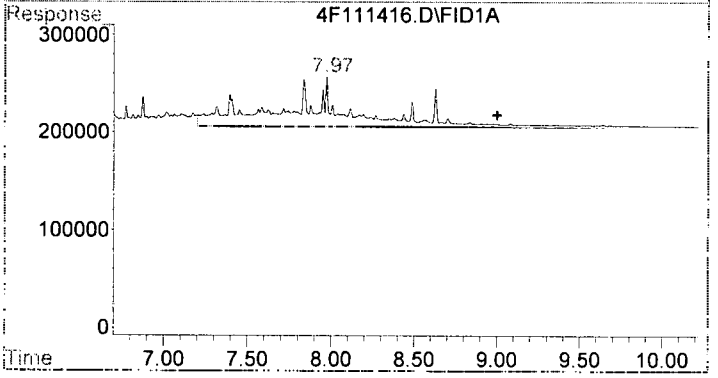
#6 o-Terphenyl

R.T.: 6.411 min
Delta R.T.: 0.000 min
Response: 53130543
Conc: 42.95 ug/mL



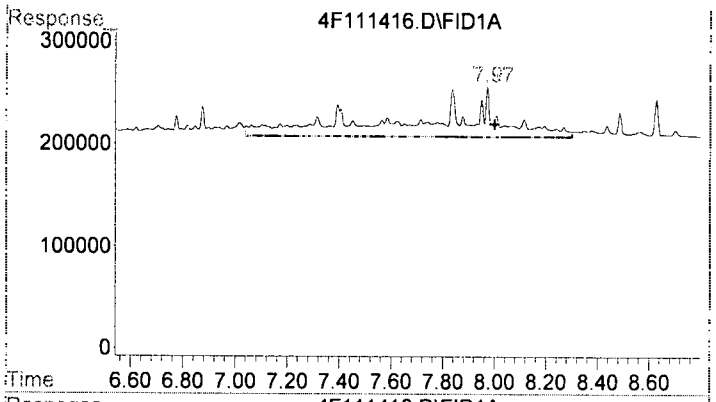
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 20982224
Conc: 19.63 ug/mL m



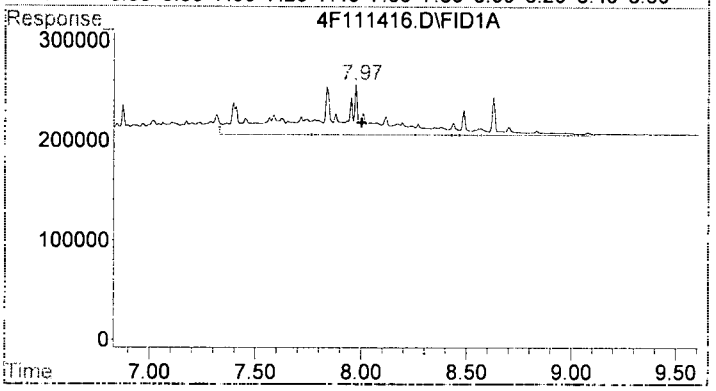
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 12920322
Conc: 12.09 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	9366974
Conc:	13.69 ug/mL m



#10 TPHmo (C25-C36)

R.T.:	8.000 min
Delta R.T.:	0.000 min
Response:	10777517
Conc:	15.88 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111417.D Vial: 12
Acq On : 14 Nov 2019 23:07 Operator: BLL
Sample : A9K0332-10 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	59120607	47.787 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	175890655	162.047 ug/mL
2)	H	Diesel	~~6.00~~	~~175890655~~	~~162.047 ug/mL~~
3)	H	DRO(C12-C24)	6.00	95282977	87.784 ug/mL
4)	H	TPHd (C10-C25)	6.00	107207189	110.625 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	73587707	96.035 ug/ml
7)	H	Oil	9.00	173583130	~~162.374 ug/mL~~
8)	H	RRO (C24-C40)	9.00	98366671	92.015 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	81402084	118.980 ug/mL
10)	H	TPHmo (C25-C36)	8.00	83580928	123.169 ug/mL

Q-Del

201.884

F-03

See Manual Integration of Oil.

AM 11.15.19

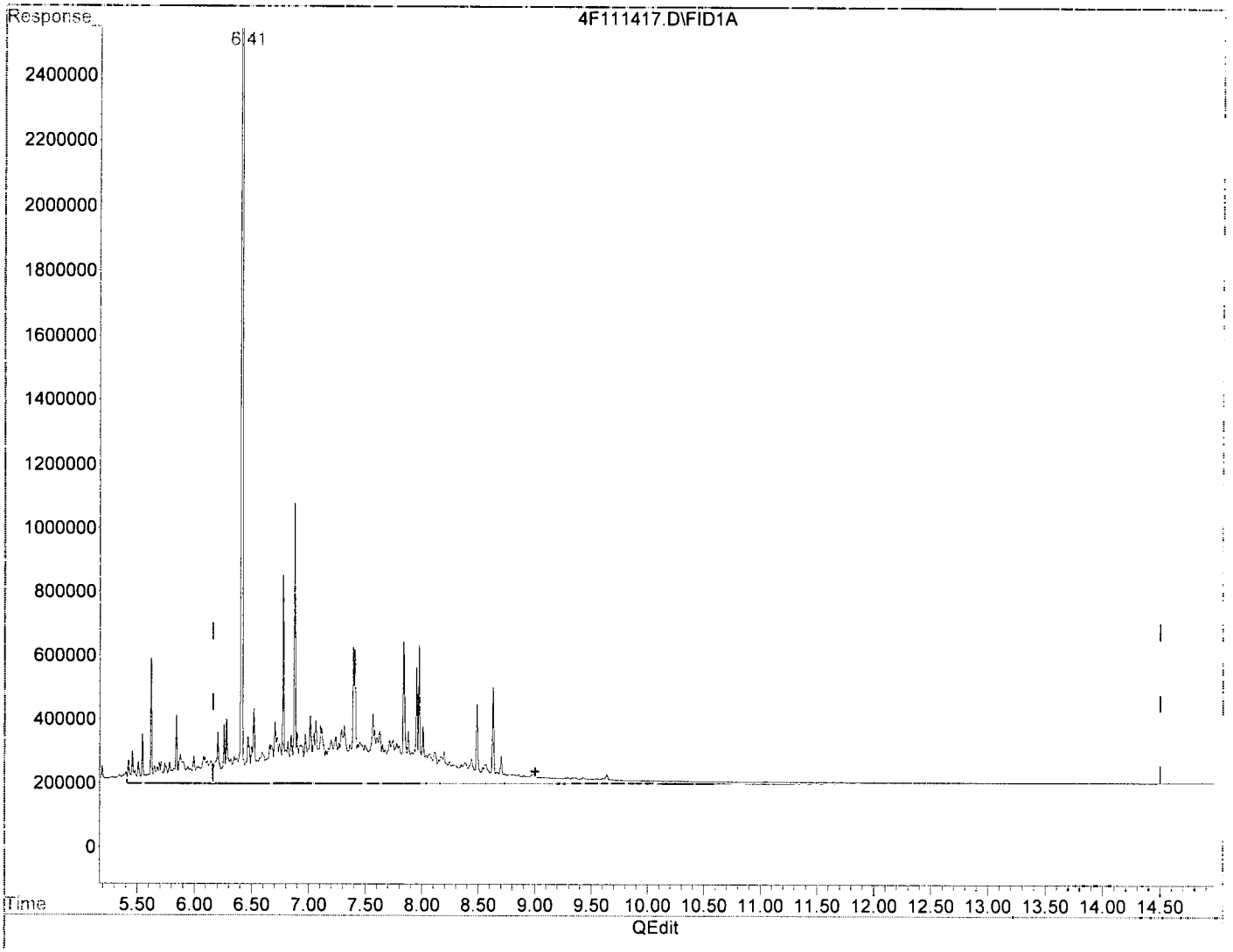
(f)=RT Delta > 1/2 Window (m)=Manual Integ

4F111417.D 4F91113D.M Fri Nov 15 05:16:39 2019 SV-GCMS3 Page 1

Quantitation Report (Qedit)

Data File : G:\4\DATA\2019-11\9K14026\4F111417.D Vial: 12
Acq On : 14 Nov 2019 23:07 Operator: BLL
Sample : A9K0332-10 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 8:28 2019 Quant Results File: 4F91113D.RES

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration



(7) Oil (H)

9.00min 201.884ug/mL (m)

response 215819751

11.15.19

✓

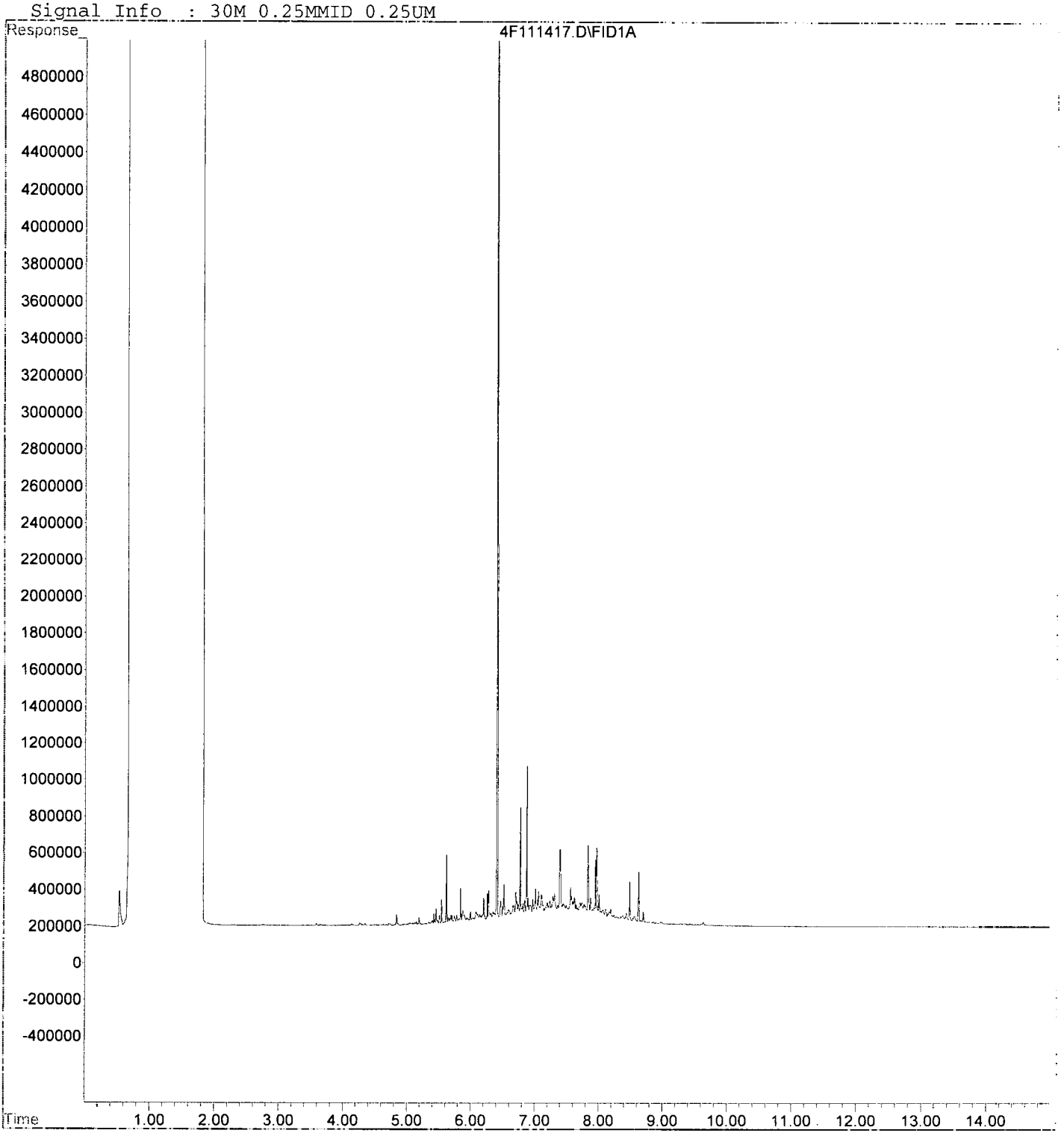
(+) = Expected Retention Time

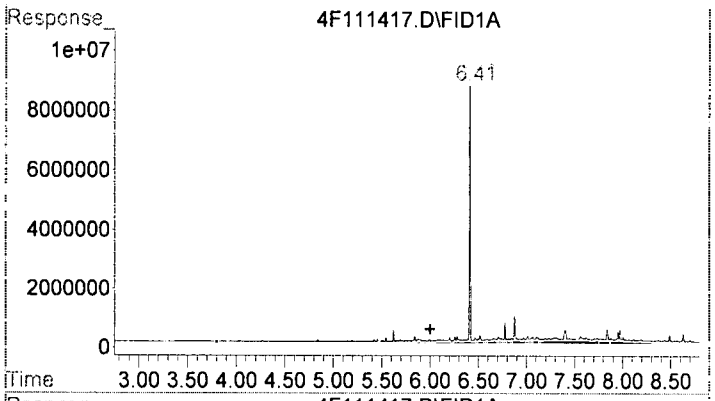
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111417.D Vial: 12
Acq On : 14 Nov 2019 23:07 Operator: BLL
Sample : A9K0332-10 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

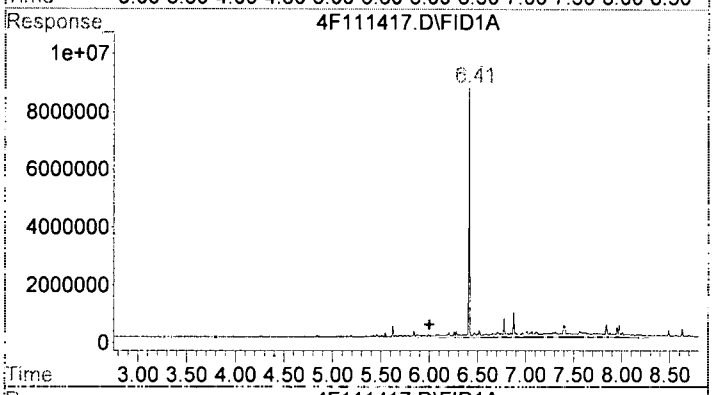
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





#1 Mineral Oil

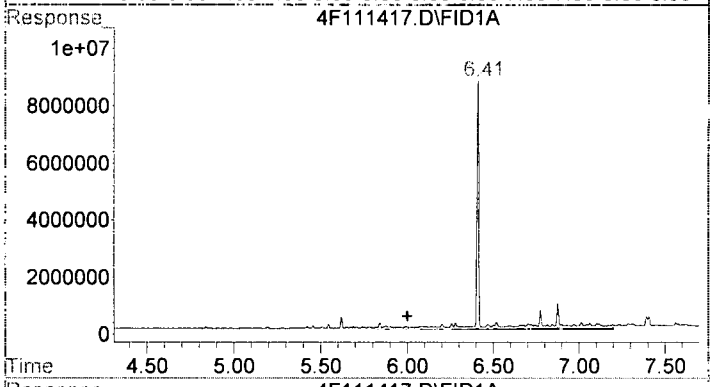
R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 175890655
Conc: 162.05 ug/mL m



#2 Diesel

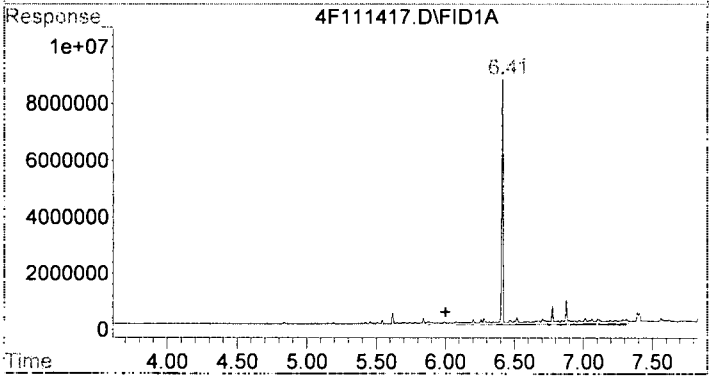
R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 175890655
Conc: 162.05 ug/mL m

AL 11.15.19



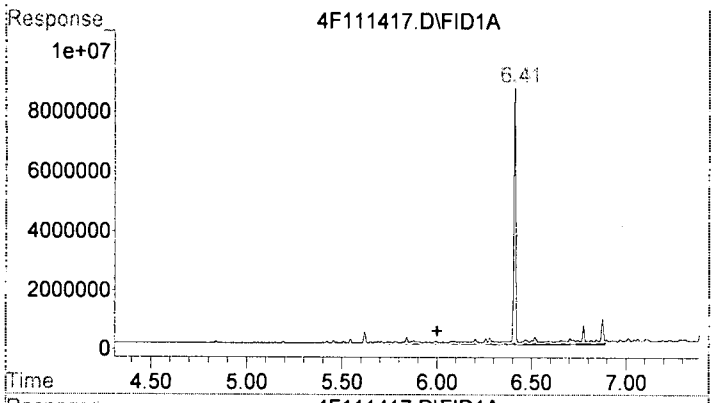
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 95282977
Conc: 87.78 ug/mL m



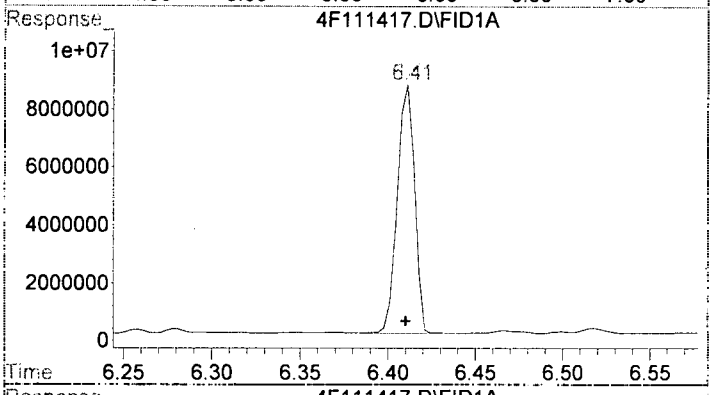
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 107207189
Conc: 110.62 ug/ml m



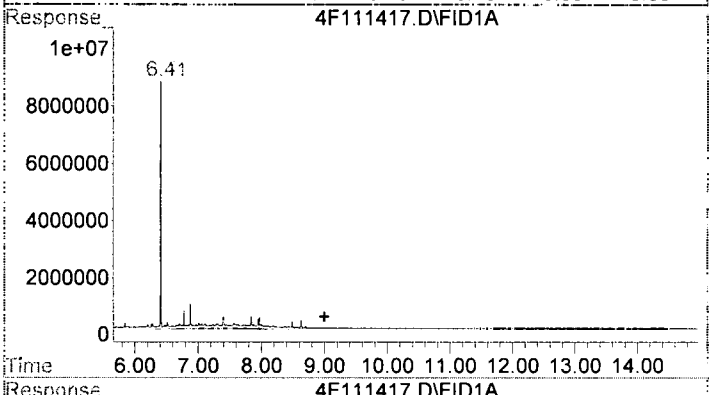
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 73587707
Conc: 96.04 ug/ml m



#6 o-Terphenyl

R.T.: 6.412 min
Delta R.T.: 0.002 min
Response: 59120607
Conc: 47.79 ug/mL



#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: ~~173583130~~ 215819751
Conc: ~~162.37 ug/mL m~~ 201.884

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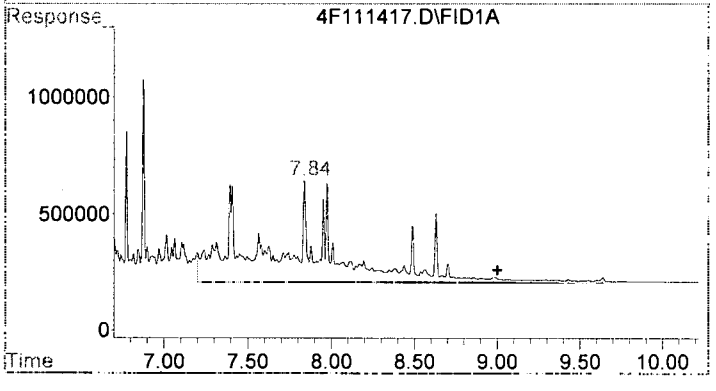
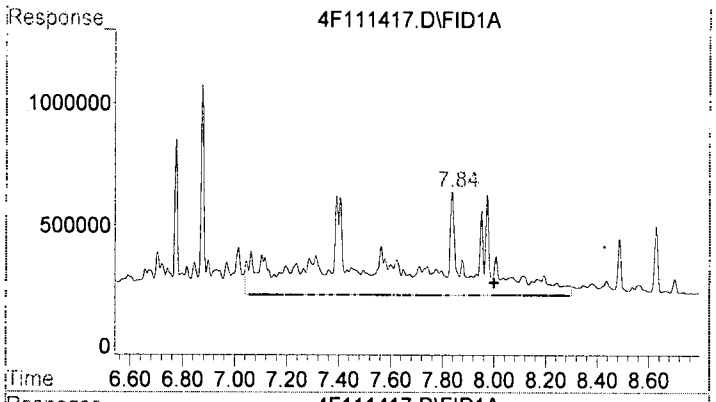
11.15.19



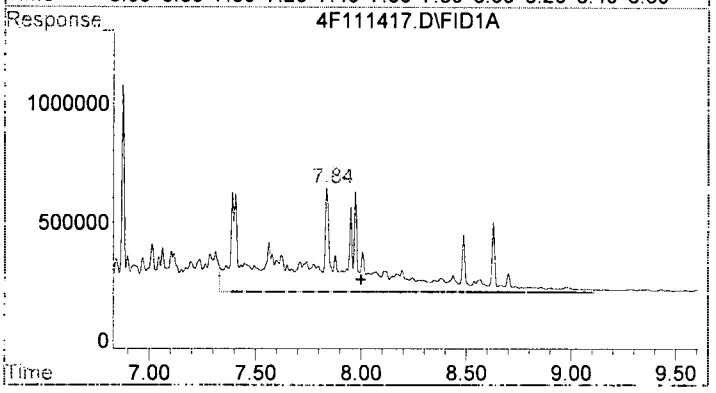
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 98366671
Conc: 92.01 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 81402084
Conc: 118.98 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 83580928
Conc: 123.17 ug/mL m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K14026\4F111422.D Vial: 15
Acq On : 15 Nov 2019 00:55 Operator: BLL
Sample : 9K14026-CCV3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	997.405	0.3	99	0.00
2	H	Diesel	1000.000	997.405	0.3	99	0.00
3	H	DRO(C12-C24)	1000.000	774.358	22.6#	77	0.00
4	H	TPHd (C10-C25)	1000.000	1033.871	-3.4	99	0.00
5	H	CA LUFT DRO (C12-C22)	1000.000	1047.879	-4.8	99	0.00
6	S	o-Terphenyl	-1.000	51.332	0.0	0	0.00
7	H	Oil	-1.000	263.288	0.0	101	0.00
8	H	RRO (C24-C40)	-1.000	19.282	0.0	7	0.00
9	H	CA LUFT ORO (C23-C32)	-1.000	46.141	0.0	107	0.00
10	H	TPHmo (C25-C36)	-1.000	19.697	0.0	115	0.00

RA 11.15.19

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111422.D Vial: 15
Acq On : 15 Nov 2019 00:55 Operator: BLL
Sample : 9K14026-CCV3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	63505956	51.332	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	1082612042	997.405	ug/mL
2)	H	Diesel	6.00	1082612042	997.405	ug/mL
3)	H	DRO(C12-C24)	6.00	840511207	774.358	ug/mL
4)	H	TPHd (C10-C25)	6.00	1001930148	1033.871	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	802943338	1047.879	ug/ml
7)	H	Oil	9.00	281463079	263.288	ug/mL
8)	H	RRO (C24-C40)	9.00	20613153	19.282	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	31567940	46.141	ug/mL
10)	H	TPHmo (C25-C36)	8.00	13365894	19.697	ug/mL

11.15.19

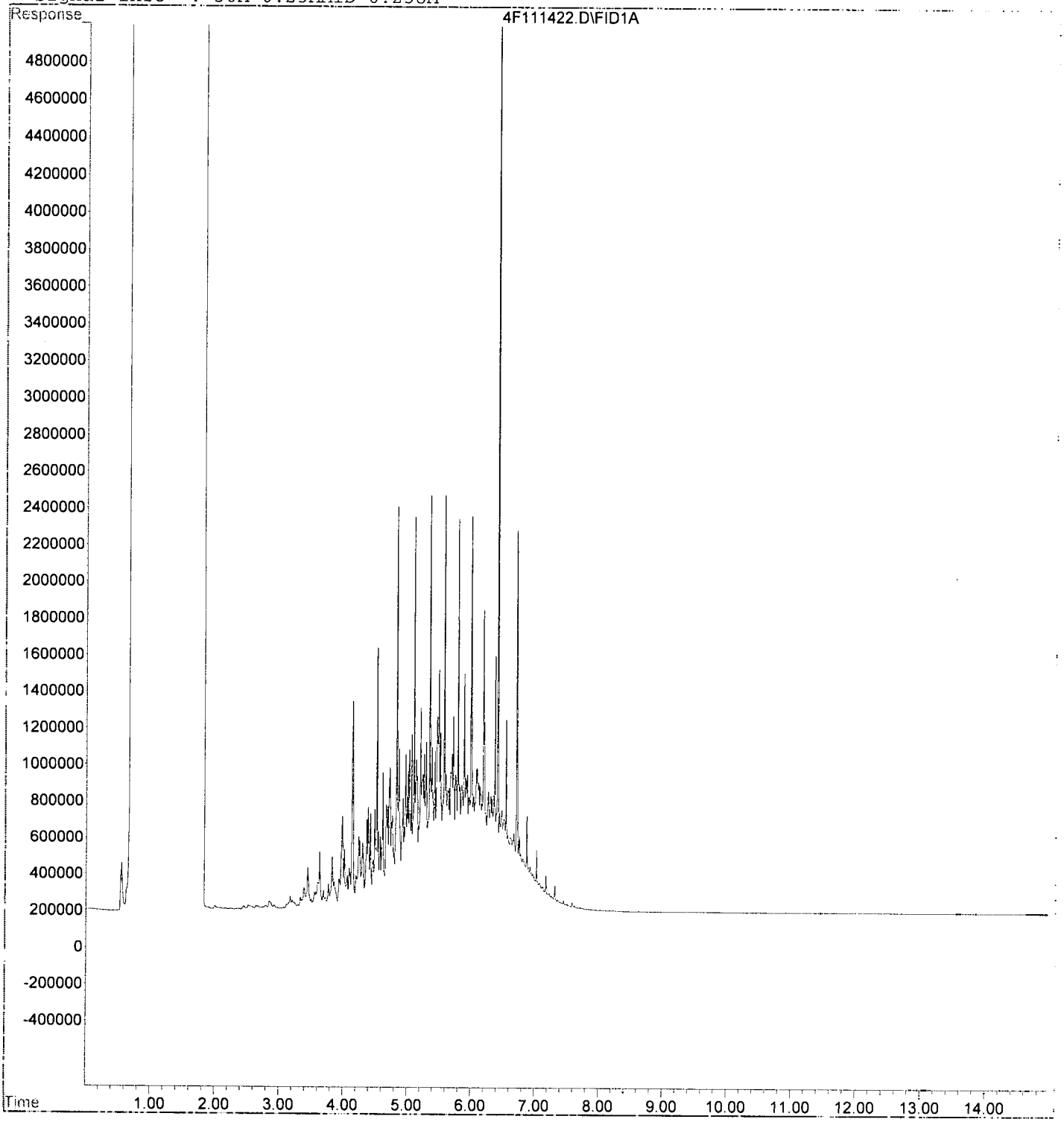
(f)=RT Delta > 1/2 Window (m)=manual Inc.

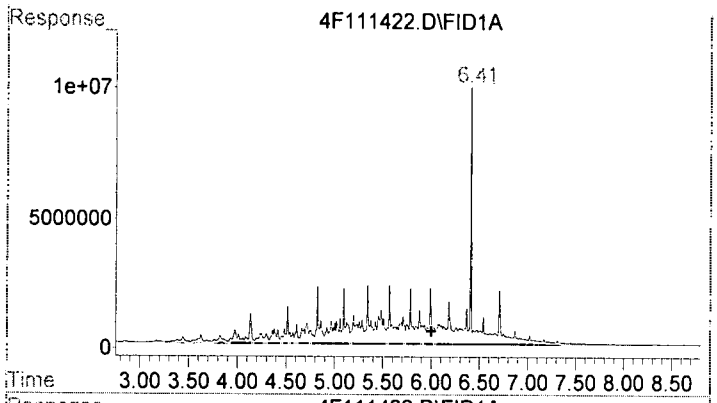
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111422.D Vial: 15
Acq On : 15 Nov 2019 00:55 Operator: BLL
Sample : 9K14026-CCV3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

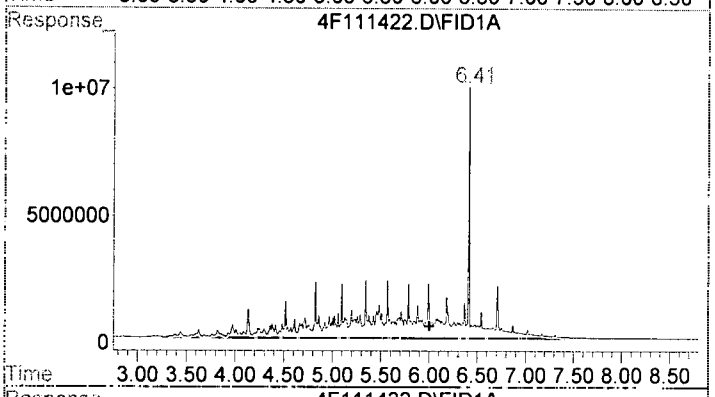
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





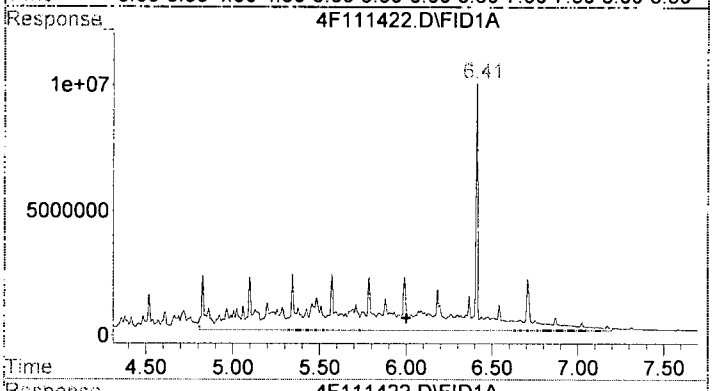
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1082612042
Conc: 997.40 ug/mL m



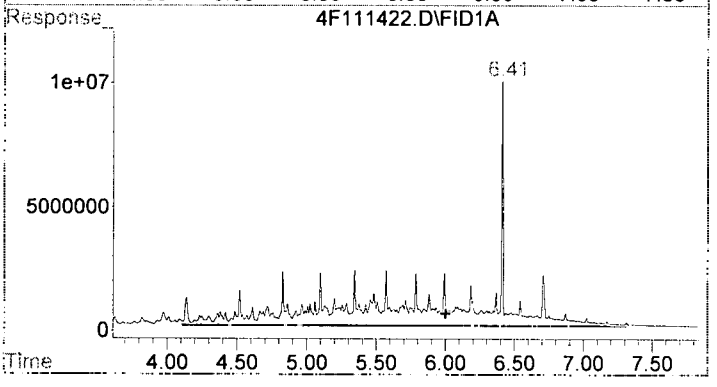
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1082612042
Conc: 997.40 ug/mL m



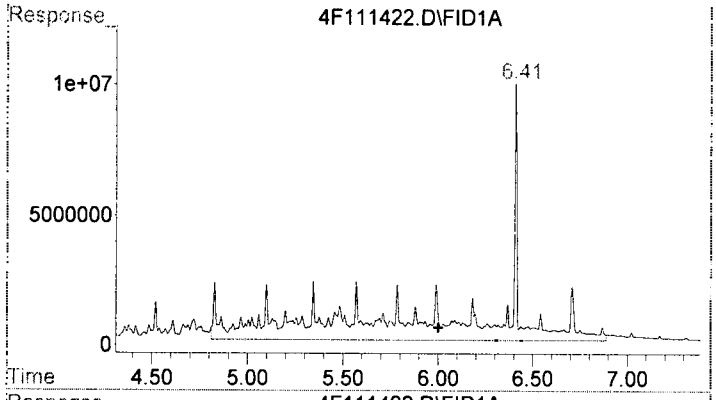
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 840511207
Conc: 774.36 ug/mL m



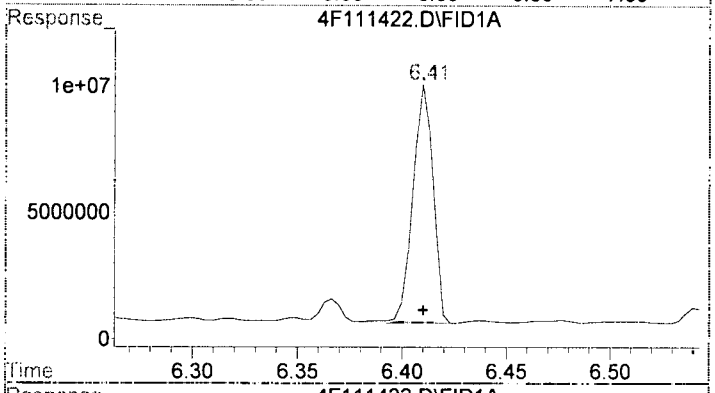
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 1001930148
Conc: 1033.87 ug/ml m



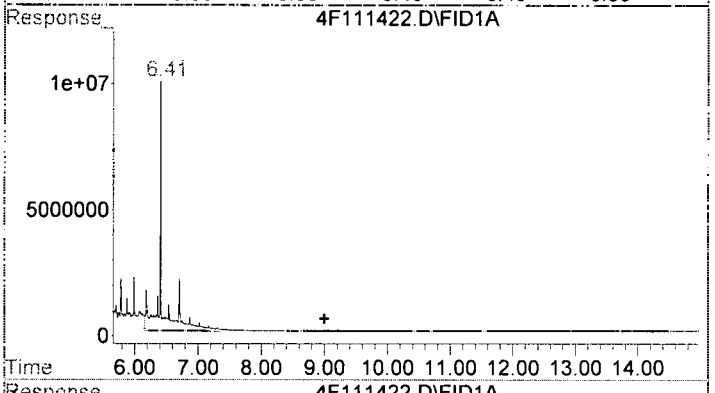
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 802943338
Conc: 1047.88 ug/ml m



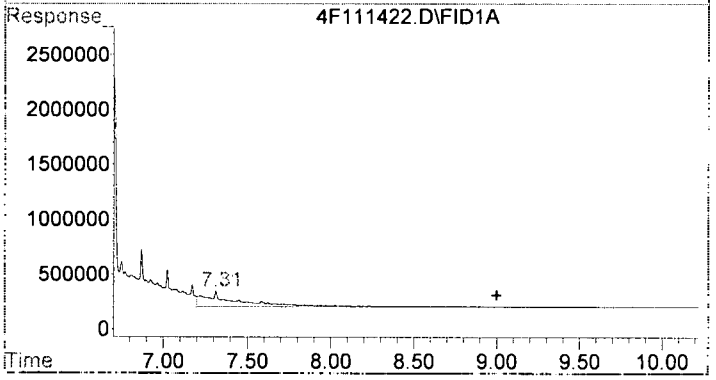
#6 o-Terphenyl

R.T.: 6.411 min
Delta R.T.: 0.001 min
Response: 63505956
Conc: 51.33 ug/mL



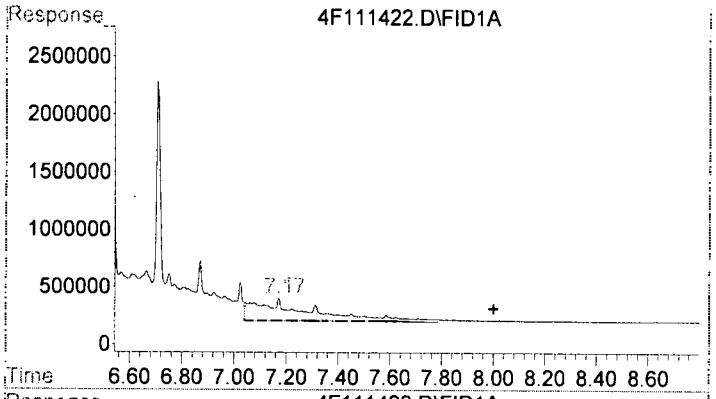
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 281463079
Conc: 263.29 ug/mL m



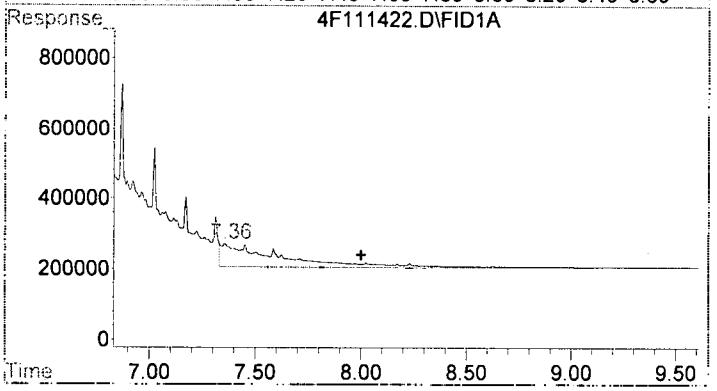
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 20613153
Conc: 19.28 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 31567940
Conc: 46.14 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 13365894
Conc: 19.70 ug/mL m

Evaluate Continuing Calibration Report

Data File : G:\4\DATA\2019-11\9K14026\4F111423.D Vial: 16
Acq On : 15 Nov 2019 1:17 Operator: BLL
Sample : 9K14026-CCV4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	341.042	0.0	93	0.00
2	H	Diesel	-1.000	341.042	0.0	93	0.00
3	H	DRO(C12-C24)	-1.000	79.446	0.0	22	0.00
4	H	TPHd (C10-C25)	-1.000	126.568	0.0	94	0.00
5	H	CA LUFT DRO (C12-C22)	-1.000	37.151	0.0	95	0.00
6	S	o-Terphenyl	-1.000	49.298	0.0	0	0.00
7	H	Oil	500.000	448.701	10.3	96	0.00
8	H	RRO (C24-C40)	500.000	349.183	30.2#	75	0.00
9	H	CA LUFT ORO (C23-C32)	500.000	459.872	8.0	93	0.00
10	H	TPHmo (C25-C36)	500.000	459.991	8.0	93	0.00

RL 11.15.19.

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

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111423.D Vial: 16
Acq On : 15 Nov 2019 1:17 Operator: BLL
Sample : 9K14026-CCV4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 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	6.41	60989128	49.298	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	370176788	341.042	ug/mL
2)	H	Diesel	6.00	370176788	341.042	ug/mL
3)	H	DRO(C12-C24)	6.00	86233446	79.446	ug/mL
4)	H	TPHd (C10-C25)	6.00	122657446	126.568	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	28467136	37.151	ug/ml
7)	H	Oil	9.00	479675430	448.701	ug/mL
8)	H	RRO (C24-C40)	9.00	373287902	349.183	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	314628455	459.872	ug/mL
10)	H	TPHmo (C25-C36)	8.00	312143077	459.991	ug/mL

AM 11.15.19

J

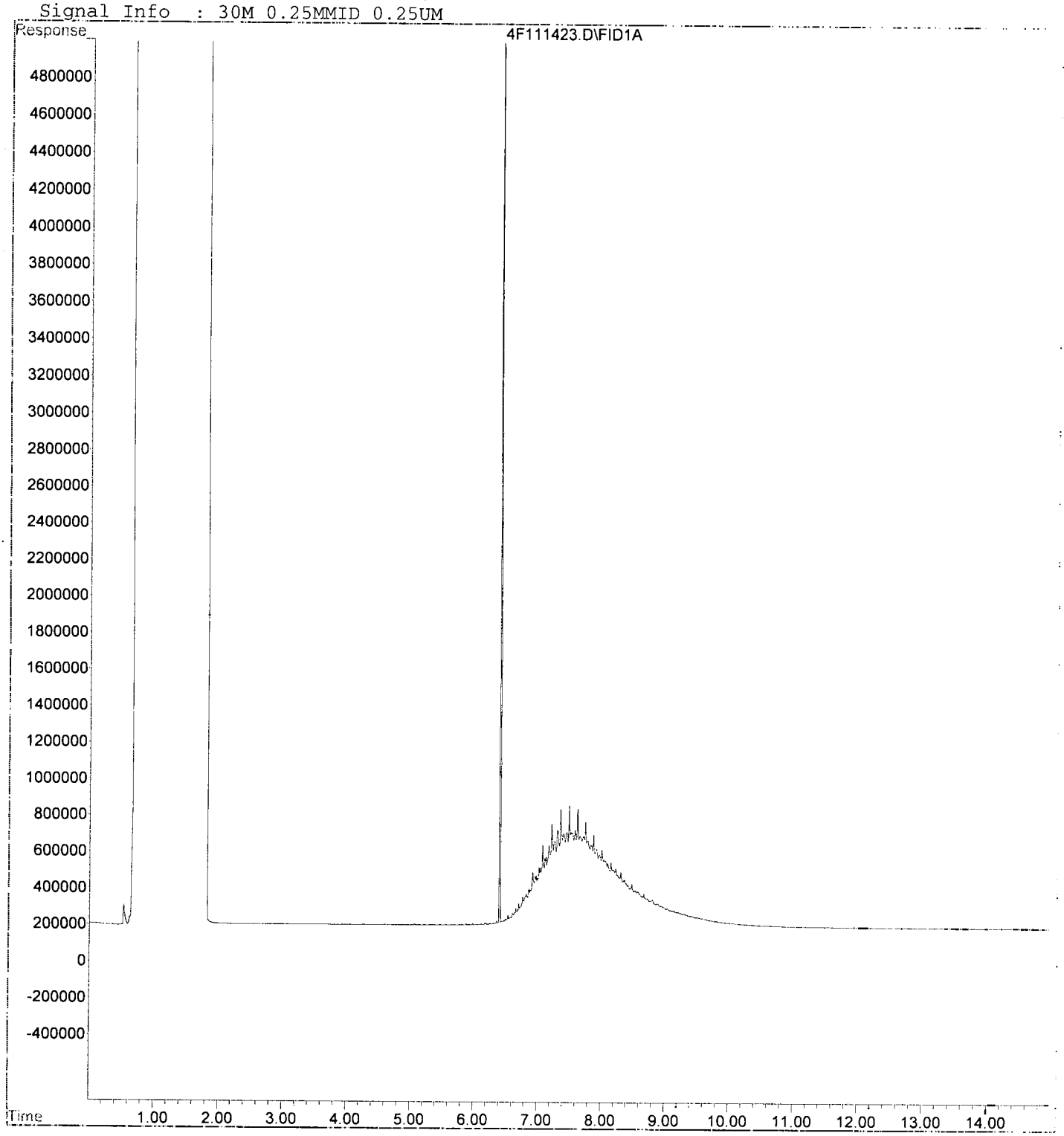
(f)=RT Delta > 1/2 window (m)=manual int.

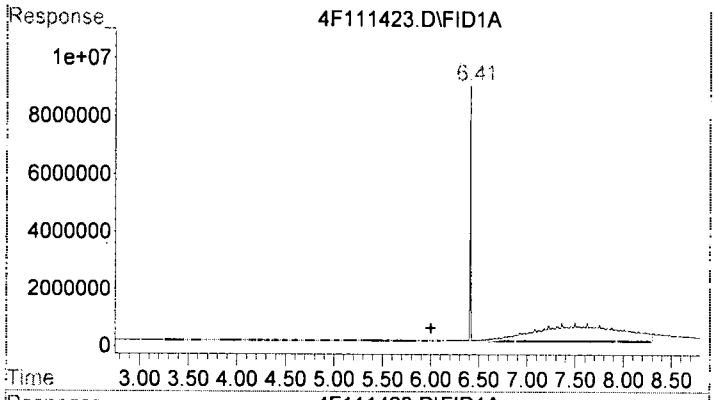
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K14026\4F111423.D Vial: 16
Acq On : 15 Nov 2019 1:17 Operator: BLL
Sample : 9K14026-CCV4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 15 5:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 09:42:40 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

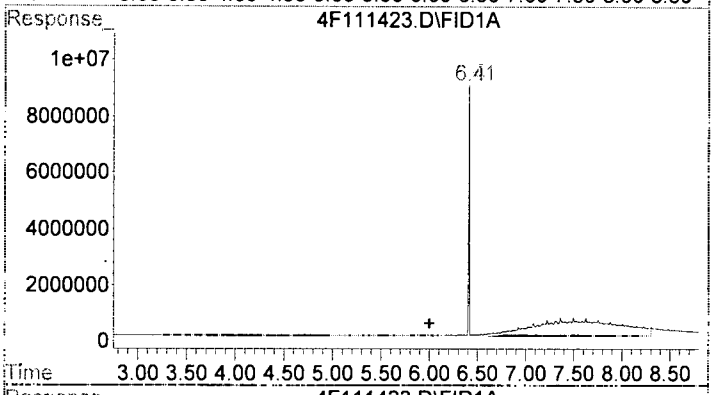
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





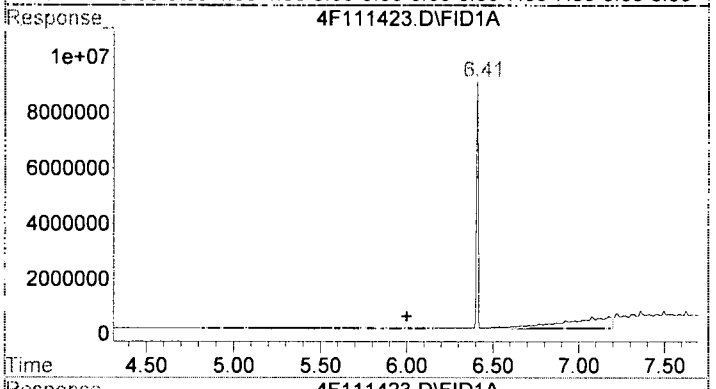
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 370176788
Conc: 341.04 ug/mL m



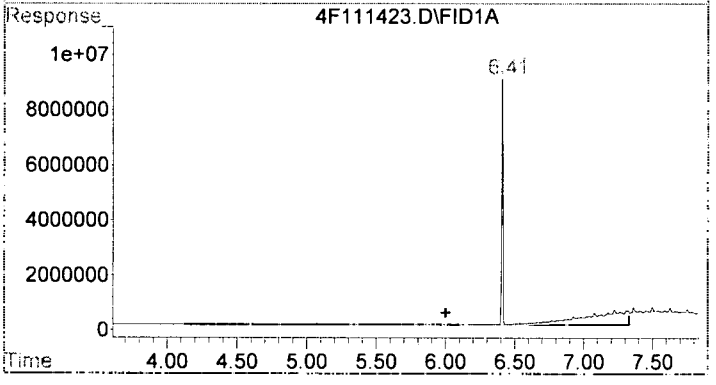
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 370176788
Conc: 341.04 ug/mL m



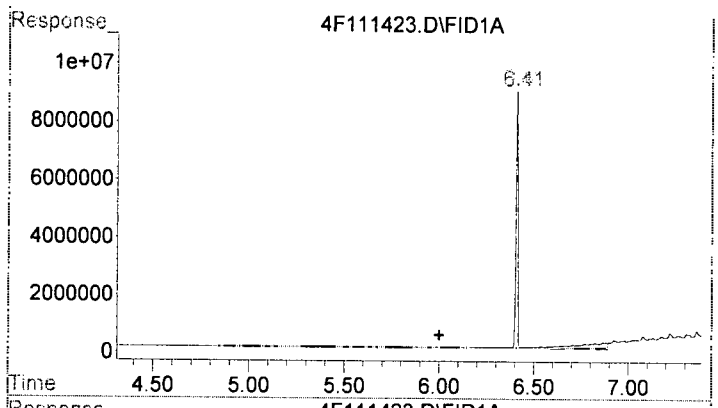
#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 86233446
Conc: 79.45 ug/mL m



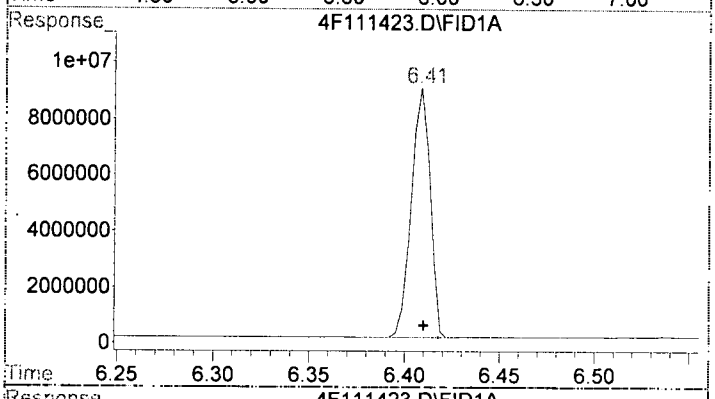
#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 122657446
Conc: 126.57 ug/ml m



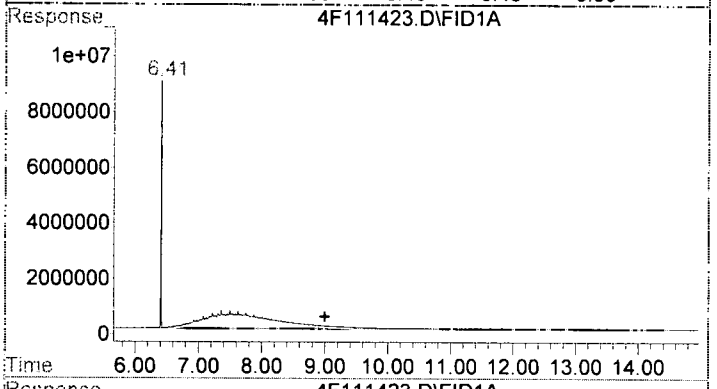
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 28467136
Conc: 37.15 ug/ml m



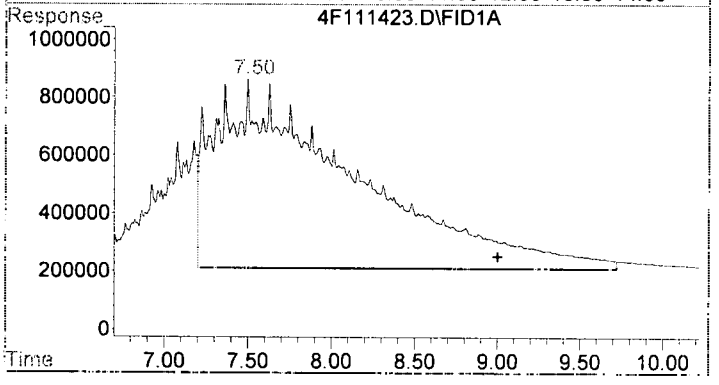
#6 o-Terphenyl

R.T.: 6.410 min
Delta R.T.: 0.000 min
Response: 60989128
Conc: 49.30 ug/mL



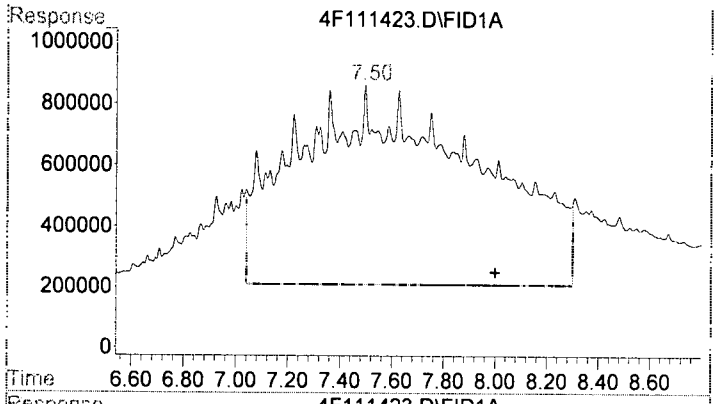
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 479675430
Conc: 448.70 ug/mL m



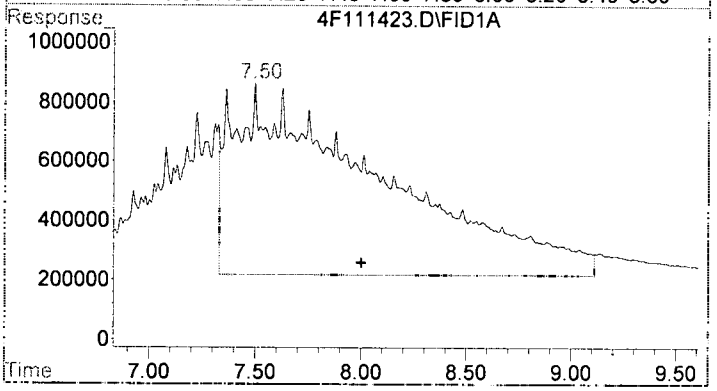
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 373287902
Conc: 349.18 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 314628455
Conc: 459.87 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 312143077
Conc: 459.99 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 9K13037 (Cal ID A9K1401) DUALFID4F

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K13037**	Instrument:	**DUALFID4F**
Date:	**11/13/19 09:21**	Calibration:	**A9K1401**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K13037-RES1	Soil	QC	QC				A19J322
2	9K13037-ICB1	Soil	QC	QC				
3	9K13037-CAL1	Soil	QC	QC				A19K029
4	9K13037-CAL2	Soil	QC	QC				A19K030
5	9K13037-CAL3	Soil	QC	QC				A19K031
6	9K13037-CAL4	Soil	QC	QC				A19K032
7	9K13037-CAL5	Soil	QC	QC				A19K033
8	9K13037-CAL6	Soil	QC	QC				A19K034
9	9K13037-CAL7	Soil	QC	QC				A19K035
10	9K13037-CAL8	Soil	QC	QC				A19I034
11	9K13037-CAL9	Soil	QC	QC				A19K002
12	9K13037-CALA	Soil	QC	QC				A19K003
13	9K13037-CALB	Soil	QC	QC				A19K004
14	9K13037-CALC	Soil	QC	QC				A19K005
15	9K13037-CALD	Soil	QC	QC				A19K001
16	9K13037-CALE	Soil	QC	QC				A19K021
17	9K13037-CALF	Soil	QC	QC				A19K022
18	9K13037-CALG	Soil	QC	QC				A19K023
19	9K13037-CALH	Soil	QC	QC				A19K024
20	9K13037-CALI	Soil	QC	QC				A19K025
21	9K13037-CALJ	Soil	QC	QC				A19K027
22	9K13037-CALK	Soil	QC	QC				A19I110
23	9K13037-ICV1	Soil	QC	QC				A19K190
24	9K13037-ICV2	Soil	QC	QC				A19K191

Data Entered By: AR 11-14-19

Comments:

Data Reviewed By: [signature] 11/14/19

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13037 **Seq. Date: 11/13/2019**

SEQUENCE LOG

SampleID	Analysis	Matrix	STDID	Analyzed
9K13037-ICB1	8015B TPH-D (C10-25) /TPH-MO	Soil		1/13/2019 10:39:00AM
"	+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 (	"		"
9K13037-CAL1	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K029	1/13/2019 10:59:00AM
"	+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	"
9K13037-CAL2	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K030	1/13/2019 11:21:00AM
"	+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	"
9K13037-CAL3	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K031	1/13/2019 11:41:00AM
"	+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	"
9K13037-CAL4	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K032	1/13/2019 12:01:00PM
"	+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	"
9K13037-CAL5	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K033	1/13/2019 12:22:00PM
"	+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	"
9K13037-CAL6	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K034	1/13/2019 12:43:00PM
"	+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	"
9K13037-CAL7	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K035	11/13/2019 1:04:00PM
"	+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		"
9K13037-CAL8	8015B TPH-D (C10-25) /TPH-MO	Soil	A19I034	11/13/2019	1:26:00PM
"	+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		"
9K13037-CAL9	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K002	11/13/2019	1:47:00PM
"	+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		"
9K13037-CALA	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K003	11/13/2019	2:09:00PM
"	+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		"

"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K003		"
9K13037-CALB	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K004	11/13/2019	2:30:00PM
"	+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		"
9K13037-CALC	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K005	11/13/2019	2:52:00PM
"	+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		"
9K13037-CALD	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K001	11/13/2019	3:12:00PM
"	+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		"
9K13037-CALE	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K021	11/13/2019	3:34:00PM
"	+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		"
9K13037-CALF	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K022	11/13/2019	3:54:00PM
"	+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		"
9K13037-CALG	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K023	11/13/2019	4:16:00PM
"	+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		"
9K13037-CALH	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K024	11/13/2019	4:37:00PM
"	+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		"
9K13037-CALI	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K025	11/13/2019	4:59:00PM
"	+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 Le	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K025		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K025		"
9K13037-CALJ	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K027	11/13/2019	5:21:00PM
"	+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 Le	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K027		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K027		"
9K13037-CALK	8015B TPH-D (C10-25) /TPH-MO	Soil	A19I110	11/13/2019	6:03:00PM
"	+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 Le	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19I110		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19I110		"
9K13037-ICV1	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K190	11/13/2019	6:44:00PM
"	+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 Le	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG -	"	A19K190		"
"	+NWTPH-Dx (Diesel/Oil) w/SG (	"	A19K190		"
9K13037-ICV2	8015B TPH-D (C10-25) /TPH-MO	Soil	A19K191	11/13/2019	7:05:00PM
"	+8015B TPH-D(C10-25)/MO(C2	"	A19K191		"
"	+8015D LL TPH-D (C10-25) /TPI	"	A19K191		"

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K13037 **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: **A9K1401** Instrument: **DUALFID4F**

8015B TPH-D (C10-25) /TPH Sequence: **9K13037** Matrix: **Soil**

9K13037-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALG	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-CALJ	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9K13037-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: 9K13037 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: **A9K1401** Instrument: **DUALFID4F**

NWTPH-Dx (Diesel/Oil) Low Sequence: **9K13037** Matrix: **Soil**

9K13037-ICV1	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9K13037-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.

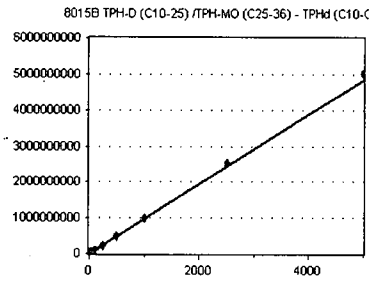
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **8015B TPH-D (C10-25) /TPH·** Instrument Cal ID: **A9K1401**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

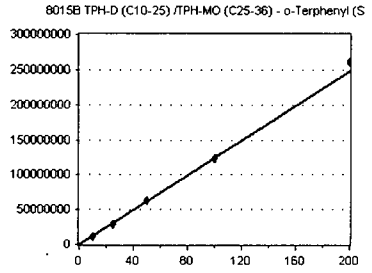


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.376814E+07	950725.600	6.00
9K13037-CAL2	40	3.811712E+07	952928.000	6.00
9K13037-CAL3	100	9.297406E+07	929740.600	6.00
9K13037-CAL4	250	2.330612E+08	932244.800	6.00
9K13037-CAL5	500	4.786955E+08	957391.000	6.00
9K13037-CAL6	1000	1.012691E+09	1012691.000	6.00
9K13037-CAL7	2500	2.522955E+09	1009182.000	6.00
9K13037-CAL8	5000	5.039707E+09	1007941.000	6.00

AVE RF **969105.600** RF RSD **3.63** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

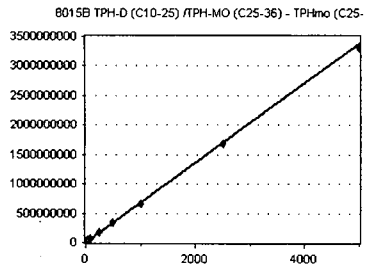


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.926812E+07	731703.000	8.00
9K13037-CALF	80	5.346837E+07	668354.600	8.00
9K13037-CALG	250	1.699122E+08	679648.800	8.00
9K13037-CALH	500	3.342742E+08	668548.400	8.00
9K13037-CALI	1000	6.697297E+08	669729.800	8.00
9K13037-CALJ	2500	1.676593E+09	670637.200	8.00
9K13037-CALK	5000	3.307352E+09	661470.400	8.00

AVE RF **678584.600** RF RSD **3.54** AVE RT **8.00**

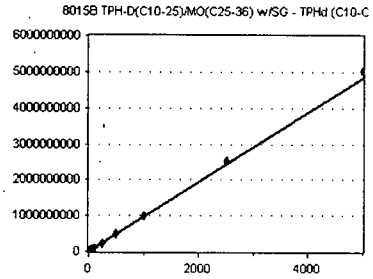
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **8015B TPH-D(C10-25)/MO(C** Instrument Cal ID: **A9K1401**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

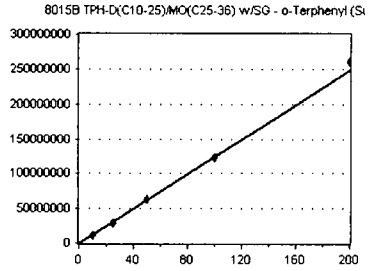


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.376814E+07	950725.600	6.00
9K13037-CAL2	40	3.811712E+07	952928.000	6.00
9K13037-CAL3	100	9.297406E+07	929740.600	6.00
9K13037-CAL4	250	2.330612E+08	932244.800	6.00
9K13037-CAL5	500	4.786955E+08	957391.000	6.00
9K13037-CAL6	1000	1.012691E+09	1012691.000	6.00
9K13037-CAL7	2500	2.522955E+09	1009182.000	6.00
9K13037-CAL8	5000	5.039707E+09	1007941.000	6.00

AVE RF **969105.600** RF RSD **3.63** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

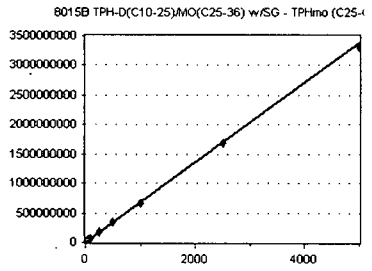


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.926812E+07	731703.000	8.00
9K13037-CALF	80	5.346837E+07	668354.600	8.00
9K13037-CALG	250	1.699122E+08	679648.800	8.00
9K13037-CALH	500	3.342742E+08	668548.400	8.00
9K13037-CALI	1000	6.697297E+08	669729.800	8.00
9K13037-CALJ	2500	1.676593E+09	670637.200	8.00
9K13037-CALK	5000	3.307352E+09	661470.400	8.00

AVE RF **678584.600** RF RSD **3.54** AVE RT **8.00**

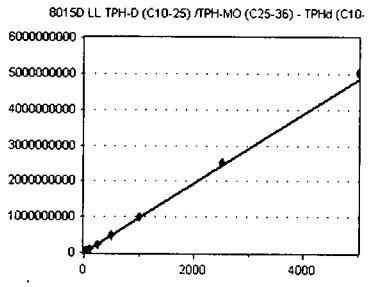
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **8015D LL TPH-D (C10-25) /T** Instrument Cal ID: **A9K1401**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

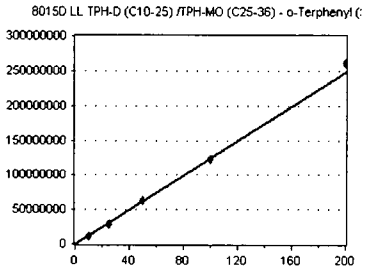


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.376814E+07	950725.600	6.00
9K13037-CAL2	40	3.811712E+07	952928.000	6.00
9K13037-CAL3	100	9.297406E+07	929740.600	6.00
9K13037-CAL4	250	2.330612E+08	932244.800	6.00
9K13037-CAL5	500	4.786955E+08	957391.000	6.00
9K13037-CAL6	1000	1.012691E+09	1012691.000	6.00
9K13037-CAL7	2500	2.522955E+09	1009182.000	6.00
9K13037-CAL8	5000	5.039707E+09	1007941.000	6.00

AVE RF **969105.600** RF RSD **3.63** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

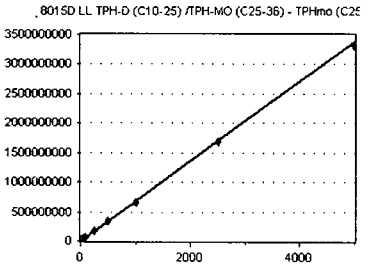


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.926812E+07	731703.000	8.00
9K13037-CALF	80	5.346837E+07	668354.600	8.00
9K13037-CALG	250	1.699122E+08	679648.800	8.00
9K13037-CALH	500	3.342742E+08	668548.400	8.00
9K13037-CALI	1000	6.697297E+08	669729.800	8.00
9K13037-CALJ	2500	1.676593E+09	670637.200	8.00
9K13037-CALK	5000	3.307352E+09	661470.400	8.00

AVE RF **678584.600** RF RSD **3.54** AVE RT **8.00**

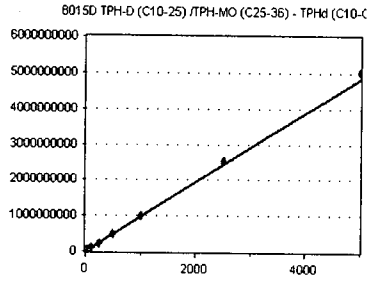
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **8015D TPH-D (C10-25) /TPH** Instrument Cal ID: **A9K1401**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

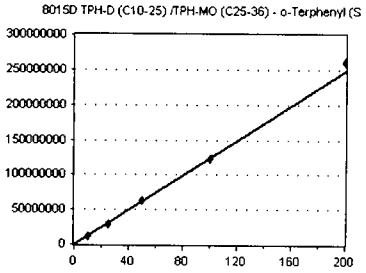


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.376814E+07	950725.600	6.00
9K13037-CAL2	40	3.811712E+07	952928.000	6.00
9K13037-CAL3	100	9.297406E+07	929740.600	6.00
9K13037-CAL4	250	2.330612E+08	932244.800	6.00
9K13037-CAL5	500	4.786955E+08	957391.000	6.00
9K13037-CAL6	1000	1.012691E+09	1012691.000	6.00
9K13037-CAL7	2500	2.522955E+09	1009182.000	6.00
9K13037-CAL8	5000	5.039707E+09	1007941.000	6.00

AVE RF **969105.600** RF RSD **3.63** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

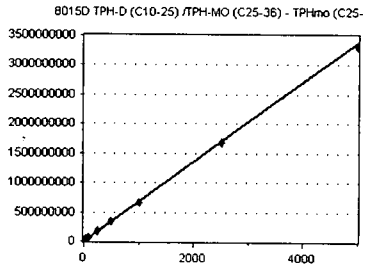


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.926812E+07	731703.000	8.00
9K13037-CALF	80	5.346837E+07	668354.600	8.00
9K13037-CALG	250	1.699122E+08	679648.800	8.00
9K13037-CALH	500	3.342742E+08	668548.400	8.00
9K13037-CALI	1000	6.697297E+08	669729.800	8.00
9K13037-CALJ	2500	1.676593E+09	670637.200	8.00
9K13037-CALK	5000	3.307352E+09	661470.400	8.00

AVE RF **678584.600** RF RSD **3.54** AVE RT **8.00**

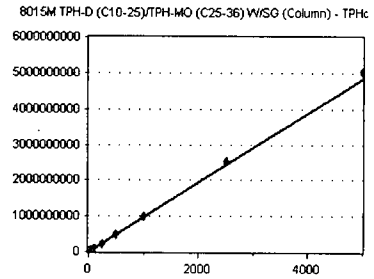
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **8015M TPH-D (C10-25)/TPH-** Instrument Cal ID: **A9K1401**

TPHd (C10-C25)

Curve Fit: **AVERAGE RF**

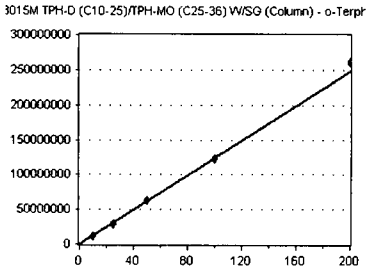


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.376814E+07	950725.600	6.00
9K13037-CAL2	40	3.811712E+07	952928.000	6.00
9K13037-CAL3	100	9.297406E+07	929740.600	6.00
9K13037-CAL4	250	2.330612E+08	932244.800	6.00
9K13037-CAL5	500	4.786955E+08	957391.000	6.00
9K13037-CAL6	1000	1.012691E+09	1012691.000	6.00
9K13037-CAL7	2500	2.522955E+09	1009182.000	6.00
9K13037-CAL8	5000	5.039707E+09	1007941.000	6.00

AVE RF **969105.600** RF RSD **3.63** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

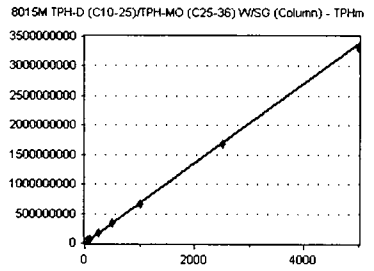


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

TPHmo (C25-C36)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.926812E+07	731703.000	8.00
9K13037-CALF	80	5.346837E+07	668354.600	8.00
9K13037-CALG	250	1.699122E+08	679648.800	8.00
9K13037-CALH	500	3.342742E+08	668548.400	8.00
9K13037-CALI	1000	6.697297E+08	669729.800	8.00
9K13037-CALJ	2500	1.676593E+09	670637.200	8.00
9K13037-CALK	5000	3.307352E+09	661470.400	8.00

AVE RF **678584.600** RF RSD **3.54** AVE RT **8.00**

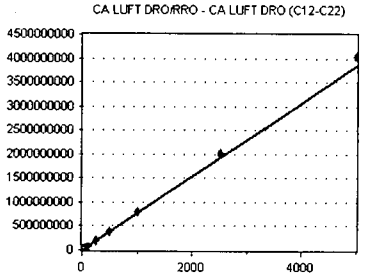
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO** Instrument Cal ID: **A9K1401**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

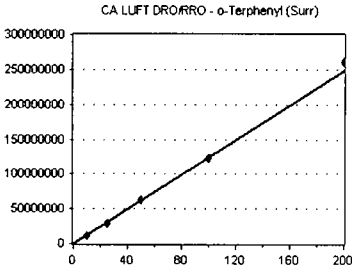


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	1.830786E+07	732314.400	6.00
9K13037-CAL2	40	2.90233E+07	725582.500	6.00
9K13037-CAL3	100	7.234085E+07	723408.500	6.00
9K13037-CAL4	250	1.880352E+08	752140.800	6.00
9K13037-CAL5	500	3.844924E+08	768984.800	6.00
9K13037-CAL6	1000	8.126657E+08	812665.800	6.00
9K13037-CAL7	2500	2.020754E+09	808301.600	6.00
9K13037-CAL8	5000	4.033245E+09	806649.000	6.00

AVE RF **766255.900** RF RSD **5.03** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

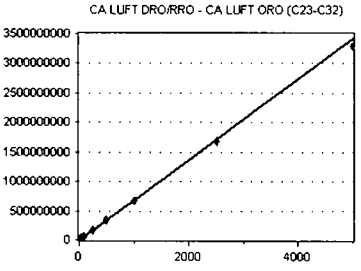


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.893524E+07	723381.000	8.00
9K13037-CALF	80	5.40538E+07	675672.500	8.00
9K13037-CALG	250	1.744999E+08	697999.600	8.00
9K13037-CALH	500	3.397412E+08	679482.400	8.00
9K13037-CALI	1000	6.780015E+08	678001.500	8.00
9K13037-CALJ	2500	1.688667E+09	675466.800	8.00
9K13037-CALK	5000	3.295777E+09	659155.400	8.00

AVE RF **684165.600** RF RSD **3.02** AVE RT **8.00**

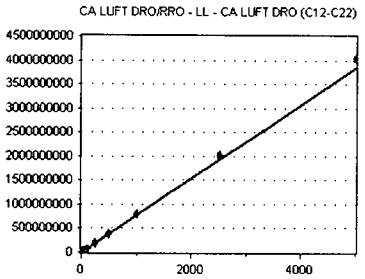
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO - LL** Instrument Cal ID: **A9K1401**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

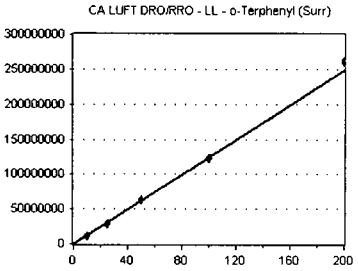


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	1.830786E+07	732314.400	6.00
9K13037-CAL2	40	2.90233E+07	725582.500	6.00
9K13037-CAL3	100	7.234085E+07	723408.500	6.00
9K13037-CAL4	250	1.880352E+08	752140.800	6.00
9K13037-CAL5	500	3.844924E+08	768984.800	6.00
9K13037-CAL6	1000	8.126657E+08	812665.800	6.00
9K13037-CAL7	2500	2.020754E+09	808301.600	6.00
9K13037-CAL8	5000	4.033245E+09	806649.000	6.00

AVE RF **766255.900** RF RSD **5.03** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

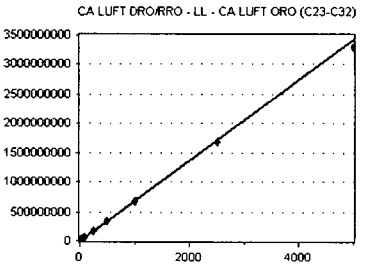


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.893524E+07	723381.000	8.00
9K13037-CALF	80	5.40538E+07	675672.500	8.00
9K13037-CALG	250	1.744999E+08	697999.600	8.00
9K13037-CALH	500	3.397412E+08	679482.400	8.00
9K13037-CALI	1000	6.780015E+08	678001.500	8.00
9K13037-CALJ	2500	1.688667E+09	675466.800	8.00
9K13037-CALK	5000	3.295777E+09	659155.400	8.00

AVE RF **684165.600** RF RSD **3.02** AVE RT **8.00**

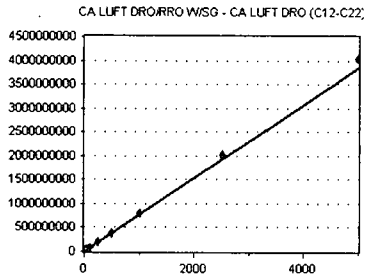
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **CA LUFT DRO/RRO W/SG** Instrument Cal ID: **A9K1401**

CA LUFT DRO (C12-C22)

Curve Fit: **AVERAGE RF**

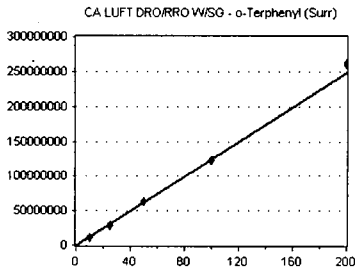


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	1.830786E+07	732314.400	6.00
9K13037-CAL2	40	2.90233E+07	725582.500	6.00
9K13037-CAL3	100	7.234085E+07	723408.500	6.00
9K13037-CAL4	250	1.880352E+08	752140.800	6.00
9K13037-CAL5	500	3.844924E+08	768984.800	6.00
9K13037-CAL6	1000	8.126657E+08	812665.800	6.00
9K13037-CAL7	2500	2.020754E+09	808301.600	6.00
9K13037-CAL8	5000	4.033245E+09	806649.000	6.00

AVE RF **766255.900** RF RSD **5.03** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

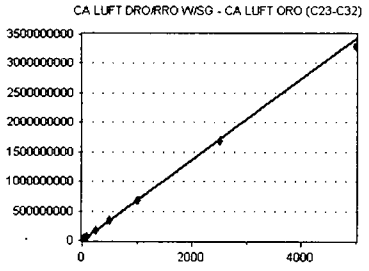


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

CA LUFT ORO (C23-C32)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	2.893524E+07	723381.000	8.00
9K13037-CALF	80	5.40538E+07	675672.500	8.00
9K13037-CALG	250	1.744999E+08	697999.600	8.00
9K13037-CALH	500	3.397412E+08	679482.400	8.00
9K13037-CALI	1000	6.780015E+08	678001.500	8.00
9K13037-CALJ	2500	1.688667E+09	675466.800	8.00
9K13037-CALK	5000	3.295777E+09	659155.400	8.00

AVE RF **684165.600** RF RSD **3.02** AVE RT **8.00**

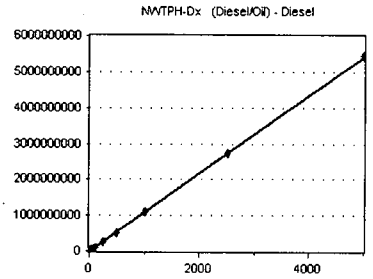
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A9K1401**

Diesel

Curve Fit: **AVERAGE RF**

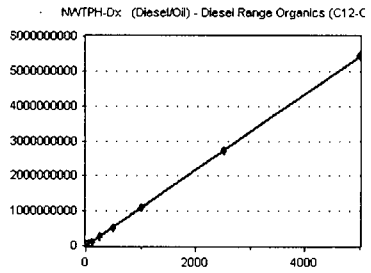


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

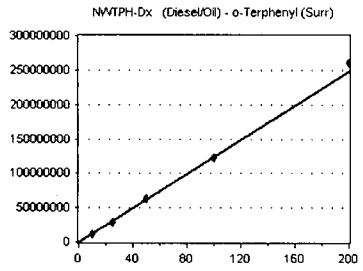


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

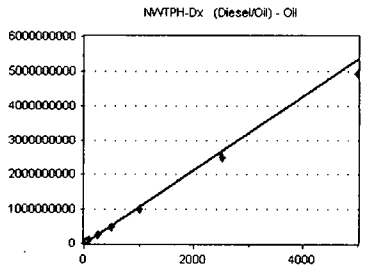


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

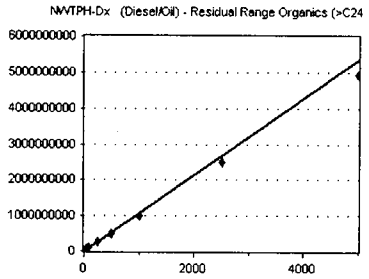
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil)** Instrument Cal ID: **A9K1401**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

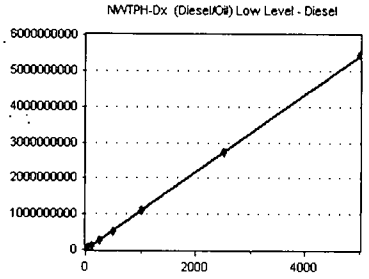
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A9K1401**

Diesel

Curve Fit: **AVERAGE RF**

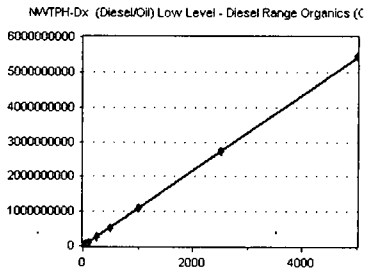


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

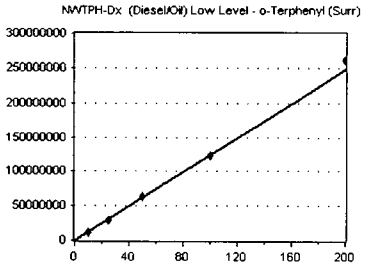


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

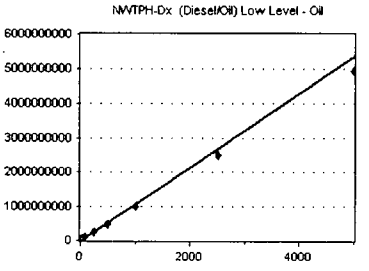


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

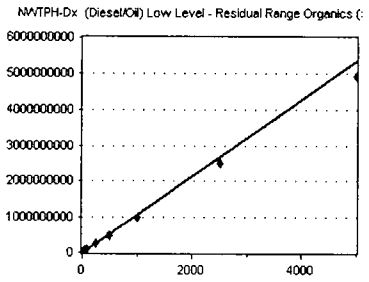
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) Low** Instrument Cal ID: **A9K1401**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09-	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

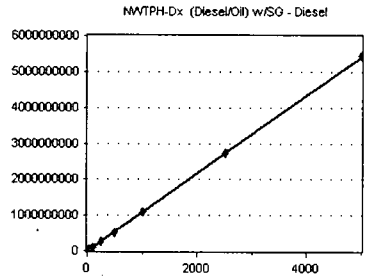
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1401**

Diesel

Curve Fit: **AVERAGE RF**

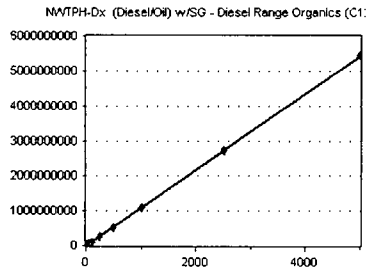


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

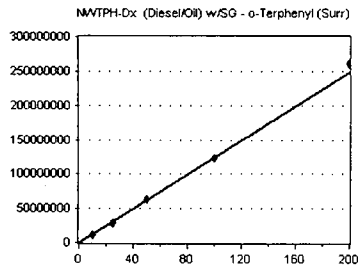


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

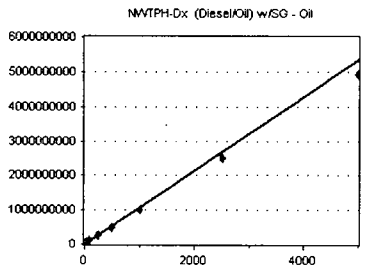


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

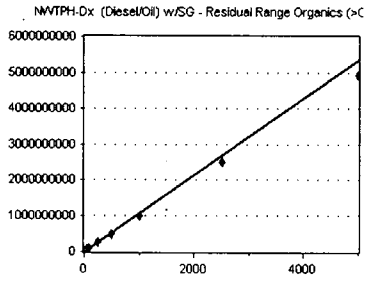
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1401**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

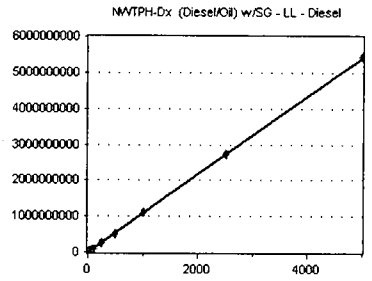
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1401**

Diesel

Curve Fit: **AVERAGE RF**

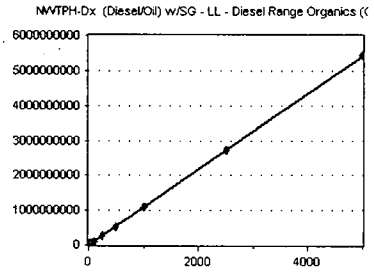


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

Diesel Range Organics (C12-C24

Curve Fit: **AVERAGE RF**

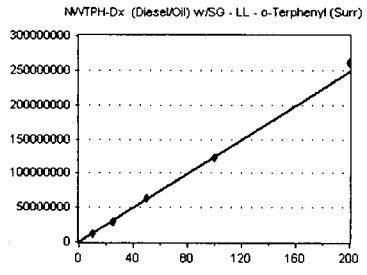


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

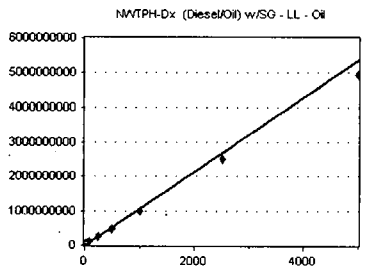


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

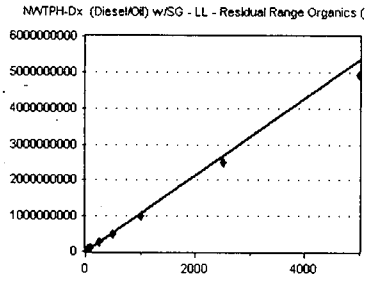
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/S** Instrument Cal ID: **A9K1401**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

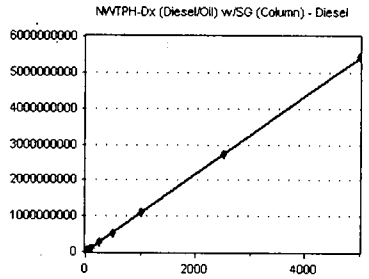
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SG** Instrument Cal ID: **A9K1401**

Diesel

Curve Fit: **AVERAGE RF**

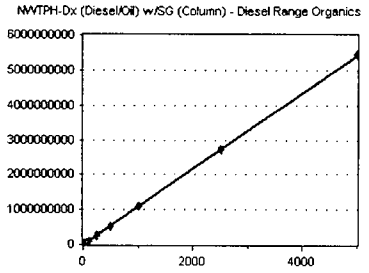


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

Diesel Range Organics (C12-C24)

Curve Fit: **AVERAGE RF**

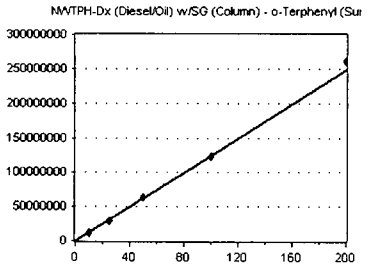


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL1	25	2.903024E+07	1161210.000	6.00
9K13037-CAL2	40	4.43471E+07	1108678.000	6.00
9K13037-CAL3	100	1.057895E+08	1057895.000	6.00
9K13037-CAL4	250	2.607396E+08	1042958.000	6.00
9K13037-CAL5	500	5.226341E+08	1045268.000	6.00
9K13037-CAL6	1000	1.092944E+09	1092944.000	6.00
9K13037-CAL7	2500	2.719582E+09	1087833.000	6.00
9K13037-CAL8	5000	5.433243E+09	1086649.000	6.00

AVE RF **1085429.000** RF RSD **3.57** AVE RT **6.00**

o-Terphenyl (Surr)

Curve Fit: **AVERAGE RF**

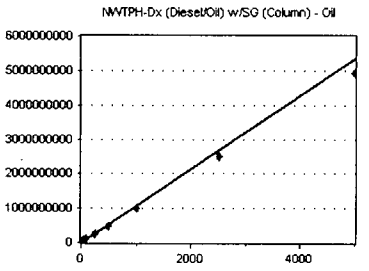


Standard	Concentration	Response	Response Factor	RT
9K13037-CAL9	10	1.213994E+07	1213994.000	6.41
9K13037-CALA	25	2.958851E+07	1183540.000	6.41
9K13037-CALB	50	6.264814E+07	1252963.000	6.41
9K13037-CALC	100	1.229779E+08	1229779.000	6.42
9K13037-CALD	200	2.611091E+08	1305546.000	6.42

AVE RF **1237164.000** RF RSD **3.70** AVE RT **6.41**

Oil

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

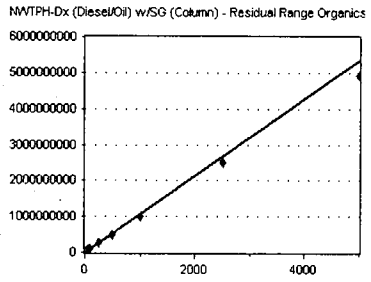
Element Calibration Review Sheet

Calibration ID: **A9K1401** Instrument: **DUALFID4F** Calibration Date: **11/14/2019**

Analysis: **NWTPH-Dx (Diesel/Oil) w/SC** Instrument Cal ID: **A9K1401**

Residual Range Organics (>C24

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K13037-CALE	40	5.408699E+07	1352175.000	9.00
9K13037-CALF	80	8.821844E+07	1102731.000	9.00
9K13037-CALG	250	2.613197E+08	1045279.000	9.00
9K13037-CALH	500	4.984086E+08	996817.200	9.00
9K13037-CALI	1000	9.956525E+08	995652.500	9.00
9K13037-CALJ	2500	2.508442E+09	1003377.000	9.00
9K13037-CALK	5000	4.93593E+09	987186.000	9.00

AVE RF **1069031.000** RF RSD **12.28** AVE RT **9.00**

Calibration Status Report HP G1530A

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 2019
Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	D1	25.00	0.00	G:\4\DATA\2019-11\9K13037\4F111304.D
2	D2	40.00	0.00	G:\4\DATA\2019-11\9K13037\4F111305.D
3	D3	100.00	0.00	G:\4\DATA\2019-11\9K13037\4F111306.D
4	D4	250.00	0.00	G:\4\DATA\2019-11\9K13037\4F111307.D
5	D5	500.00	0.00	G:\4\DATA\2019-11\9K13037\4F111308.D
6	D6	1000.00	0.00	G:\4\DATA\2019-11\9K13037\4F111309.D
7	D7	2500.00	0.00	G:\4\DATA\2019-11\9K13037\4F111310.D
8	D8	5000.00	0.00	G:\4\DATA\2019-11\9K13037\4F111311.D
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10	S2	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111313.D
11	S3	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111314.D
12	S4	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111315.D
13	S5	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111316.D
14	O1	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111317.D
15	O2	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111318.D
16	O3	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111319.D
17	O4	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111320.D
18	O5	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111321.D
19	O6	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111322.D
20	O7	-1.00	0.00	G:\4\DATA\2019-11\9K13037\4F111324.D

BM 11.14.19

#	ID	Update Time	Quant Time	Acquisition Time
1	D1	Nov 14 08:25 2019	Nov 14 08:11 2019	13 Nov 2019 10:59
2	D2	Nov 14 08:25 2019	Nov 14 08:12 2019	13 Nov 2019 11:21
3	D3	Nov 14 08:25 2019	Nov 14 08:12 2019	13 Nov 2019 11:41
4	D4	Nov 14 08:25 2019	Nov 14 08:12 2019	13 Nov 2019 12:01
5	D5	Nov 14 08:25 2019	Nov 14 08:13 2019	13 Nov 2019 12:22
6	D6	Nov 14 08:25 2019	Nov 14 08:13 2019	13 Nov 2019 12:43
7	D7	Nov 14 08:26 2019	Nov 14 08:13 2019	13 Nov 2019 13:04
8	D8	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 13:26
9	S1	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 13:47
10	S2	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 14:09
11	S3	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 14:30
12	S4	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 14:52
13	S5	Nov 14 08:26 2019	Nov 14 08:14 2019	13 Nov 2019 15:12
14	O1	Nov 14 08:27 2019	Nov 14 08:14 2019	13 Nov 2019 15:34
15	O2	Nov 14 08:27 2019	Nov 14 08:14 2019	13 Nov 2019 15:54
16	O3	Nov 14 08:27 2019	Nov 14 08:15 2019	13 Nov 2019 16:16
17	O4	Nov 14 08:27 2019	Nov 14 08:15 2019	13 Nov 2019 16:37
18	O5	Nov 14 08:27 2019	Nov 14 08:16 2019	13 Nov 2019 16:59
19	O6	Nov 14 08:27 2019	Nov 14 08:16 2019	13 Nov 2019 17:21
20	O7	Nov 14 08:27 2019	Nov 14 08:16 2019	13 Nov 2019 18:03

4F91113D.M Thu Nov 14 08:28:21 2019 SV-GCMS3

Response Factor Report HP G1530A

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 2019

A9K1461

Calibration Files
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D4 =4F111307.D D5 =4F111308.D D6 =4F111309.D

		Compound	D1	D2	D3	D4	D5	D6	Avg		%RSD
1)	H	Mineral Oil	1.161	1.109	1.058	1.043	1.045	1.093	1.085	E6	3.57
2)	H	Diesel	1.161	1.109	1.058	1.043	1.045	1.093	1.085	E6	3.57
3)	H	DRO(C12-C24)	1.161	1.109	1.058	1.043	1.045	1.093	1.085	E6	3.57
4)	H	TPHd (C10-C25)	0.951	0.953	0.930	0.932	0.957	1.013	0.969	E6	3.63
5)	H	CA LUFT DRO (C12-C2	7.323	7.256	7.234	7.521	7.690	8.127	7.663	E5	5.03
6)	S	o-Terphenyl							1.237	E6	3.70
7)	H	Oil							1.069	E6	12.28
8)	H	RRO (C24-C40)							1.069	E6	12.28
9)	H	CA LUFT ORO (C23-C3							6.842	E5	3.02
10)	H	TPHmo (C25-C36)							6.786	E5	3.54

BR 11.14.19

J

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	TPHd (C10-C25)	6.00	1.000	A	A	A
5	H	CA LUFT DRO (C12-C22)	6.00	1.000	A	A	A
6	S	o-Terphenyl	6.41	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	CA LUFT ORO (C23-C32)	8.00	1.000	A	A	A
10	H	TPHmo (C25-C36)	8.00	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

4F91113D.M Thu Nov 14 08:28:28 2019 SV-GCMS3

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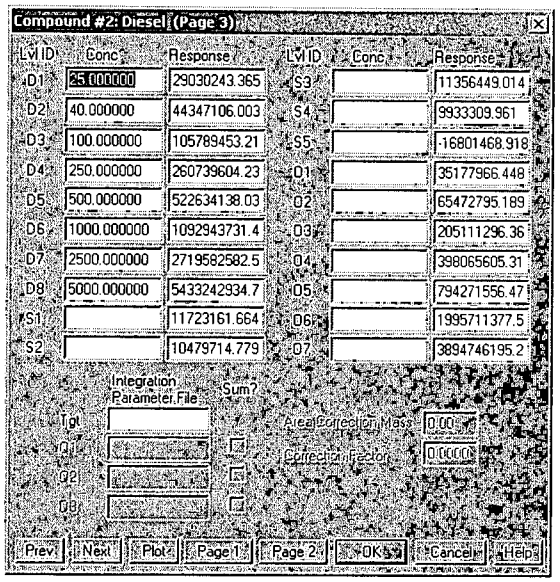
Compound #2: Diesel (Page 3)
Lvl ID
Conc
Response
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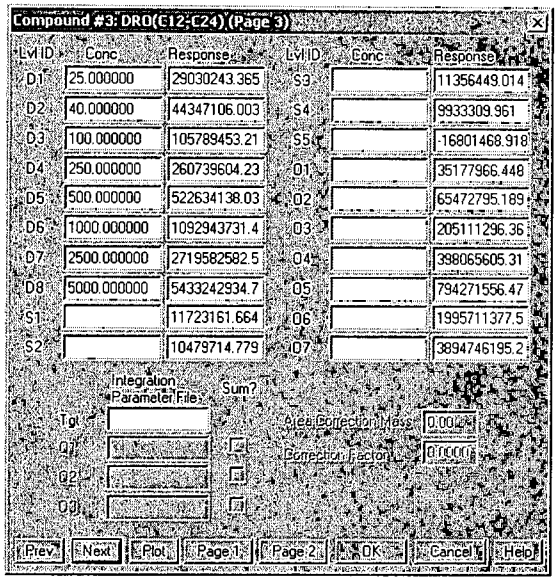
D2 40.000000 44347106.003
D3 100.000000 105789453.21
D4 250.000000 260739604.23
D5 500.000000 522634138.03
D6 1000.000000 1092943731.4
D7 2500.000000 2719582582.5
D8 5000.000000 5433242934.7
S1 11723161.664
S2 10479714.779
S3 11356449.014
S4 9933309.961
S5 -16801468.918
O1 35177966.448
O2 65472795.189
O3 205111296.36
O4 398065605.31
O5 794271556.47
O6 1995711377.5
O7 3894746195.2
Integration Parameter File
Sum?
Tgt
Q1
Q2
Q8
Area Correction Mass 0.00
Correction Factor 0.00000
Prev
Next
Plot
Page 1
Page 2
OK
Cancel
Help

BR 11.14.19


Compound #3: DRO(C12-C24) (Page 3)
Lvl ID
Conc
Response
D1 25.000000 29030243.365
D2 40.000000 44347106.003
D3 100.000000 105789453.21
D4 250.000000 260739604.23
D5 500.000000 522634138.03
D6 1000.000000 1092943731.4
D7 2500.000000 2719582582.5
D8 5000.000000 5433242934.7
S1 11723161.664
S2 10479714.779
S3 11356449.014
S4 9933309.961
S5 -16801468.918
O1 35177966.448
O2 65472795.189
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O4 398065605.31
O5 794271556.47
O6 1995711377.5
O7 3894746195.2
Integration Parameter File
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Area Correction Mass
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Correction Factor
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Page 2
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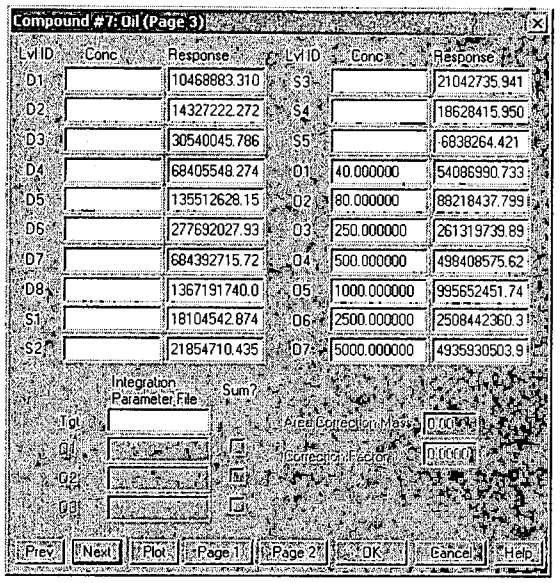
Compound #7: Oil (Page 3)
Lvl ID
Conc
Response
D1 10468883.310
D2 14327222.272
D3 30540045.786
D4 68405548.274
D5 135512628.15
D6 277692027.93
D7 684392715.72
D8 1367191740.0
S1 18104542.874
S2 21854710.435
S3 21042735.941
S4 18628415.950
S5 6838264.421
O1 40.000000 54086990.733
O2 80.000000 88218437.799
O3 250.000000 261319739.89
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O5 1000.000000 995652451.74
O6 2500.000000 2508442360.3
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Integration Parameter File
Sum?
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D1
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Page 2
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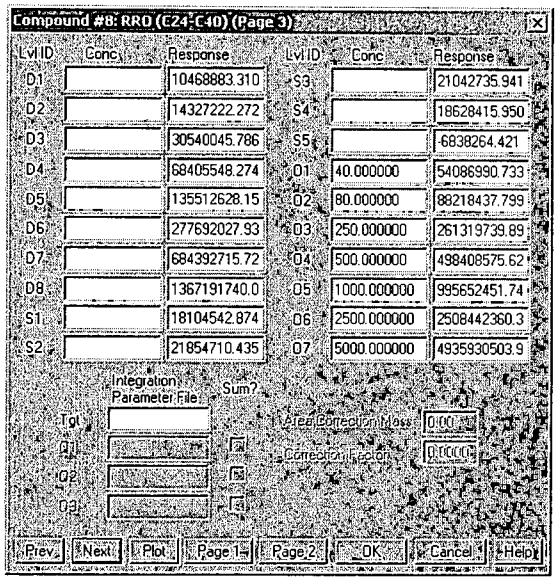
11-14-19


Compound #8: RRD (C24-C40) (Page 3)
LvlID Conc Response
D1 10468883.310
D2 14327222.272
D3 30540045.786
D4 68405548.274
D5 135512628.15
D6 277692027.93
D7 684392715.72
D8 1367191740.0
S1 18104542.874
S2 21854710.435
LvlID Conc Response
S3 21042735.941
S4 18628415.950
S5 6838264.421
O1 40.000000 54086990.733
O2 80.000000 88218437.799
O3 250.000000 261319739.89
O4 500.000000 498408575.62
O5 1000.000000 995652451.74
O6 2500.000000 2508442360.3
O7 5000.000000 4935930503.9
Integration Parameter File
Sum?
Tgt
Q1
Q2
Q3
Area Correction Mass
0.000
Correction Factor
0.00000
Prev
Next
Plot
Page 1
Page 2
OK
Cancel
Help

RL 11.14.19

✓

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111303.D Vial: 99
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13037-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:37 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	4141914	3.816	ug/mL	
2)	H	Diesel	6.00	4141914	3.816	ug/mL	
3)	H	DRO(C12-C24)	6.00	4141914	3.816	ug/mL	
4)	H	TPHd (C10-C25)	6.00	1396345	1.441	ug/ml	
5)	H	CA LUFT DRO (C12-C22)	6.00	629600	0.822	ug/ml	$< 1/2$
7)	H	Oil	9.00	14206774	13.289	ug/mL	
8)	H	RRO (C24-C40)	9.00	14206774	13.289	ug/mL	
9)	H	CA LUFT ORO (C23-C32)	8.00	2409881	3.522	ug/mL	
10)	H	TPHmo (C25-C36)	8.00	4335258	6.389	ug/mL	RL

RM
11.14.19

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

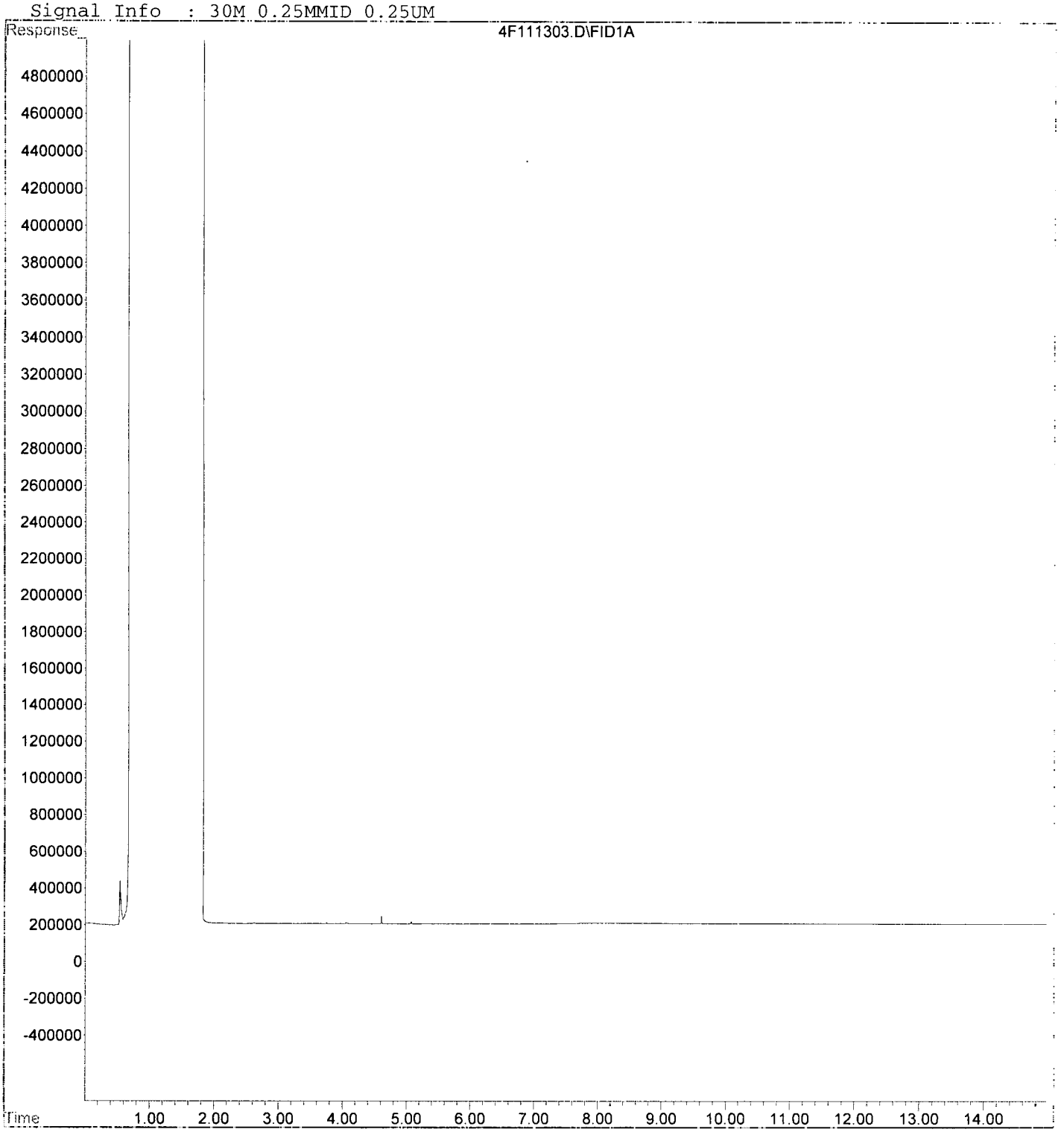
4F111303.D 4F91113D.M Thu Nov 14 08:37:57 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111303.D Vial: 99
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13037-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:37 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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\9K13037\4F111326.D
Acq On : 13 Nov 2019 18:44
Sample : 9K13037-ICV1
Misc :
IntFile : SUR.E

Vial: 21
Operator: BLL
Inst : HP G1530A
Multiplr: 1.00

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	954.562	4.5	95	0.00
2	H	Diesel	1000.000	954.562	4.5	95	0.00
3	H	DRO(C12-C24)	1000.000	954.562	4.5	95	0.00
4	H	TPHd (C10-C25)	1000.000	992.154	0.8	95	0.00
5	H	CA LUFT DRO (C12-C22)	1000.000	1006.122	-0.6	95	0.00
7	H	Oil	-1.000	247.784	0.0	95	0.00
8	H	RRO (C24-C40)	-1.000	247.784	0.0	95	0.00
9	H	CA LUFT ORO (C23-C32)	-1.000	42.408	0.0	98	0.00
10	H	TPHmo (C25-C36)	-1.000	16.804	0.0	98	0.00

RL HHS 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\9K13037\4F111326.D Vial: 21
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13037-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:38 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	1036109839	954.562	ug/mL
2)	H	Diesel	6.00	1036109839	954.562	ug/mL
3)	H	DRO(C12-C24)	6.00	1036109839	954.562	ug/mL
4)	H	TPHd (C10-C25)	6.00	961502305	992.154	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	770946849	1006.122	ug/ml
7)	H	Oil	9.00	264889245	247.784	ug/mL
8)	H	RRO (C24-C40)	9.00	264889245	247.784	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	29014209	42.408	ug/mL
10)	H	TPHmo (C25-C36)	8.00	11403235	16.804	ug/mL

≈ 96%

RM 11.14.19

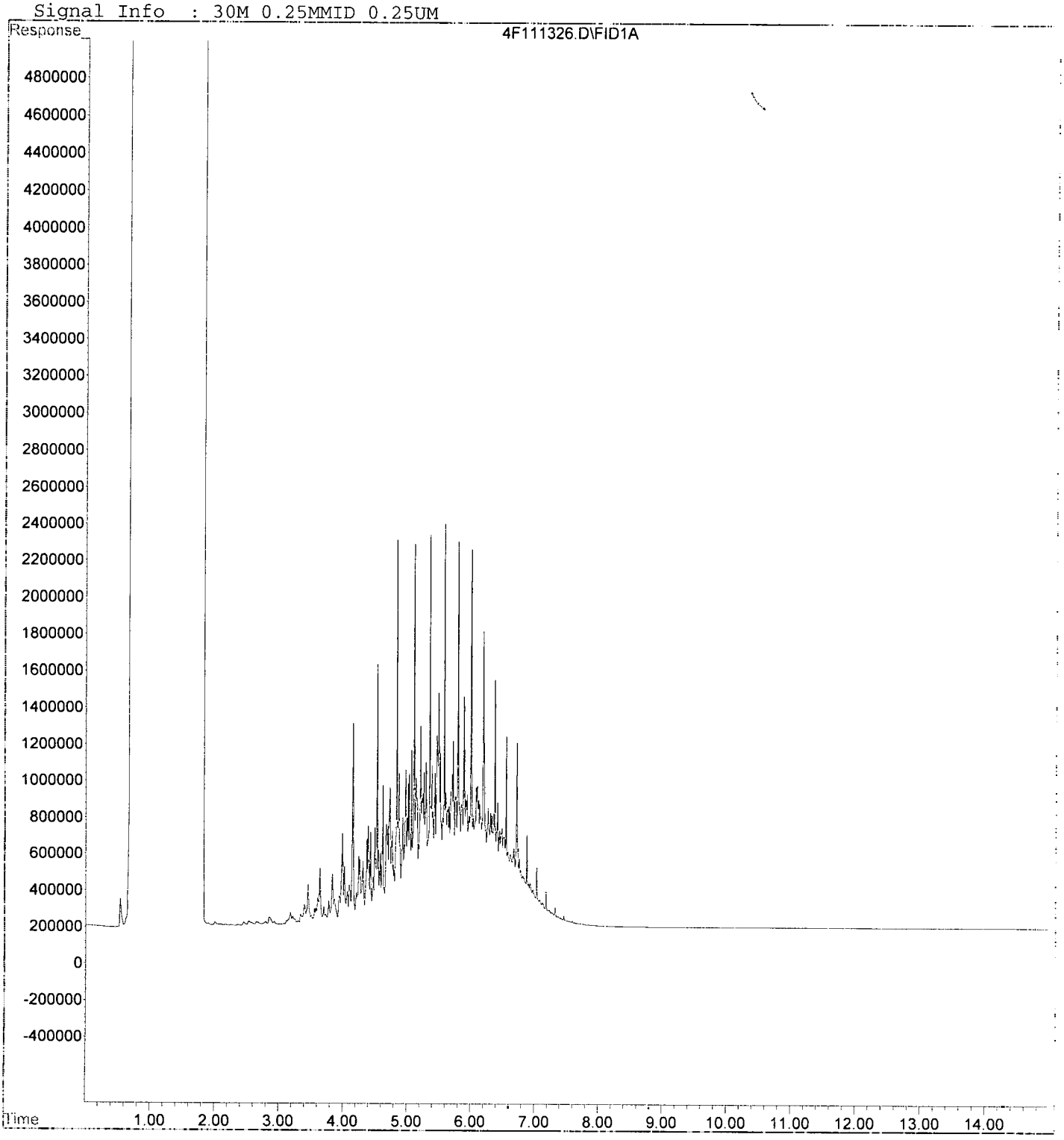
(f)=RT Delta > 1/2 window (m)=manual Enc.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111326.D Vial: 21
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13037-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:38 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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\9K13037\4F111327.D Vial: 22
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13037-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E

Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	662.219	0.0	90	0.00
2	H	Diesel	-1.000	662.219	0.0	90	0.00
3	H	DRO(C12-C24)	-1.000	662.219	0.0	90	0.00
4	H	TPHd (C10-C25)	-1.000	245.913	0.0	92	0.00
5	H	CA LUFT DRO (C12-C22)	-1.000	71.496	0.0	93	0.00
7	H	Oil	1000.000	846.692	15.3#	91	0.00
8	H	RRO (C24-C40)	1000.000	846.692	15.3#	91	0.00
9	H	CA LUFT ORO (C23-C32)	1000.000	896.739	10.3	90	0.00
10	H	TPHmo (C25-C36)	1000.000	890.680	10.9	90	0.00

AN 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\9K13037\4F111327.D Vial: 22
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13037-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:38 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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	718791332	662.219	ug/mL
2) H	Diesel	6.00	718791332	662.219	ug/mL
3) H	DRO(C12-C24)	6.00	718791332	662.219	ug/mL
4) H	TPHd (C10-C25)	6.00	238315489	245.913	ug/ml
5) H	CA LUFT DRO (C12-C22)	6.00	54783986	71.496	ug/ml
7) H	Oil	9.00	905140299	846.692	ug/mL
8) H	RRO (C24-C40)	9.00	905140299	846.692	ug/mL
9) H	CA LUFT ORO (C23-C32)	8.00	613517917	896.739	ug/mL
10) H	TPHmo (C25-C36)	8.00	604401644	890.680	ug/mL

-85%

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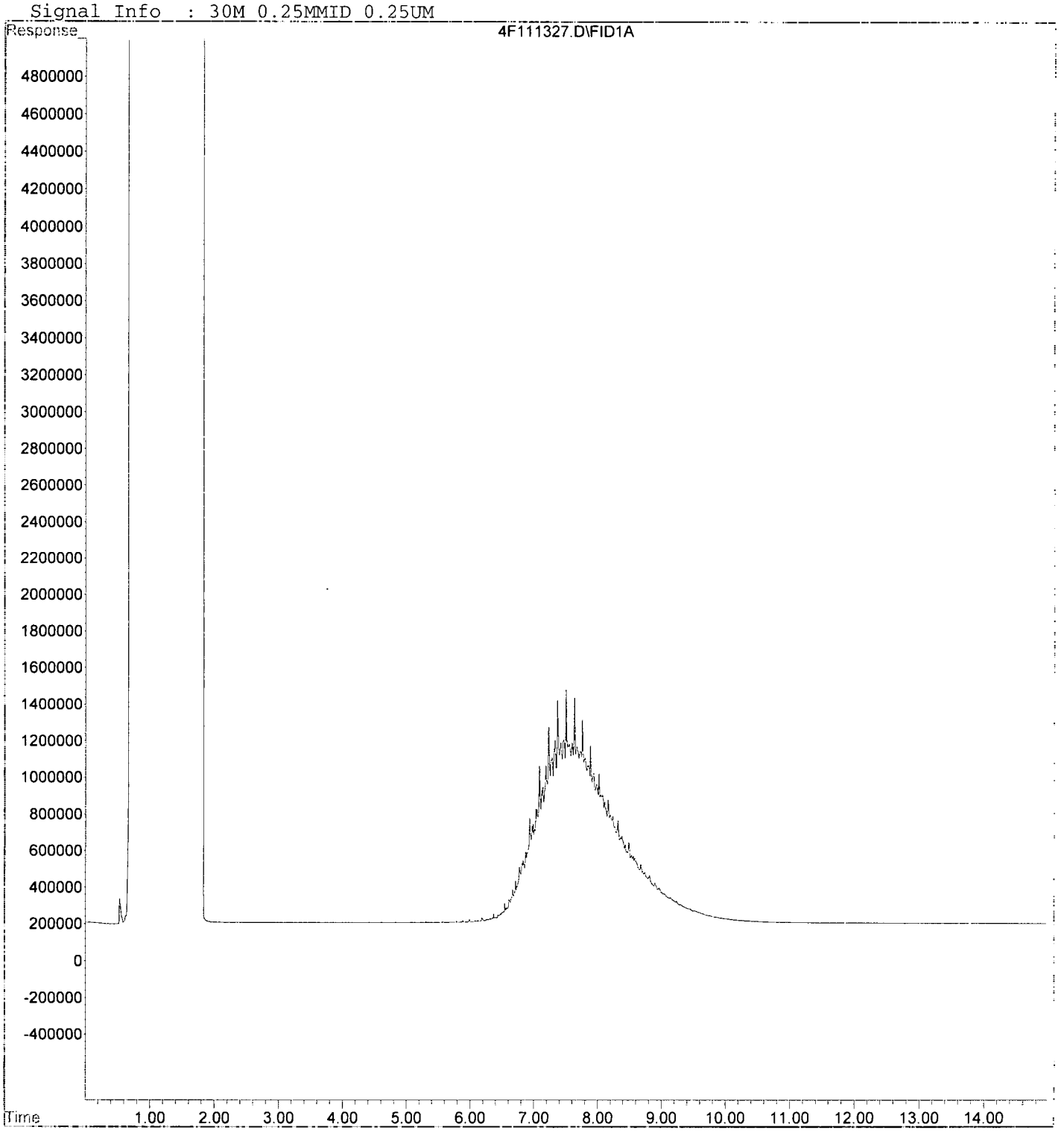
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111327.D Vial: 22
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13037-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:38 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:27:56 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		

BR 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		

BR 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		

11.14.19

Injection Log

Directory: G:\4\DATA\2019-11\9K13037

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	99	4f111301.d	1.	DCM		13 Nov 2019 09:58
2	94	4f111302.d	1.	9K13037-RES1		13 Nov 2019 10:18
3	99	4f111303.d	1.	9K13037-ICB1		13 Nov 2019 10:39
4	1	4f111304.d	1.	9K13037-CAL1		13 Nov 2019 10:59
5	2	4f111305.d	1.	9K13037-CAL2		13 Nov 2019 11:21
6	3	4f111306.d	1.	9K13037-CAL3		13 Nov 2019 11:41
7	4	4f111307.d	1.	9K13037-CAL4		13 Nov 2019 12:01
8	5	4f111308.d	1.	9K13037-CAL5		13 Nov 2019 12:22
9	6	4f111309.d	1.	9K13037-CAL6		13 Nov 2019 12:43
10	7	4f111310.d	1.	9K13037-CAL7		13 Nov 2019 13:04
11	8	4f111311.d	1.	9K13037-CAL8		13 Nov 2019 13:26
12	9	4f111312.d	1.	9K13037-CAL9		13 Nov 2019 13:47
13	10	4f111313.d	1.	9K13037-CALA		13 Nov 2019 14:09
14	11	4f111314.d	1.	9K13037-CALB		13 Nov 2019 14:30
15	12	4f111315.d	1.	9K13037-CALC		13 Nov 2019 14:52
16	13	4f111316.d	1.	9K13037-CALD		13 Nov 2019 15:12
17	14	4f111317.d	1.	9K13037-CALE		13 Nov 2019 15:34
18	15	4f111318.d	1.	9K13037-CALF		13 Nov 2019 15:54
19	16	4f111319.d	1.	9K13037-CALG		13 Nov 2019 16:16
20	17	4f111320.d	1.	9K13037-CALH		13 Nov 2019 16:37
21	18	4f111321.d	1.	9K13037-CALI		13 Nov 2019 16:59
22	19	4f111322.d	1.	9K13037-CALJ		13 Nov 2019 17:21
23	99	4f111323.d	1.	9K13037-IBL1		13 Nov 2019 17:42
24	20	4f111324.d	1.	9K13037-CALK		13 Nov 2019 18:03
25	99	4f111325.d	1.	9K13037-IBL2		13 Nov 2019 18:23
26	21	4f111326.d	1.	9K13037-ICV1		13 Nov 2019 18:44
27	22	4f111327.d	1.	9K13037-ICV2		13 Nov 2019 19:05
28	99	4f111328.d	1.	DCM		13 Nov 2019 19:25
29	99	4f111329.d	1.	DCM		13 Nov 2019 19:46
30	99	4f111330.d	1.	DCM		13 Nov 2019 20:07

AA 11.14.19

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111302.D Vial: 94
Acq On : 13 Nov 2019 10:18 Operator: BLL
Sample : 9K13037-RES1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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

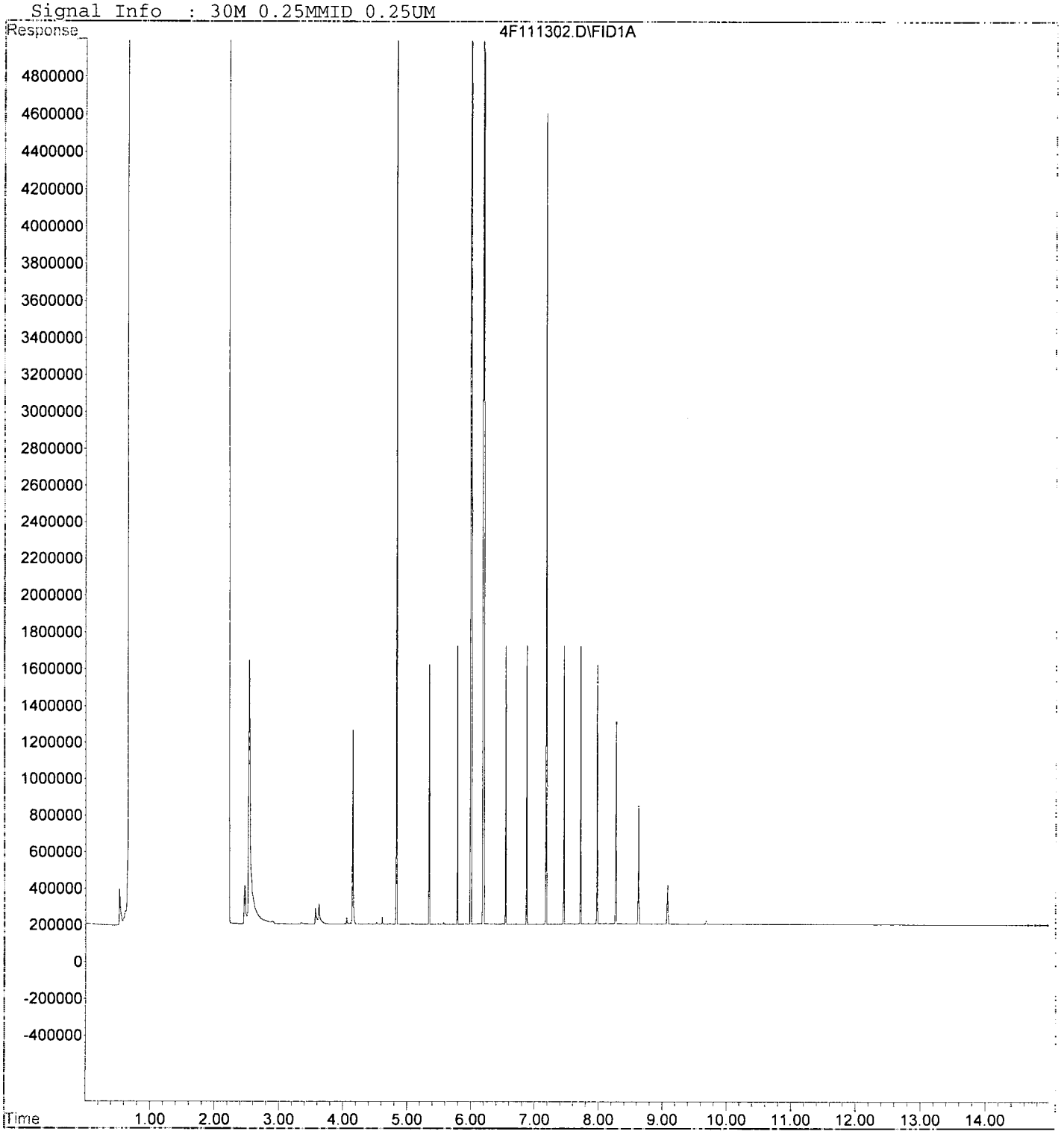
		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
6)	S	o-Terphenyl	6.54f	9600811	8.071	ug/mL
		Target Compounds				
1)	H	Mineral Oil	6.00	296164620	275.680	ug/mL
2)	H	Diesel	6.00	296164620	275.680	ug/mL
3)	H	DRO(C12-C24)	6.00	296164620	275.680	ug/mL
4)	H	TPHd (C10-C25)	6.00	250759304	254.814	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	210858231	266.667	ug/ml
7)	H	Oil	9.00	172971041	189.446	ug/mL
8)	H	RRO (C24-C40)	9.00	172971041	189.446	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	70284705	119.014	ug/mL
10)	H	TPHmo (C25-C36)	8.00	51361156	85.829	ug/mL

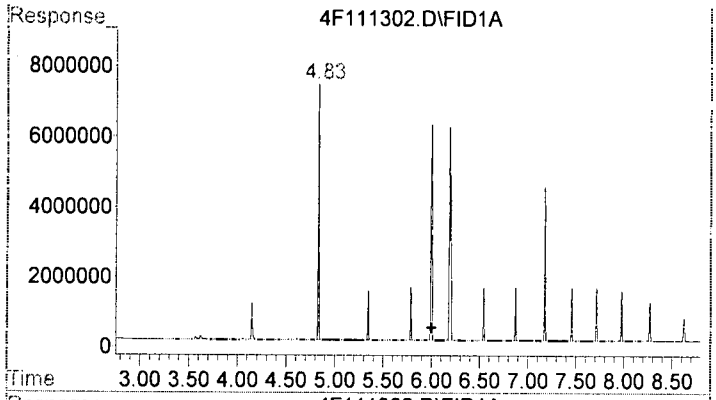
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111302.D Vial: 94
Acq On : 13 Nov 2019 10:18 Operator: BLL
Sample : 9K13037-RES1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 2019
Response via : Multiple Level Calibration
DataAcq Meth : A4F60831.M

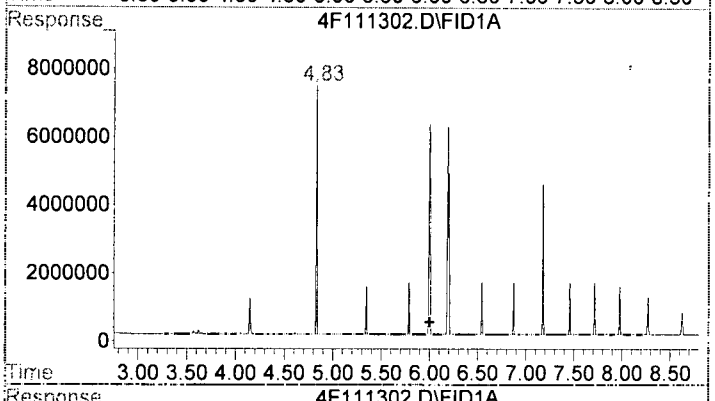
Volume Inj. : 1uL
Signal Phase : Restek Rxi-5Sil MS
Signal Info : 30M 0.25MMID 0.25UM





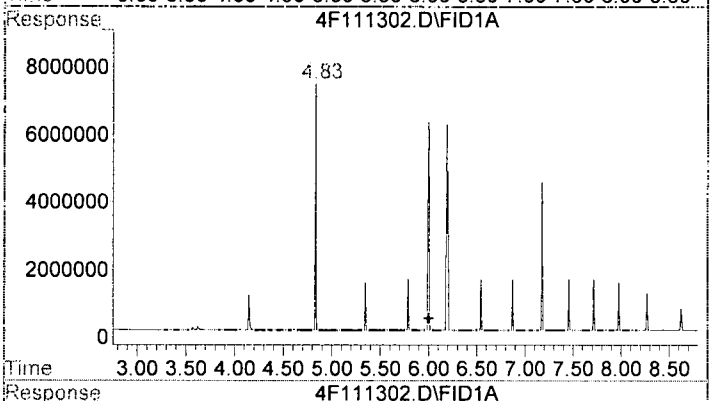
#1 Mineral Oil

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 296164620
Conc: 275.68 ug/mL m



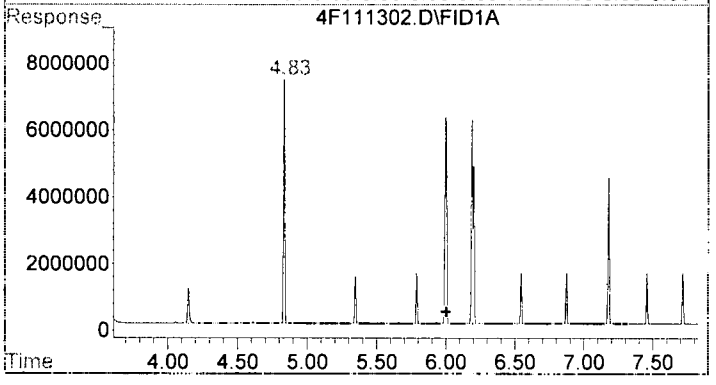
#2 Diesel

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 296164620
Conc: 275.68 ug/mL m



#3 DRO(C12-C24)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 296164620
Conc: 275.68 ug/mL m



#4 TPHd (C10-C25)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 250759304
Conc: 254.81 ug/ml m

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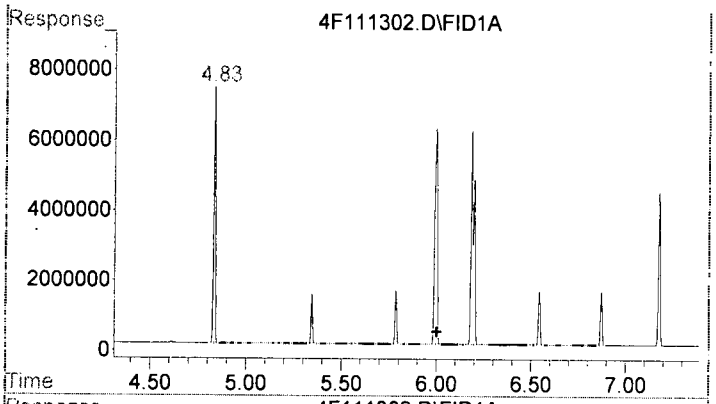
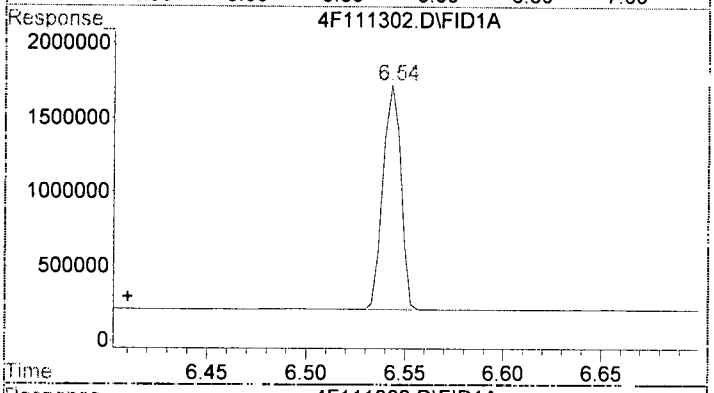


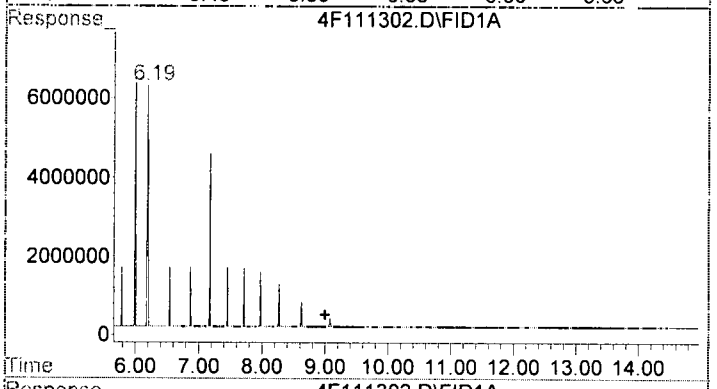
#5 CA LUFT DRO (C12-C22)

R.T.: 6.000 min
Delta R.T.: 0.000 min
Response: 210858231
Conc: 266.67 ug/ml m



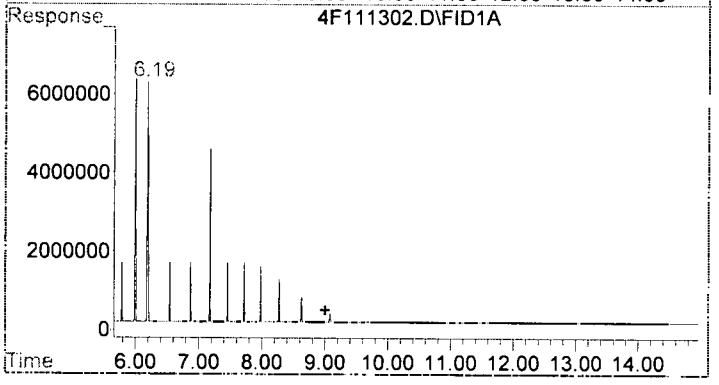
#6 o-Terphenyl

R.T.: 6.544 min
Delta R.T.: 0.134 min
Response: 9600811
Conc: 8.07 ug/mL



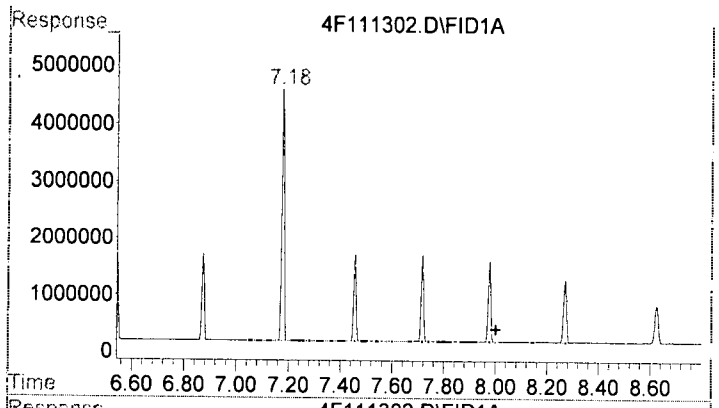
#7 Oil

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 172971041
Conc: 189.45 ug/mL m



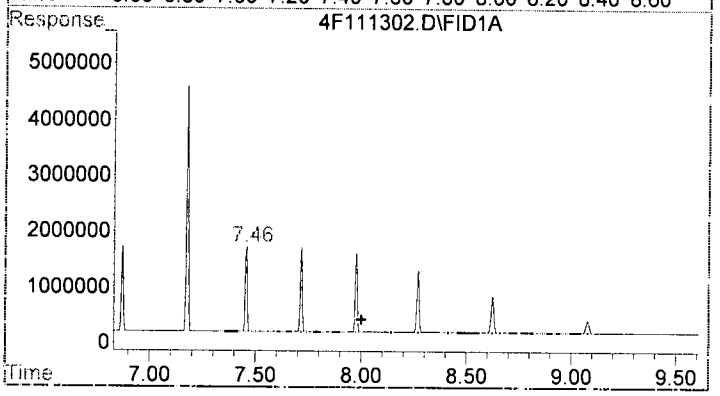
#8 RRO (C24-C40)

R.T.: 9.000 min
Delta R.T.: 0.000 min
Response: 172971041
Conc: 189.45 ug/mL m



#9 CA LUFT ORO (C23-C32)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 70284705
Conc: 119.01 ug/mL m



#10 TPHmo (C25-C36)

R.T.: 8.000 min
Delta R.T.: 0.000 min
Response: 51361156
Conc: 85.83 ug/mL m

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111303.D Vial: 99
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13037-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	4141914	3.855	ug/mL
2)	H	Diesel	6.00	4141914	3.855	ug/mL
3)	H	DRO(C12-C24)	6.00	4141914	3.855	ug/mL
4)	H	TPHd (C10-C25)	6.00	1396345	1.419	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	629600	0.796	ug/ml
7)	H	Oil	9.00	14206774	15.560	ug/mL
8)	H	RRO (C24-C40)	9.00	14206774	15.560	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2409881	4.081	ug/mL
10)	H	TPHmo (C25-C36)	8.00	4335258	7.245	ug/mL

11.14.19

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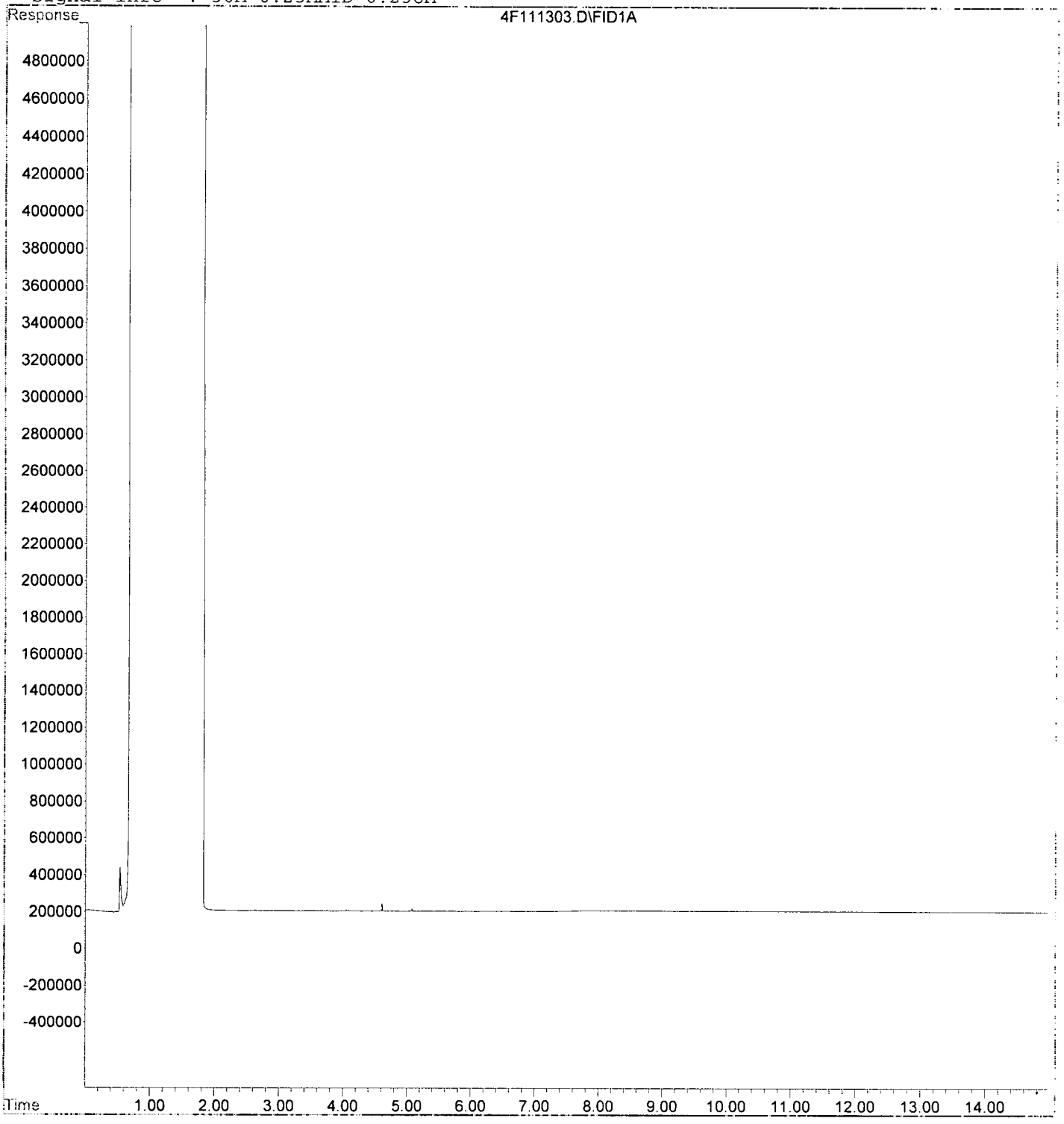
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111303.D Vial: 99
Acq On : 13 Nov 2019 10:39 Operator: BLL
Sample : 9K13037-ICB1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111304.D Vial: 1
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13037-CAL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	29030243	27.022	ug/mL
2)	H	Diesel	6.00	29030243	27.022	ug/mL
3)	H	DRO(C12-C24)	6.00	29030243	27.022	ug/mL
4)	H	TPHd (C10-C25)	6.00	23768141	24.152	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	18307855	23.153	ug/ml
7)	H	Oil	9.00	10468883	11.466	ug/mL
8)	H	RRO (C24-C40)	9.00	10468883	11.466	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	1141989	1.934	ug/mL
10)	H	TPHmo (C25-C36)	8.00	1863378	3.114	ug/mL

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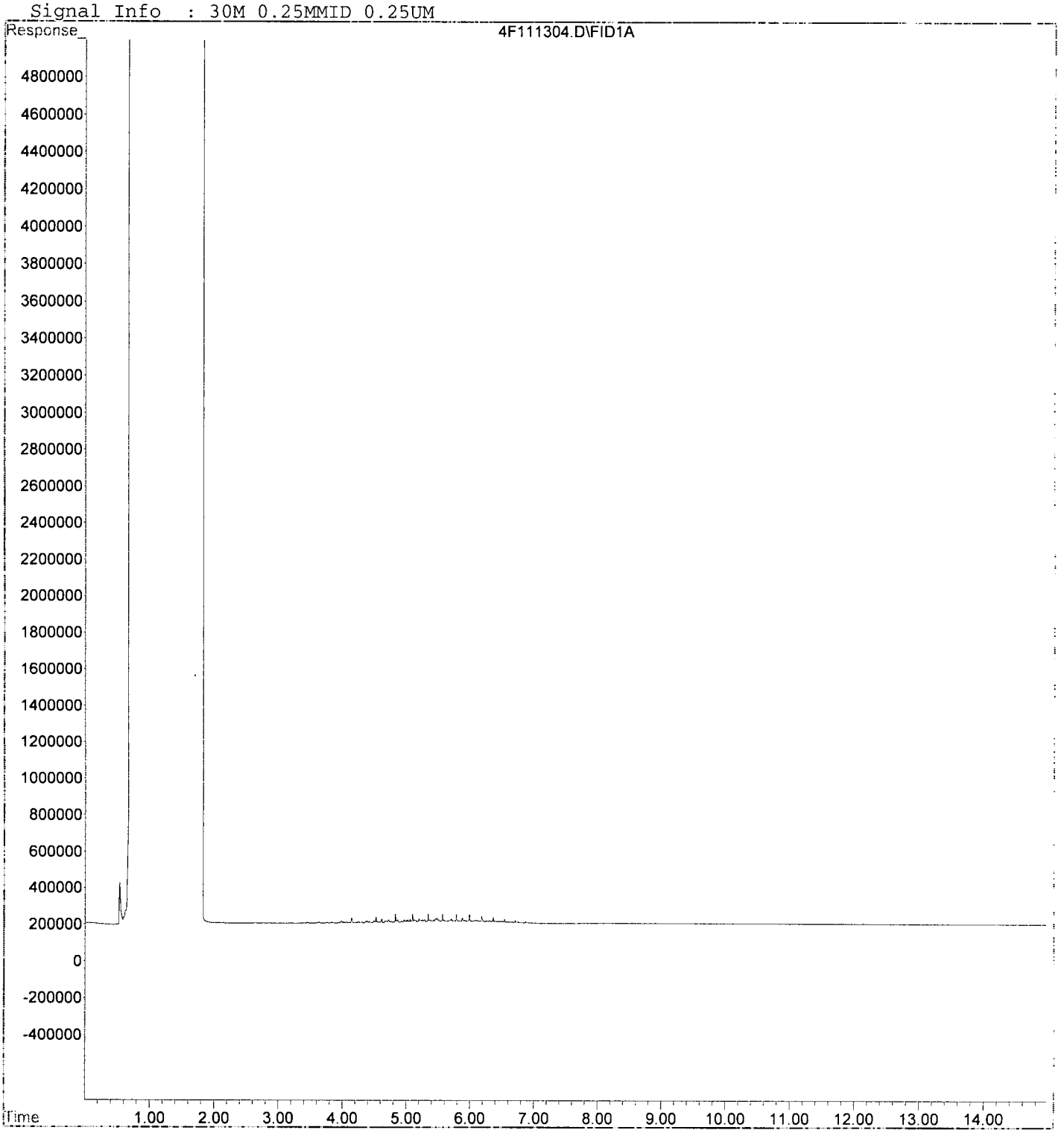
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111304.D Vial: 1
Acq On : 13 Nov 2019 10:59 Operator: BLL
Sample : 9K13037-CAL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:11 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111305.D Vial: 2
Acq On : 13 Nov 2019 11:21 Operator: BLL
Sample : 9K13037-CAL2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	44347106	41.280	ug/mL
2)	H	Diesel	6.00	44347106	41.280	ug/mL
3)	H	DRO(C12-C24)	6.00	44347106	41.280	ug/mL
4)	H	TPHd (C10-C25)	6.00	38117117	38.734	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	29023298	36.705	ug/ml
7)	H	Oil	9.00	14327222	15.692	ug/mL
8)	H	RRO (C24-C40)	9.00	14327222	15.692	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	1116711	1.891	ug/mL
10)	H	TPHmo (C25-C36)	8.00	1448252	2.420	ug/mL

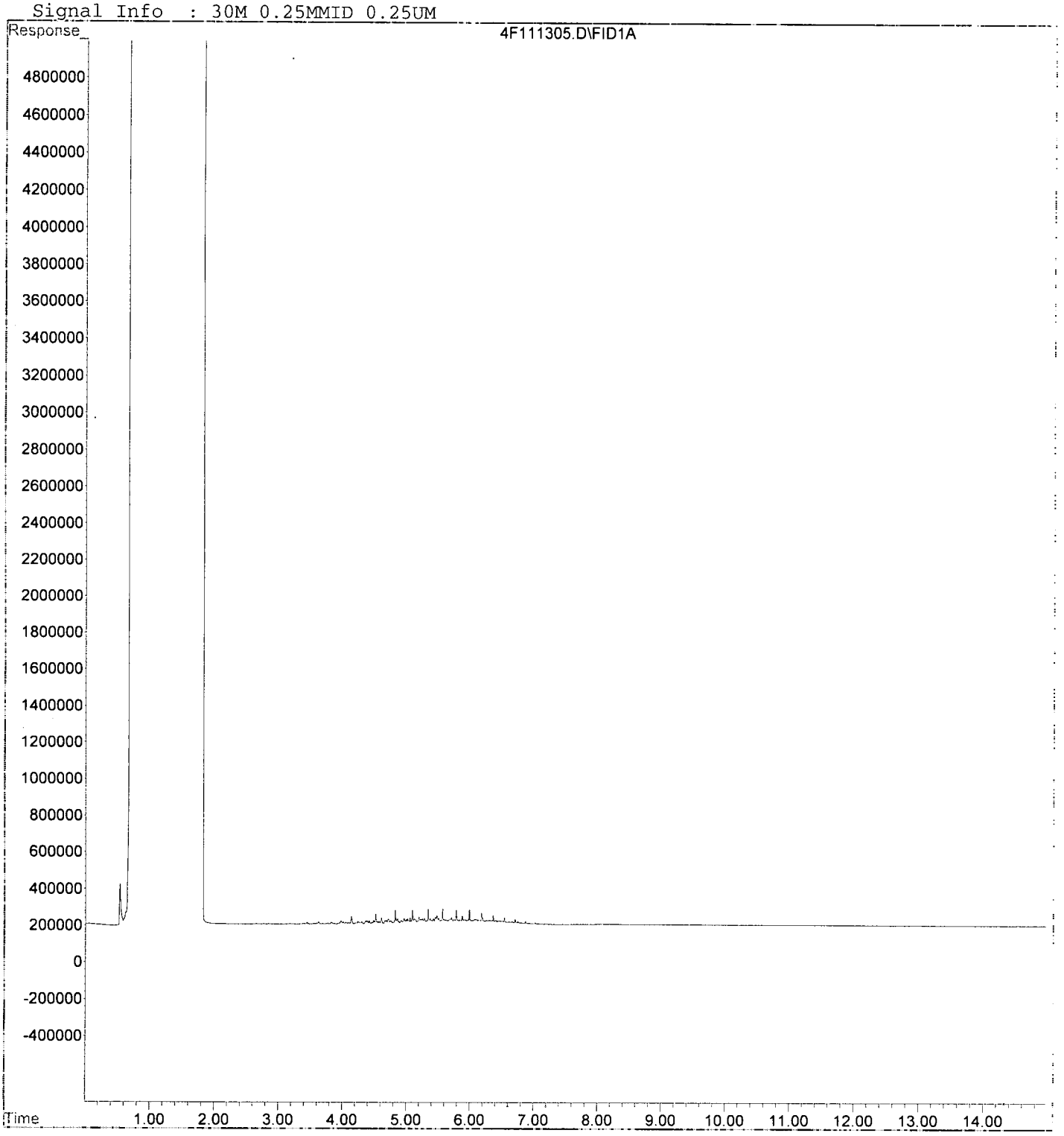
AR 11.14.19

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111305.D Vial: 2
Acq On : 13 Nov 2019 11:21 Operator: BLL
Sample : 9K13037-CAL2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111306.D Vial: 3
Acq On : 13 Nov 2019 11:41 Operator: BLL
Sample : 9K13037-CAL3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	105789453	98.472	ug/mL
2)	H	Diesel	6.00	105789453	98.472	ug/mL
3)	H	DRO(C12-C24)	6.00	105789453	98.472	ug/mL
4)	H	TPHd (C10-C25)	6.00	92974056	94.478	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	72340849	91.488	ug/ml
7)	H	Oil	9.00	30540046	33.449	ug/mL
8)	H	RRO (C24-C40)	9.00	30540046	33.449	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2350719	3.981	ug/mL
10)	H	TPHmo (C25-C36)	8.00	1972050	3.295	ug/mL

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

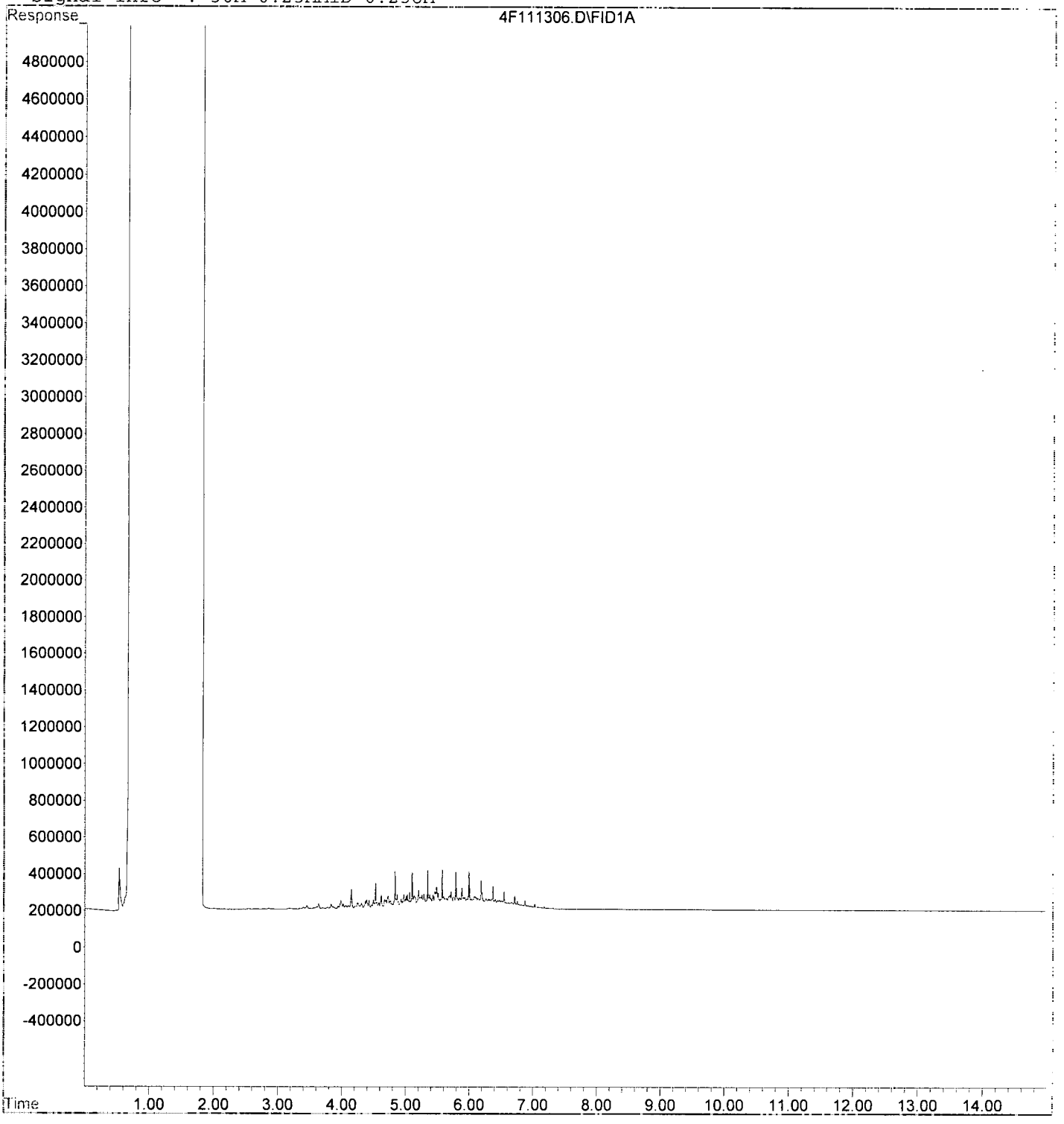
4F111306.D 4F91113D.M Thu Nov 14 08:12:25 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111306.D Vial: 3
Acq On : 13 Nov 2019 11:41 Operator: BLL
Sample : 9K13037-CAL3 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111307.D Vial: 4
Acq On : 13 Nov 2019 12:01 Operator: BLL
Sample : 9K13037-CAL4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	260739604	242.705	ug/mL
2)	H	Diesel	6.00	260739604	242.705	ug/mL
3)	H	DRO(C12-C24)	6.00	260739604	242.705	ug/mL
4)	H	TPHd (C10-C25)	6.00	233061201	236.830	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	188035170	237.803	ug/ml
7)	H	Oil	9.00	68405548	74.921	ug/mL
8)	H	RRO (C24-C40)	9.00	68405548	74.921	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	6532846	11.062	ug/mL
10)	H	TPHmo (C25-C36)	8.00	3269268	5.463	ug/mL

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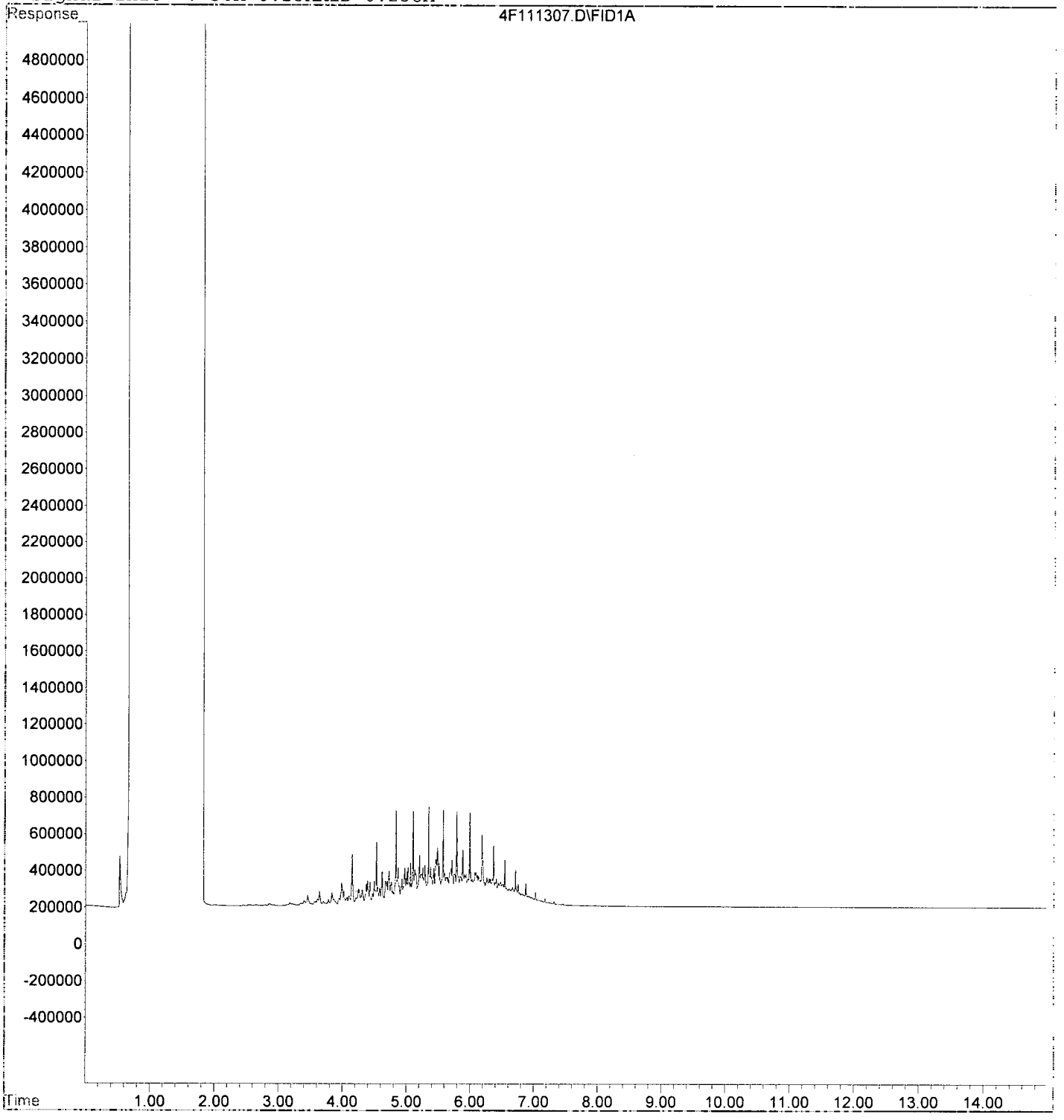
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111307.D Vial: 4
Acq On : 13 Nov 2019 12:01 Operator: BLL
Sample : 9K13037-CAL4 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:12 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111308.D Vial: 5
Acq On : 13 Nov 2019 12:22 Operator: BLL
Sample : 9K13037-CAL5 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	522634138	486.486	ug/mL
2)	H	Diesel	6.00	522634138	486.486	ug/mL
3)	H	DRO(C12-C24)	6.00	522634138	486.486	ug/mL
4)	H	TPHd (C10-C25)	6.00	478695481	486.436	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	384492440	486.258	ug/ml
7)	H	Oil	9.00	135512628	148.420	ug/mL
8)	H	RRO (C24-C40)	9.00	135512628	148.420	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	13952473	23.626	ug/mL
10)	H	TPHmo (C25-C36)	8.00	5827869	9.739	ug/mL

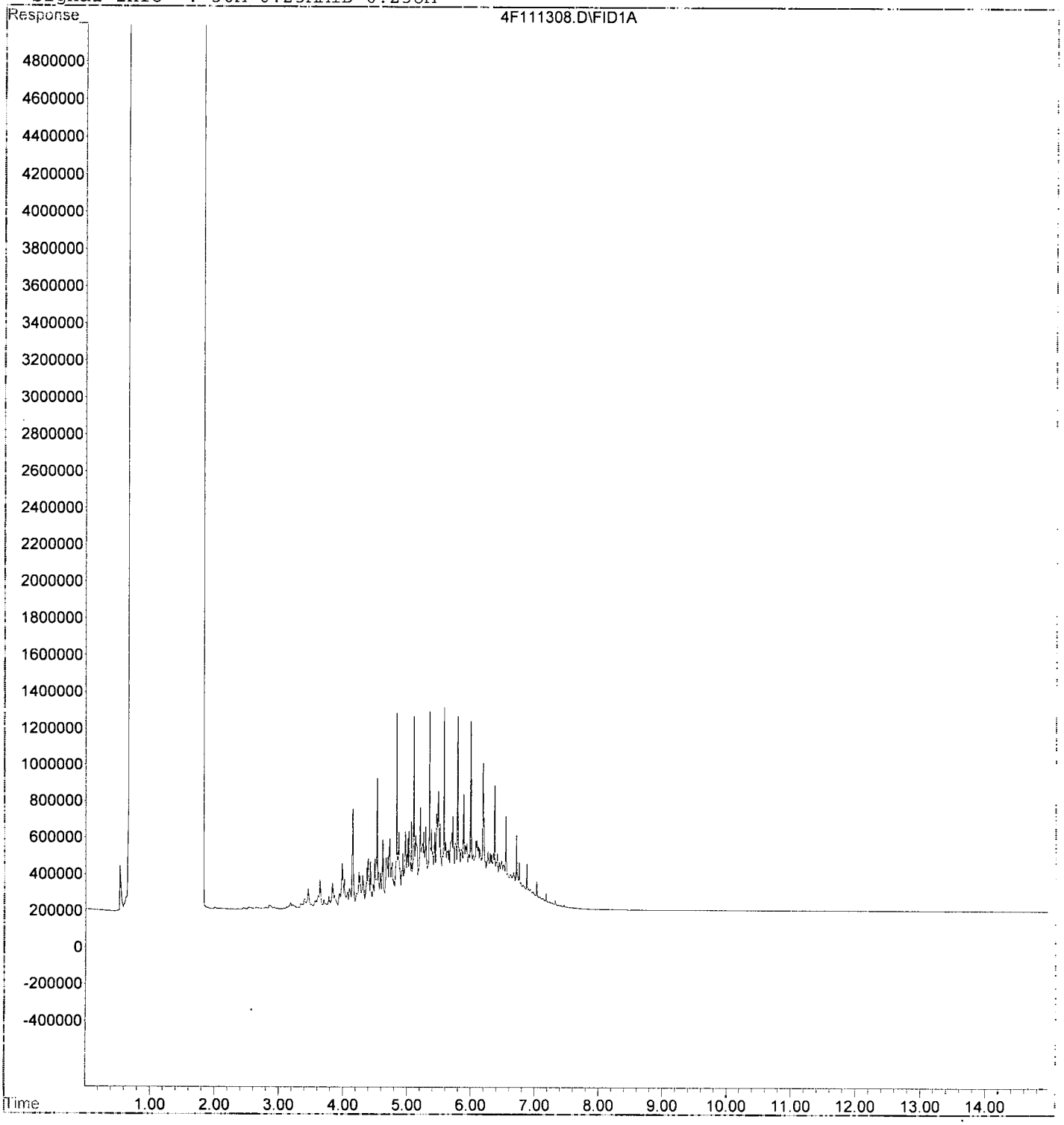
AR 11.14.19

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111308.D Vial: 5
Acq On : 13 Nov 2019 12:22 Operator: BLL
Sample : 9K13037-CAL5 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111309.D Vial: 6
Acq On : 13 Nov 2019 12:43 Operator: BLL
Sample : 9K13037-CAL6 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	1092943731	1017.350	ug/mL
2)	H	Diesel	6.00	1092943731	1017.350	ug/mL
3)	H	DRO(C12-C24)	6.00	1092943731	1017.350	ug/mL
4)	H	TPHd (C10-C25)	6.00	1012691303	1029.068	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	812665651	1027.757	ug/ml
7)	H	Oil	9.00	277692028	304.141	ug/mL
8)	H	RRO (C24-C40)	9.00	277692028	304.141	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	29497981	49.949	ug/mL
10)	H	TPHmo (C25-C36)	8.00	11611031	19.403	ug/mL

AL 11.14.19

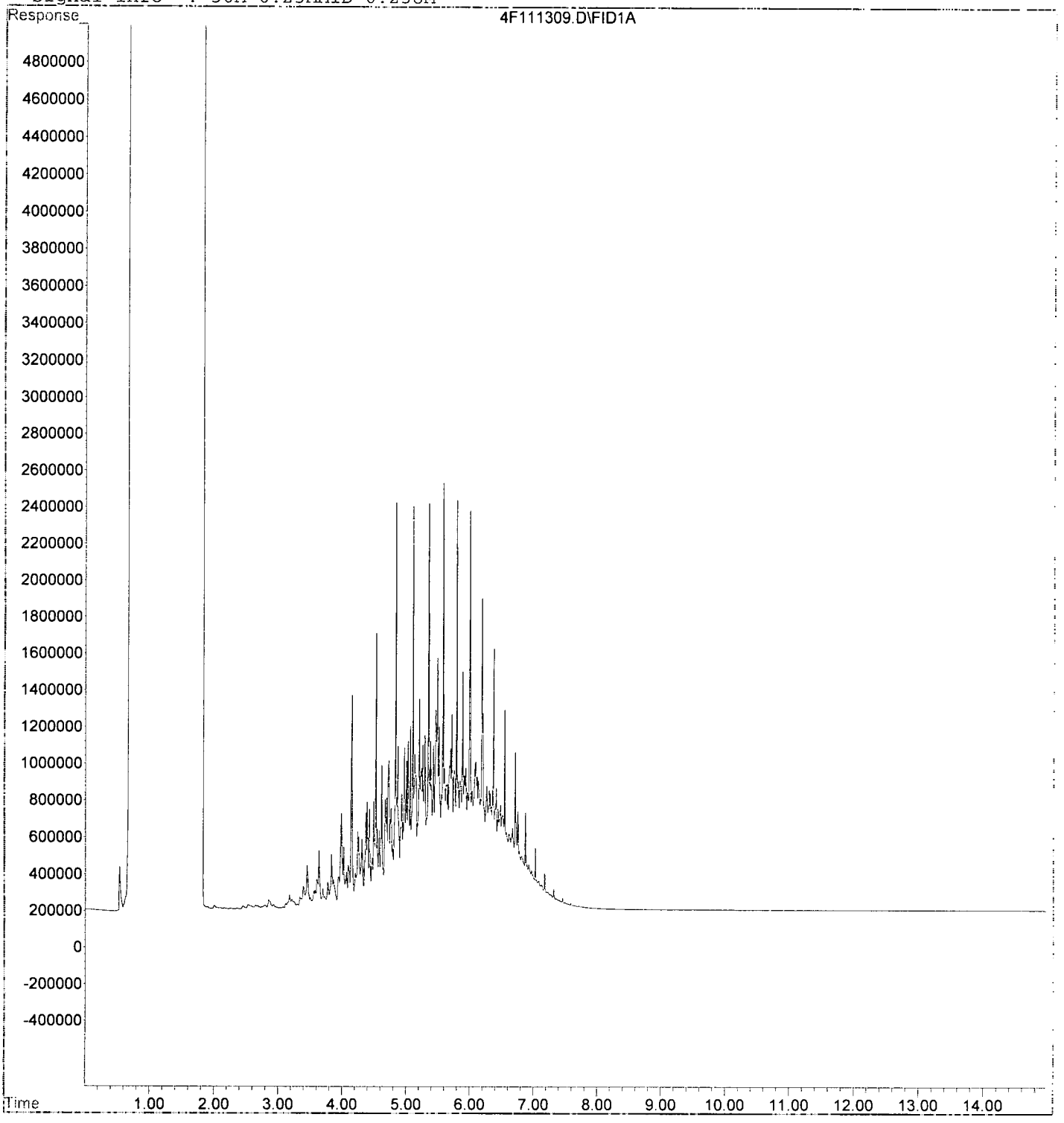
✓

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111309.D Vial: 6
Acq On : 13 Nov 2019 12:43 Operator: BLL
Sample : 9K13037-CAL6 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111310.D Vial: 7
Acq On : 13 Nov 2019 13:04 Operator: BLL
Sample : 9K13037-CAL7 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	2719582583	2531.482	ug/mL
2)	H	Diesel	6.00	2719582583	2531.482	ug/mL
3)	H	DRO(C12-C24)	6.00	2719582583	2531.482	ug/mL
4)	H	TPHd (C10-C25)	6.00	2522954646	2563.753	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	2020754373	2555.596	ug/ml
7)	H	Oil	9.00	684392716	749.578	ug/mL
8)	H	RRO (C24-C40)	9.00	684392716	749.578	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	74808993	126.675	ug/mL
10)	H	TPHmo (C25-C36)	8.00	28339432	47.358	ug/mL

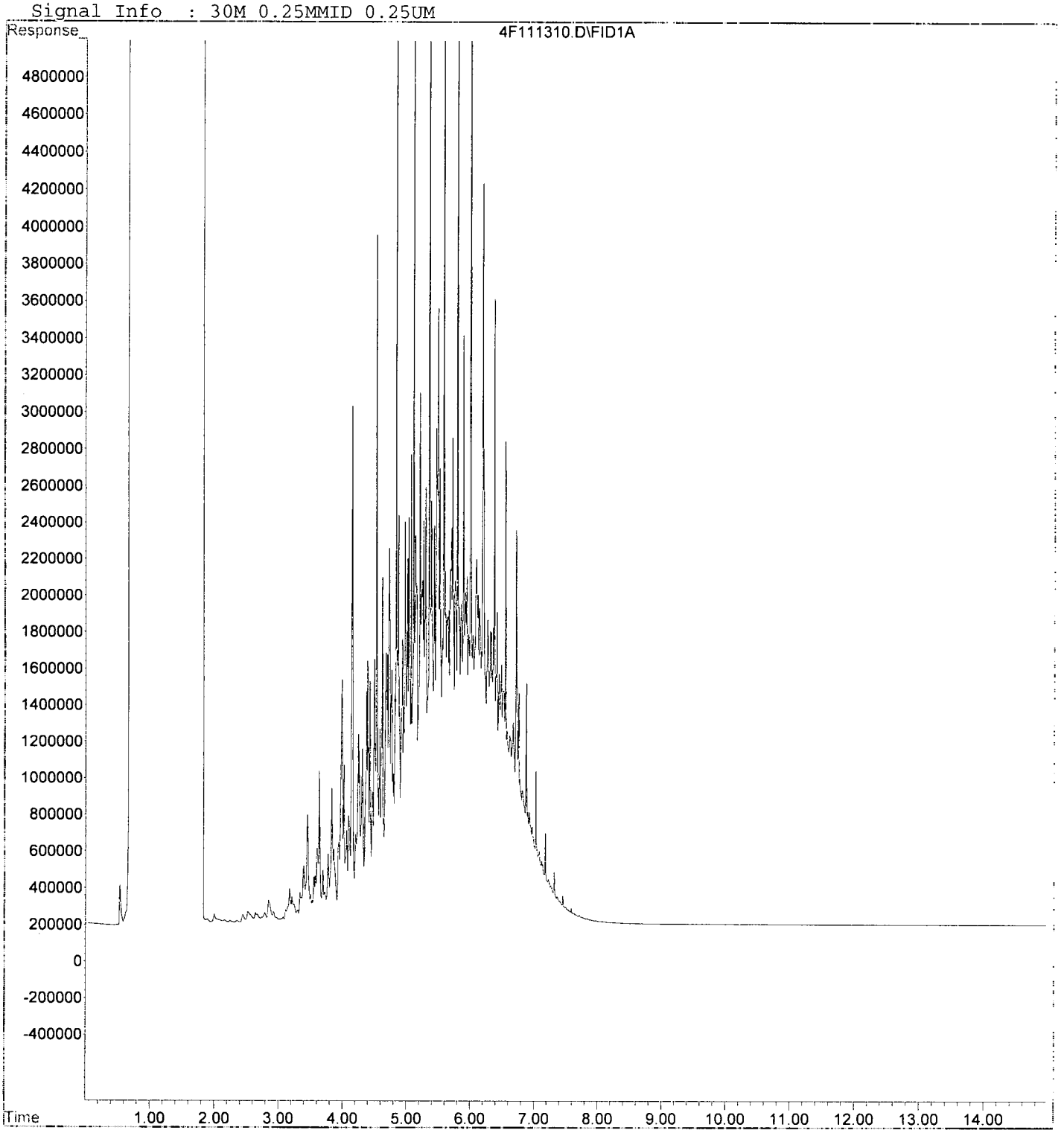
AR 11.14.19

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111310.D Vial: 7
Acq On : 13 Nov 2019 13:04 Operator: BLL
Sample : 9K13037-CAL7 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:13 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111311.D Vial: 8
Acq On : 13 Nov 2019 13:26 Operator: BLL
Sample : 9K13037-CAL8 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	5433242935	5057.451	ug/mL
2)	H	Diesel	6.00	5433242935	5057.451	ug/mL
3)	H	DRO(C12-C24)	6.00	5433242935	5057.451	ug/mL
4)	H	TPHd (C10-C25)	6.00	5039706448	5121.203	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	4033244979	5100.741	ug/ml
7)	H	Oil	9.00	1367191740	1497.411	ug/mL
8)	H	RRO (C24-C40)	9.00	1367191740	1497.411	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	149541436	253.220	ug/mL
10)	H	TPHmo (C25-C36)	8.00	55818436	93.278	ug/mL

AL 11.14.19

(f)=RT Delta > 1/2 window (m)=Manual Inc.

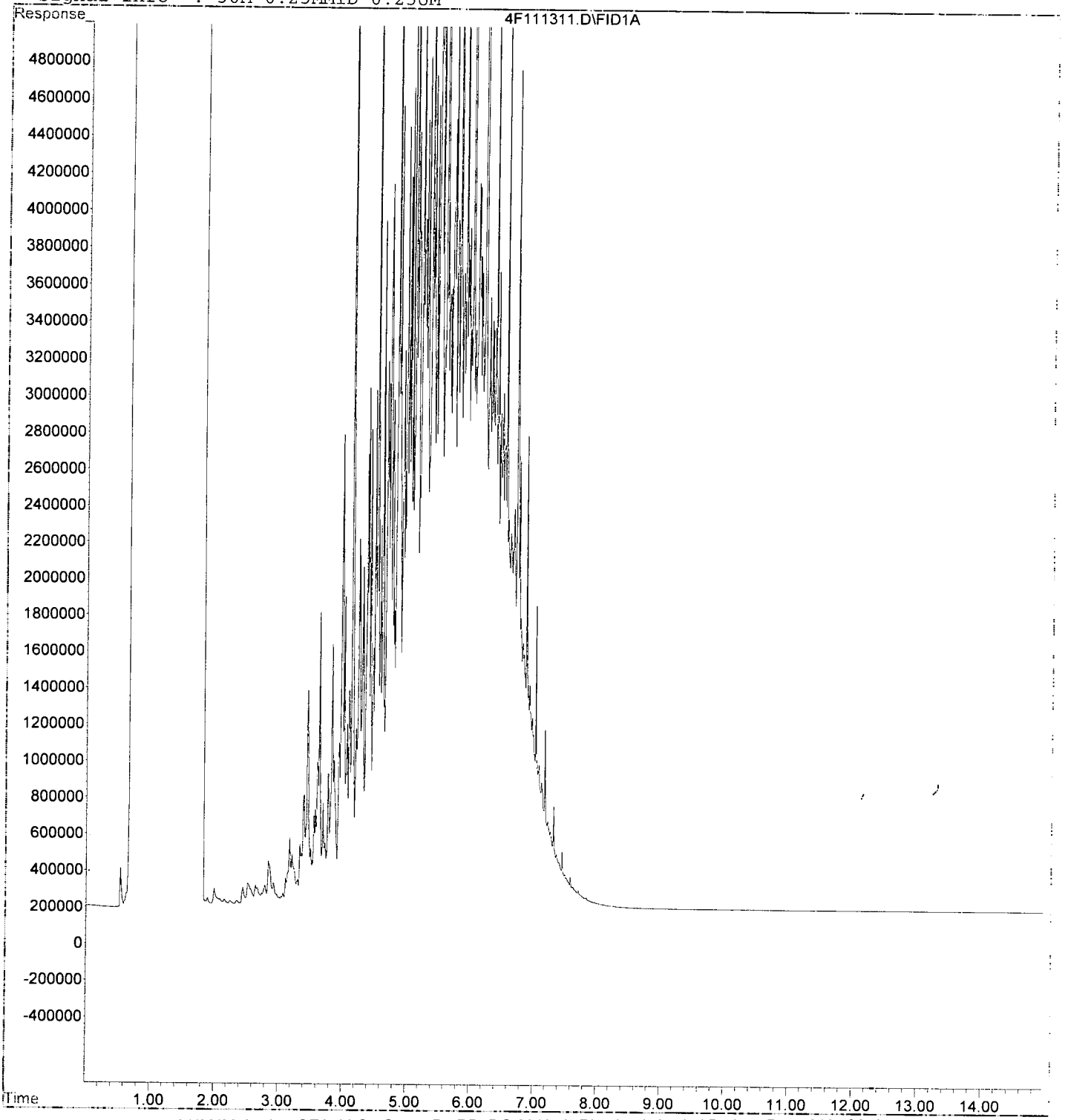
4F111311.D 4F91113D.M Thu Nov 14 08:14:08 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111311.D Vial: 8
Acq On : 13 Nov 2019 13:26 Operator: BLL
Sample : 9K13037-CAL8 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111312.D Vial: 9
Acq On : 13 Nov 2019 13:47 Operator: BLL
Sample : 9K13037-CAL9 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	6.41	12139940	10.205 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	11723162	10.912 ug/mL
2)	H	Diesel	6.00	11723162	10.912 ug/mL
3)	H	DRO(C12-C24)	6.00	11723162	10.912 ug/mL
4)	H	TPHd (C10-C25)	6.00	8174654	8.307 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	6687411	8.457 ug/ml
7)	H	Oil	9.00	18104543	19.829 ug/mL
8)	H	RRO (C24-C40)	9.00	18104543	19.829 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2355864	3.989 ug/mL
10)	H	TPHmo (C25-C36)	8.00	3899988	6.517 ug/mL

AN 11.14.19

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

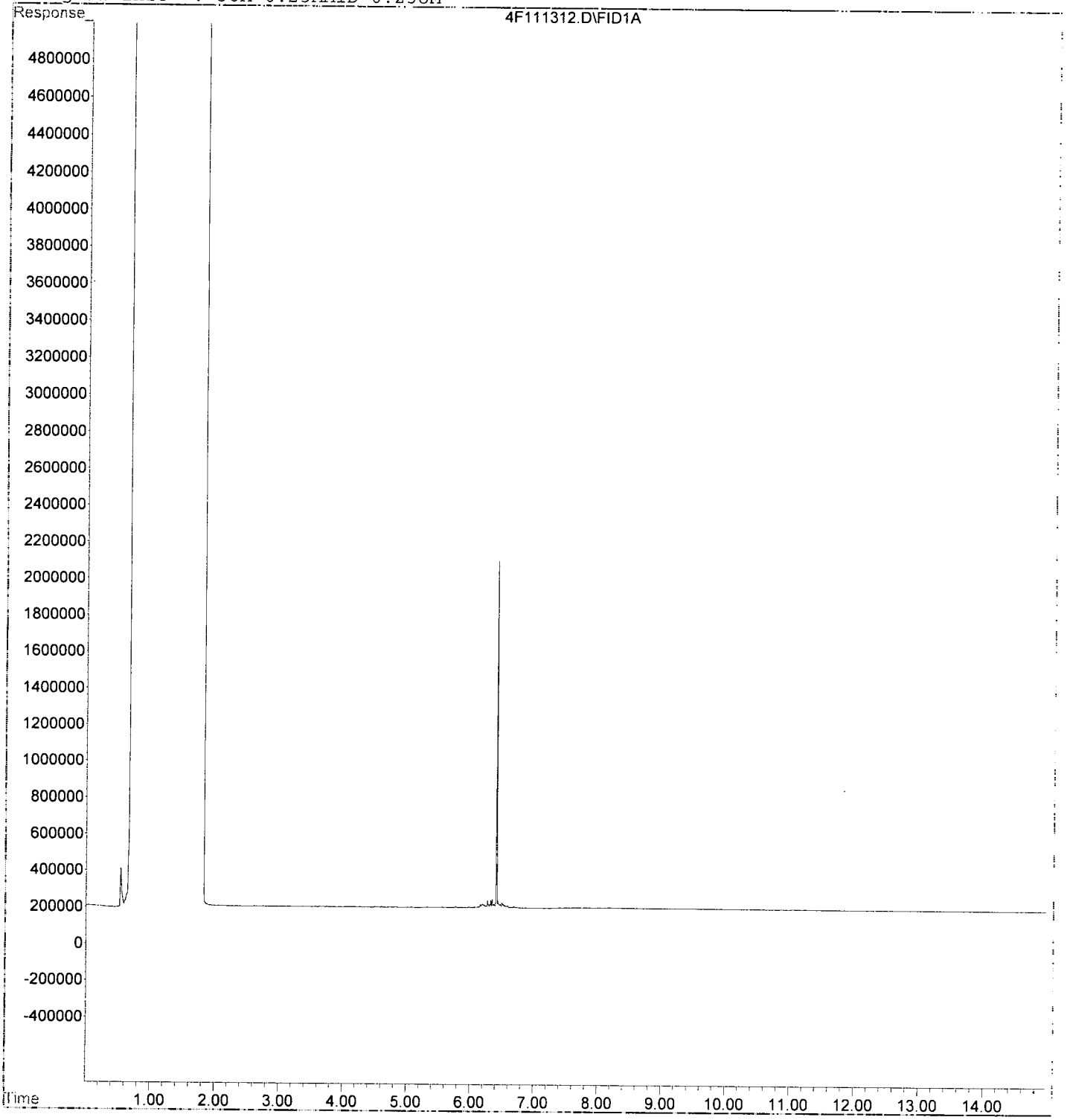
4F111312.D 4F91113D.M Thu Nov 14 08:14:15 2019 SV_GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111312.D Vial: 9
Acq On : 13 Nov 2019 13:47 Operator: BLL
Sample : 9K13037-CAL9 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111313.D Vial: 10
Acq On : 13 Nov 2019 14:09 Operator: BLL
Sample : 9K13037-CALA Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	6.41	29588513	24.873 ug/mL
		Target Compounds			
1)	H	Mineral Oil	6.00	10479715	9.755 ug/mL
2)	H	Diesel	6.00	10479715	9.755 ug/mL
3)	H	DRO(C12-C24)	6.00	10479715	9.755 ug/mL
4)	H	TPHd (C10-C25)	6.00	6954759	7.067 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	5881898	7.439 ug/ml
7)	H	Oil	9.00	21854710	23.936 ug/mL
8)	H	RRO (C24-C40)	9.00	21854710	23.936 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2431757	4.118 ug/mL
10)	H	TPHmo (C25-C36)	8.00	4122403	6.889 ug/mL

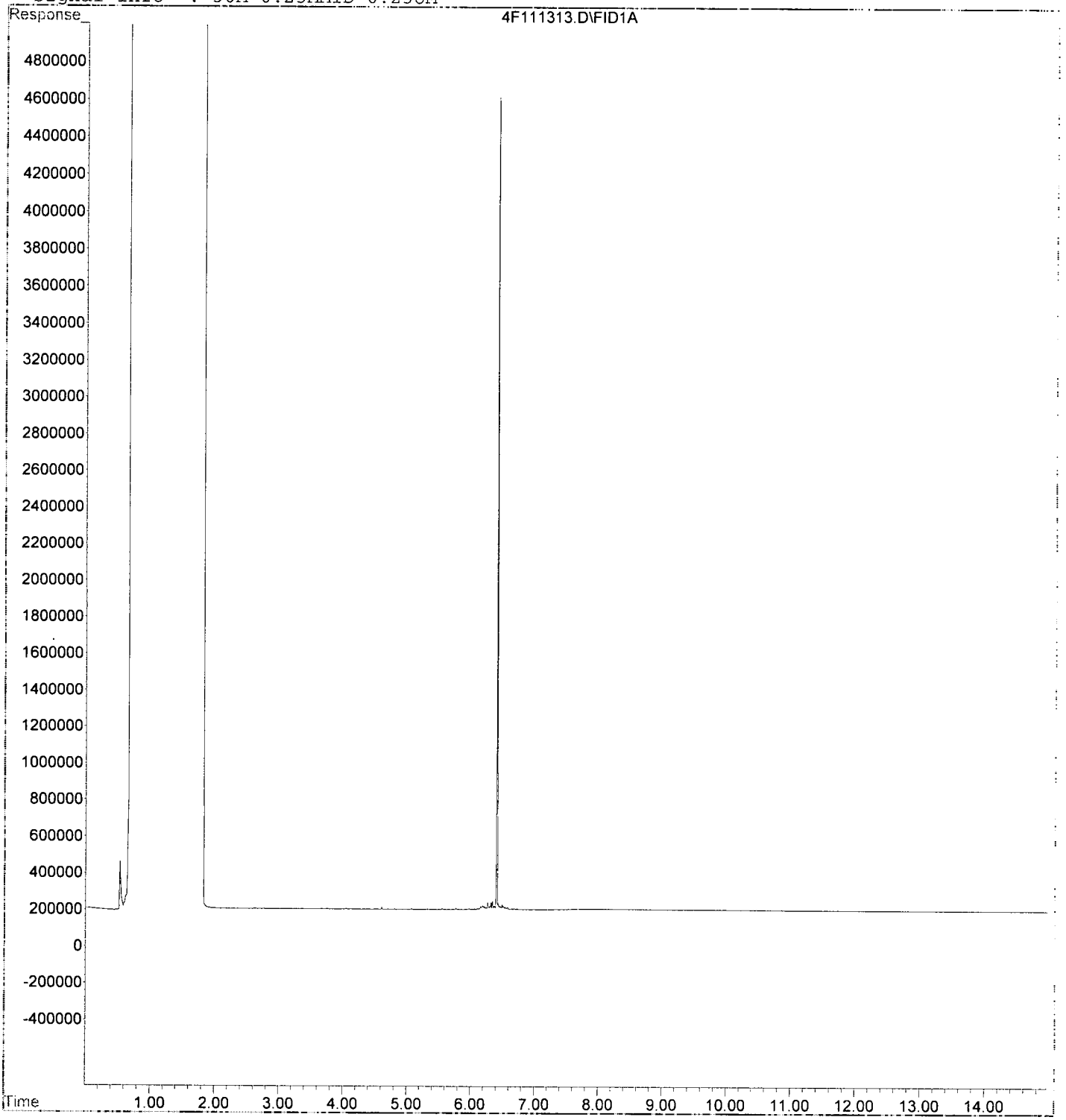
11.14.19

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111313.D Vial: 10
Acq On : 13 Nov 2019 14:09 Operator: BLL
Sample : 9K13037-CALA Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111314.D Vial: 11
Acq On : 13 Nov 2019 14:30 Operator: BLL
Sample : 9K13037-CALB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	~~6.41~~	~~62648145~~	~~52.665 ug/mL~~
Target Compounds					
1)	H	Mineral Oil	6.00	11356449	10.571 ug/mL
2)	H	Diesel	6.00	11356449	10.571 ug/mL
3)	H	DRO(C12-C24)	6.00	11356449	10.571 ug/mL
4)	H	TPHd (C10-C25)	6.00	7788787	7.915 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	6496624	8.216 ug/ml
7)	H	Oil	9.00	21042736	23.047 ug/mL
8)	H	RRO (C24-C40)	9.00	21042736	23.047 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2440878	4.133 ug/mL
10)	H	TPHmo (C25-C36)	8.00	4130718	6.903 ug/mL

AN 11.14.19

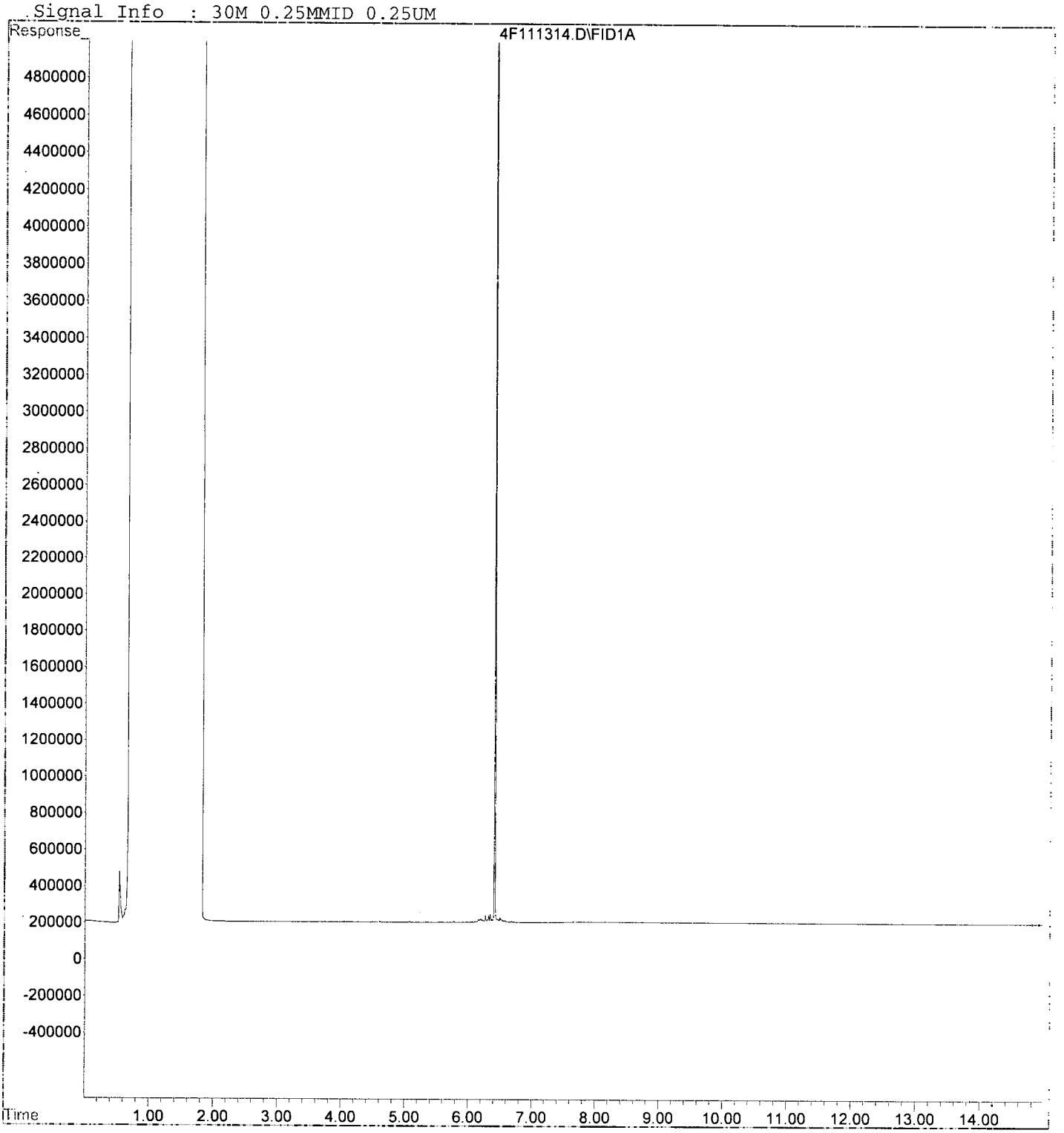
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111314.D Vial: 11
Acq On : 13 Nov 2019 14:30 Operator: BLL
Sample : 9K13037-CALB Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111315.D Vial: 12
Acq On : 13 Nov 2019 14:52 Operator: BLL
Sample : 9K13037-CALC Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	~~6.42~~	~~122977878~~	~~103.380 ug/mL~~
Target Compounds					
1)	H	Mineral Oil	6.00	9933310	9.246 ug/mL
2)	H	Diesel	6.00	9933310	9.246 ug/mL
3)	H	DRO(C12-C24)	6.00	9933310	9.246 ug/mL
4)	H	TPHd (C10-C25)	6.00	6223315	6.324 ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	4837688	6.118 ug/ml
7)	H	Oil	9.00	18628416	20.403 ug/mL
8)	H	RRO (C24-C40)	9.00	18628416	20.403 ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2233147	3.781 ug/mL
10)	H	TPHmo (C25-C36)	8.00	3694597	6.174 ug/mL

AL 11.14.19

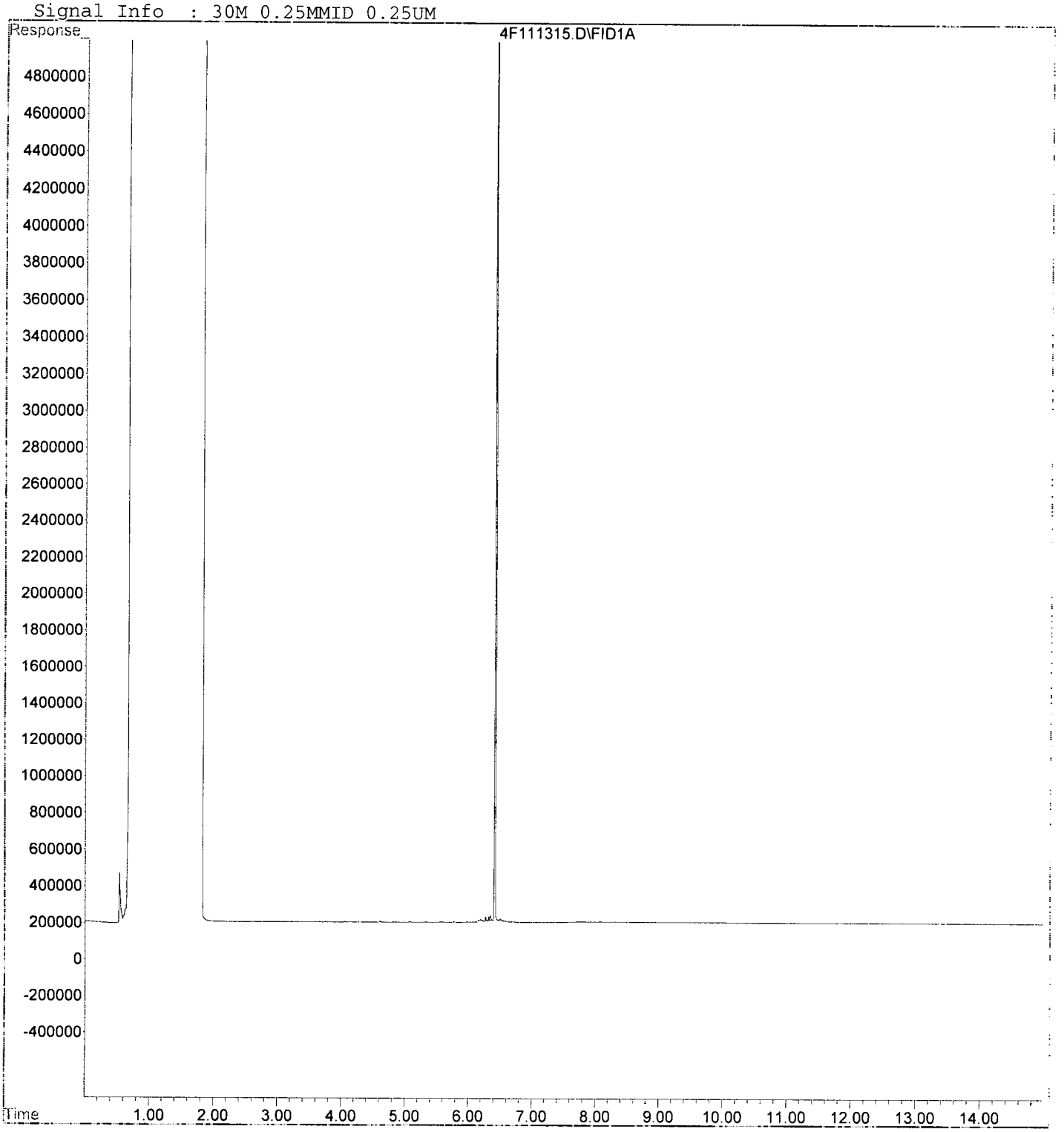
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111315.D Vial: 12
Acq On : 13 Nov 2019 14:52 Operator: BLL
Sample : 9K13037-CALC Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111316.D Vial: 13
Acq On : 13 Nov 2019 15:12 Operator: BLL
Sample : 9K13037-CALD Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	~~6.42~~	~~261109115~~	~~219.499~~	~~ug/mL~~
Target Compounds						
1)	H	Mineral Oil	6.00	-16801469	N.D.	ug/mL
2)	H	Diesel	6.00	-16801469	N.D.	ug/mL
3)	H	DRO(C12-C24)	6.00	-16801469	N.D.	ug/mL
4)	H	TPHd (C10-C25)	6.00	-20348846	N.D.	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	-21487017	N.D.	ug/ml
7)	H	Oil	9.00	-6838264	N.D.	ug/mL
8)	H	RRO (C24-C40)	9.00	-6838264	N.D.	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2302612	3.899	ug/mL
10)	H	TPHmo (C25-C36)	8.00	3990320	6.668	ug/mL

11.14.19

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

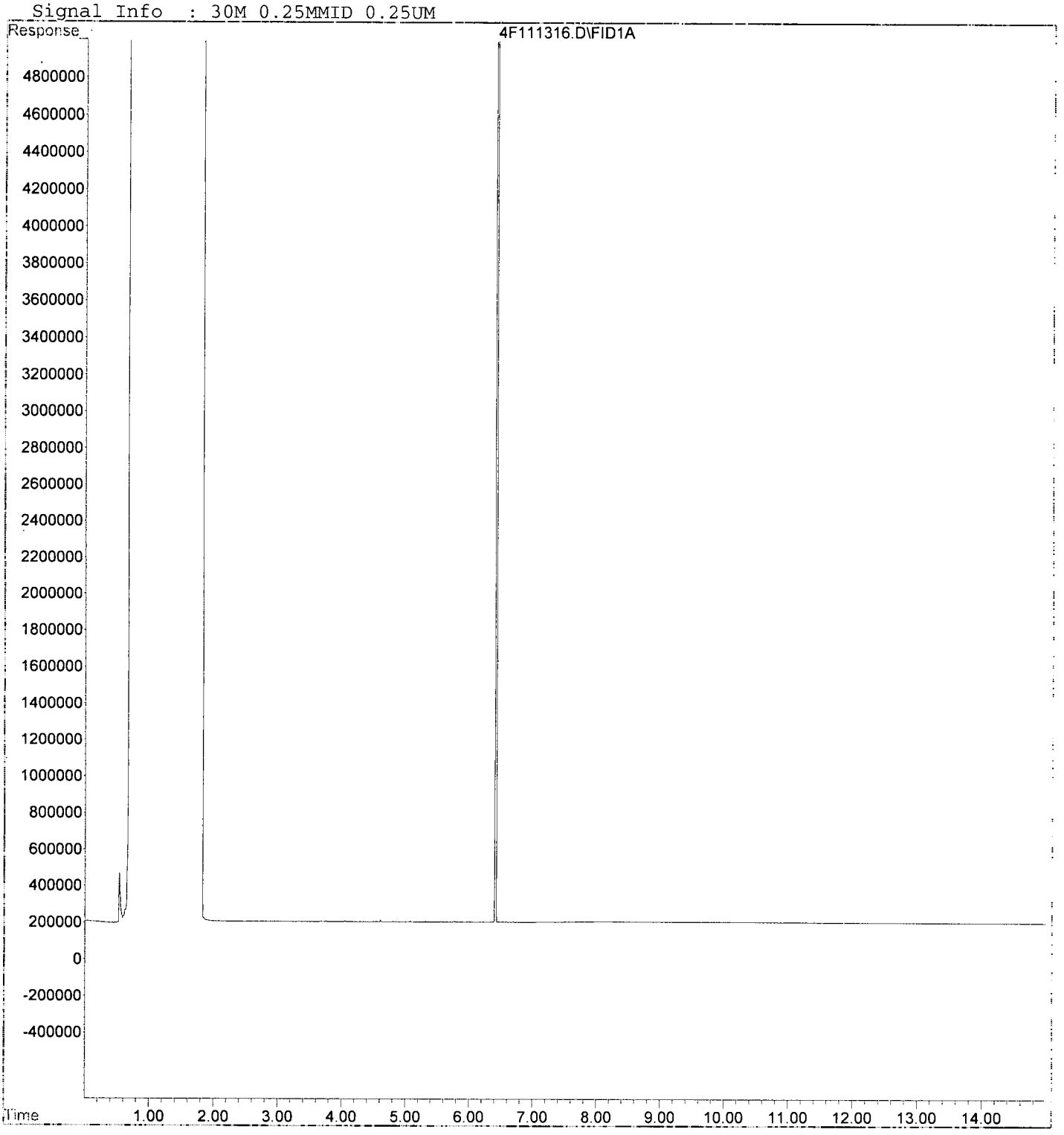
4F111316.D 4F91113D.M Thu Nov 14 08:14:33 2019 SV-GCMS3 Page 1

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111316.D Vial: 13
Acq On : 13 Nov 2019 15:12 Operator: BLL
Sample : 9K13037-CALD Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111317.D Vial: 14
Acq On : 13 Nov 2019 15:34 Operator: BLL
Sample : 9K13037-CALE Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	35177966	32.745	ug/mL
2)	H	Diesel	6.00	35177966	32.745	ug/mL
3)	H	DRO(C12-C24)	6.00	35177966	32.745	ug/mL
4)	H	TPHd (C10-C25)	6.00	11619573	11.807	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	3072089	3.885	ug/ml
7)	H	Oil	9.00	54086991	59.239	ug/mL
8)	H	RRO (C24-C40)	9.00	54086991	59.239	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	28935236	48.996	ug/mL
10)	H	TPHmo (C25-C36)	8.00	29268124	48.910	ug/mL

AR 11.14.19

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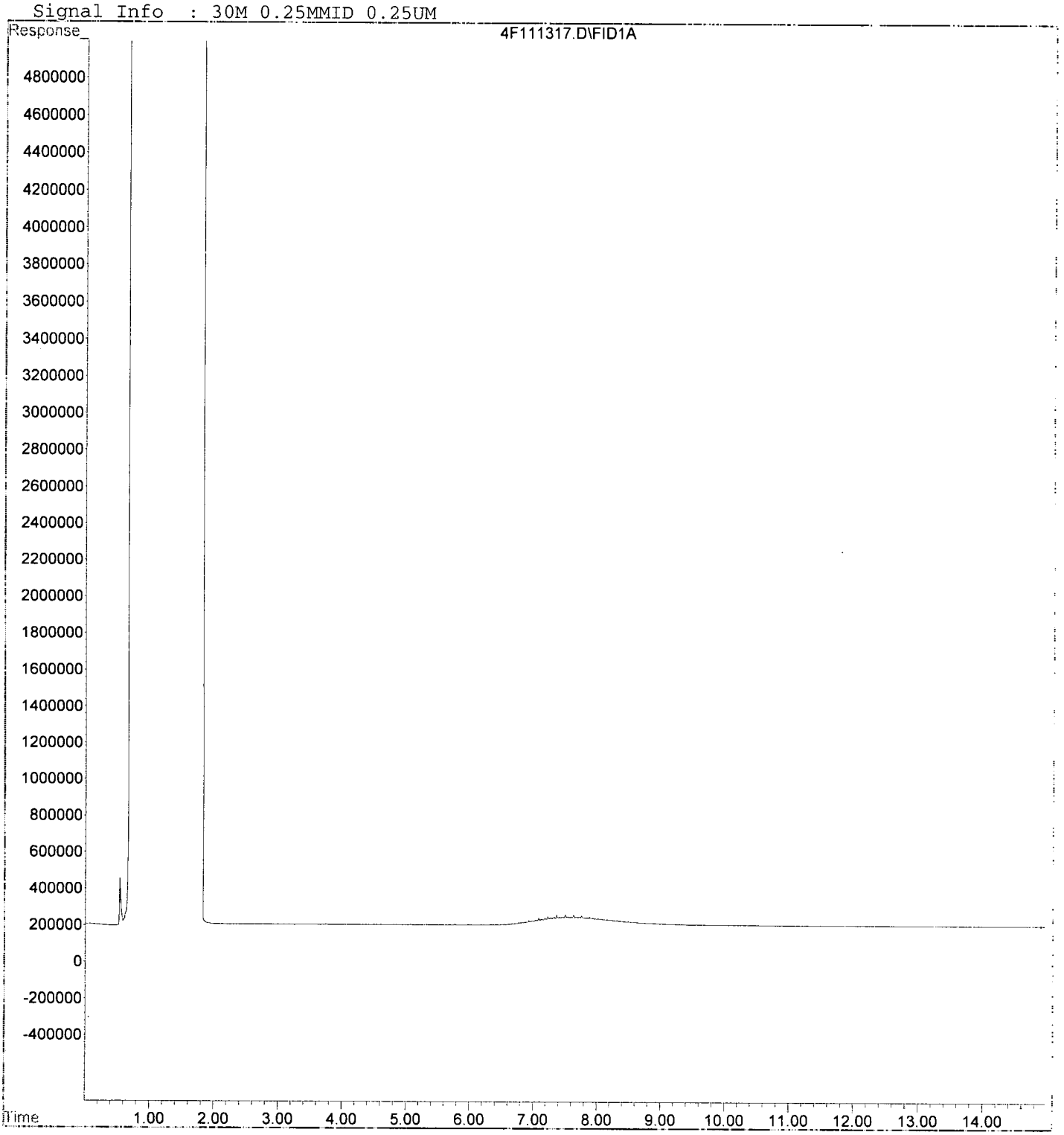
Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111317.D Vial: 14
Acq On : 13 Nov 2019 15:34 Operator: BLL
Sample : 9K13037-CALE Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111318.D Vial: 15
Acq On : 13 Nov 2019 15:54 Operator: BLL
Sample : 9K13037-CALF Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	65472795	60.944	ug/mL
2)	H	Diesel	6.00	65472795	60.944	ug/mL
3)	H	DRO(C12-C24)	6.00	65472795	60.944	ug/mL
4)	H	TPHd (C10-C25)	6.00	21696020	22.047	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	5517366	6.978	ug/ml
7)	H	Oil	9.00	88218438	96.621	ug/mL
8)	H	RRO (C24-C40)	9.00	88218438	96.621	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	54053795	91.530	ug/mL
10)	H	TPHmo (C25-C36)	8.00	53468370	89.350	ug/mL

AM 11.14.19

(f)=RT Delta > 1/2 window (m)=Manual Int.

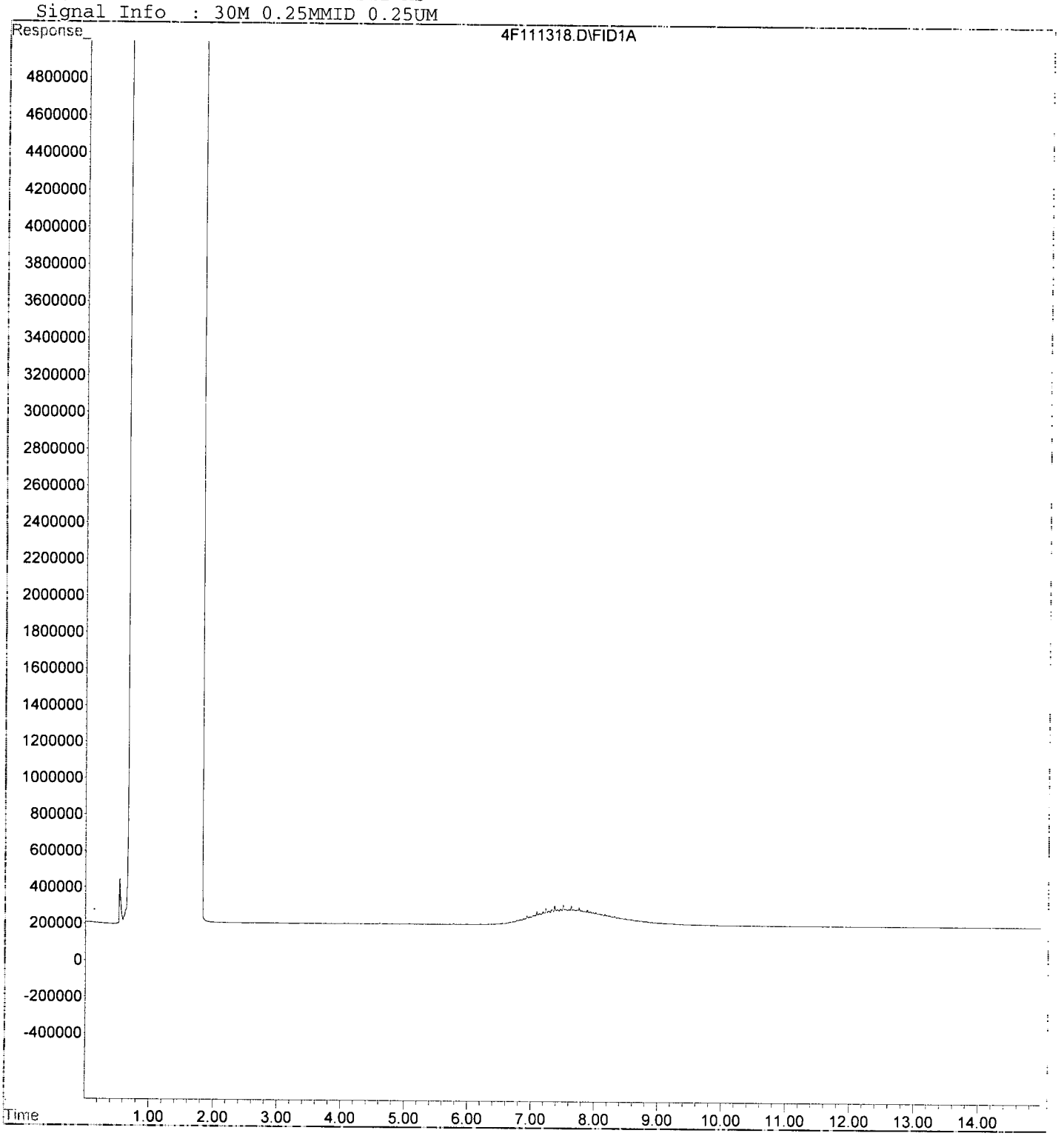
4F111318.D 4F91113D.M Thu Nov 14 08:15:09 2019 SV-GCMS3 Page 1

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111318.D Vial: 15
Acq On : 13 Nov 2019 15:54 Operator: BLL
Sample : 9K13037-CALF Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:14 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111319.D Vial: 16
Acq On : 13 Nov 2019 16:16 Operator: BLL
Sample : 9K13037-CALG Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	205111296	190.925	ug/mL
2)	H	Diesel	6.00	205111296	190.925	ug/mL
3)	H	DRO(C12-C24)	6.00	205111296	190.925	ug/mL
4)	H	TPHd (C10-C25)	6.00	67348559	68.438	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	15703961	19.860	ug/ml
7)	H	Oil	9.00	261319740	286.209	ug/mL
8)	H	RRO (C24-C40)	9.00	261319740	286.209	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	174499920	295.483	ug/mL
10)	H	TPHmo (C25-C36)	8.00	169912217	283.939	ug/mL

AR 11.14.19

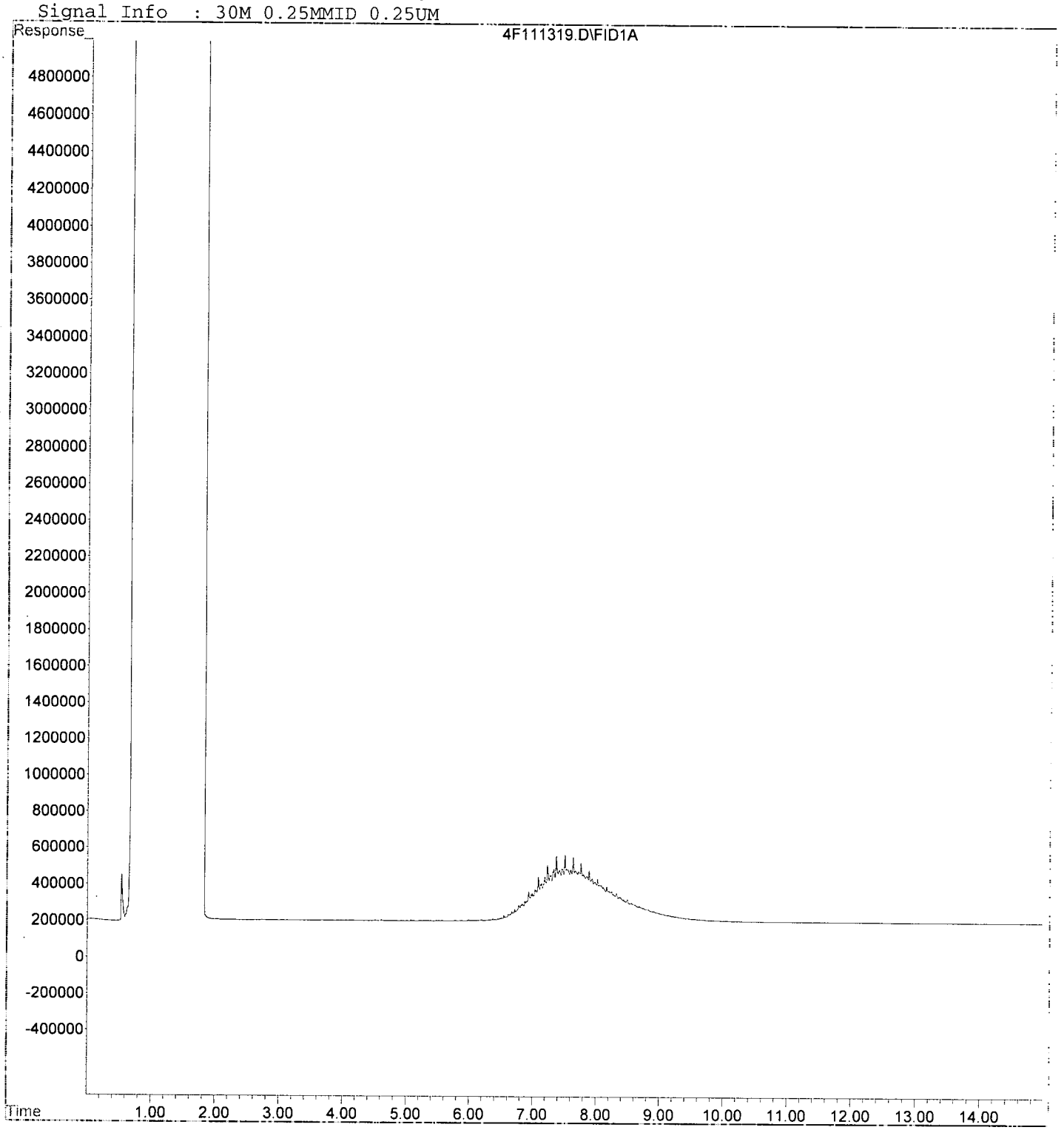
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111319.D Vial: 16
Acq On : 13 Nov 2019 16:16 Operator: BLL
Sample : 9K13037-CALG Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111320.D Vial: 17
Acq On : 13 Nov 2019 16:37 Operator: BLL
Sample : 9K13037-CALH Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	398065605	370.533	ug/mL
2)	H	Diesel	6.00	398065605	370.533	ug/mL
3)	H	DRO(C12-C24)	6.00	398065605	370.533	ug/mL
4)	H	TPHd (C10-C25)	6.00	130269972	132.377	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	30022815	37.969	ug/ml
7)	H	Oil	9.00	498408576	545.880	ug/mL
8)	H	RRO (C24-C40)	9.00	498408576	545.880	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	339741171	575.288	ug/mL
10)	H	TPHmo (C25-C36)	8.00	334274228	558.602	ug/mL

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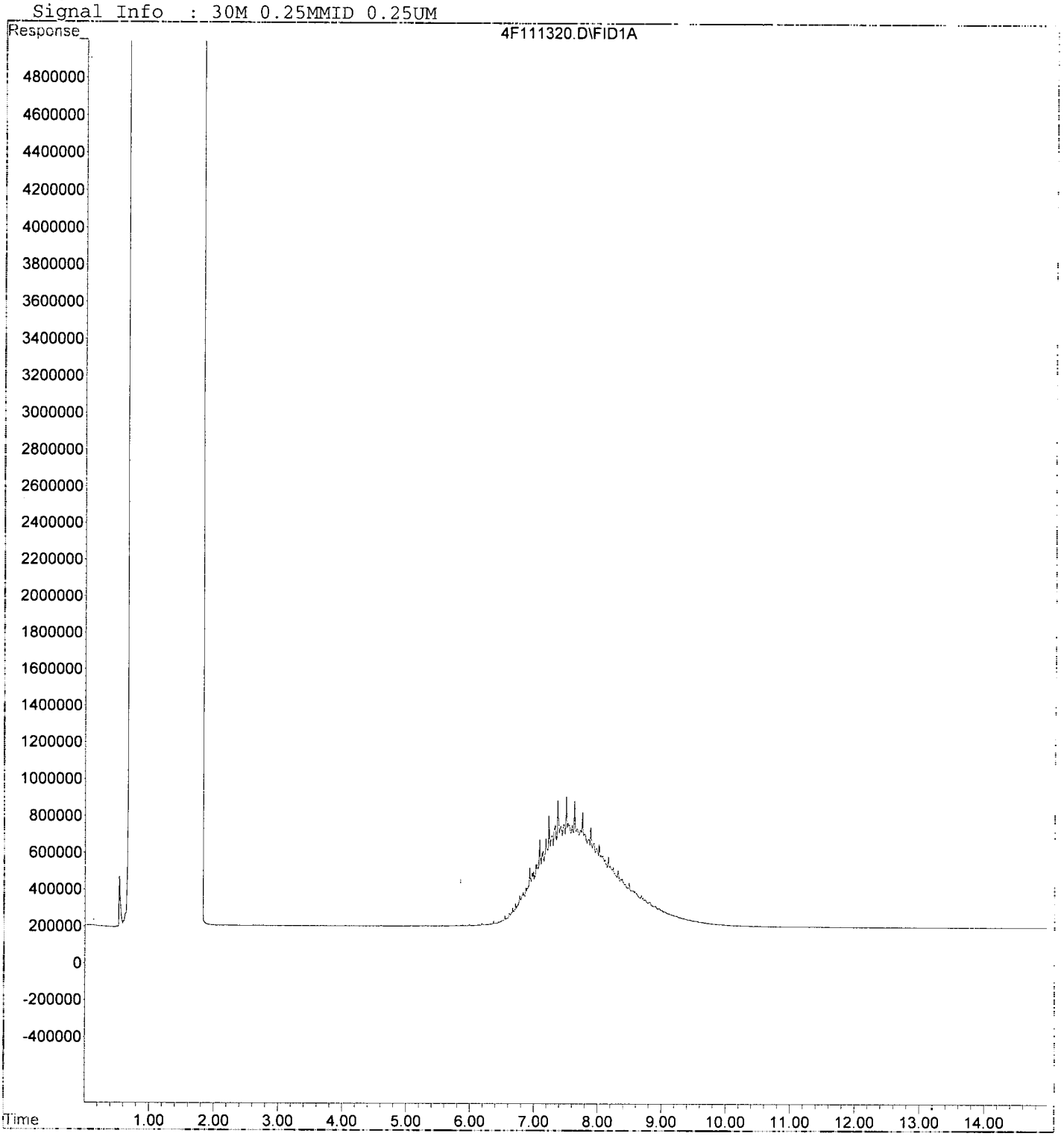
Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111320.D Vial: 17
Acq On : 13 Nov 2019 16:37 Operator: BLL
Sample : 9K13037-CALH Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:15 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111321.D Vial: 18
Acq On : 13 Nov 2019 16:59 Operator: BLL
Sample : 9K13037-CALI Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	794271556	739.335	ug/mL
2)	H	Diesel	6.00	794271556	739.335	ug/mL
3)	H	DRO(C12-C24)	6.00	794271556	739.335	ug/mL
4)	H	TPHd (C10-C25)	6.00	258535463	262.716	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	59042767	74.670	ug/ml
7)	H	Oil	9.00	995652452	1090.484	ug/mL
8)	H	RRO (C24-C40)	9.00	995652452	1090.484	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	678001524	1148.068	ug/mL
10)	H	TPHmo (C25-C36)	8.00	669729669	1119.179	ug/mL

RL 11.14.19

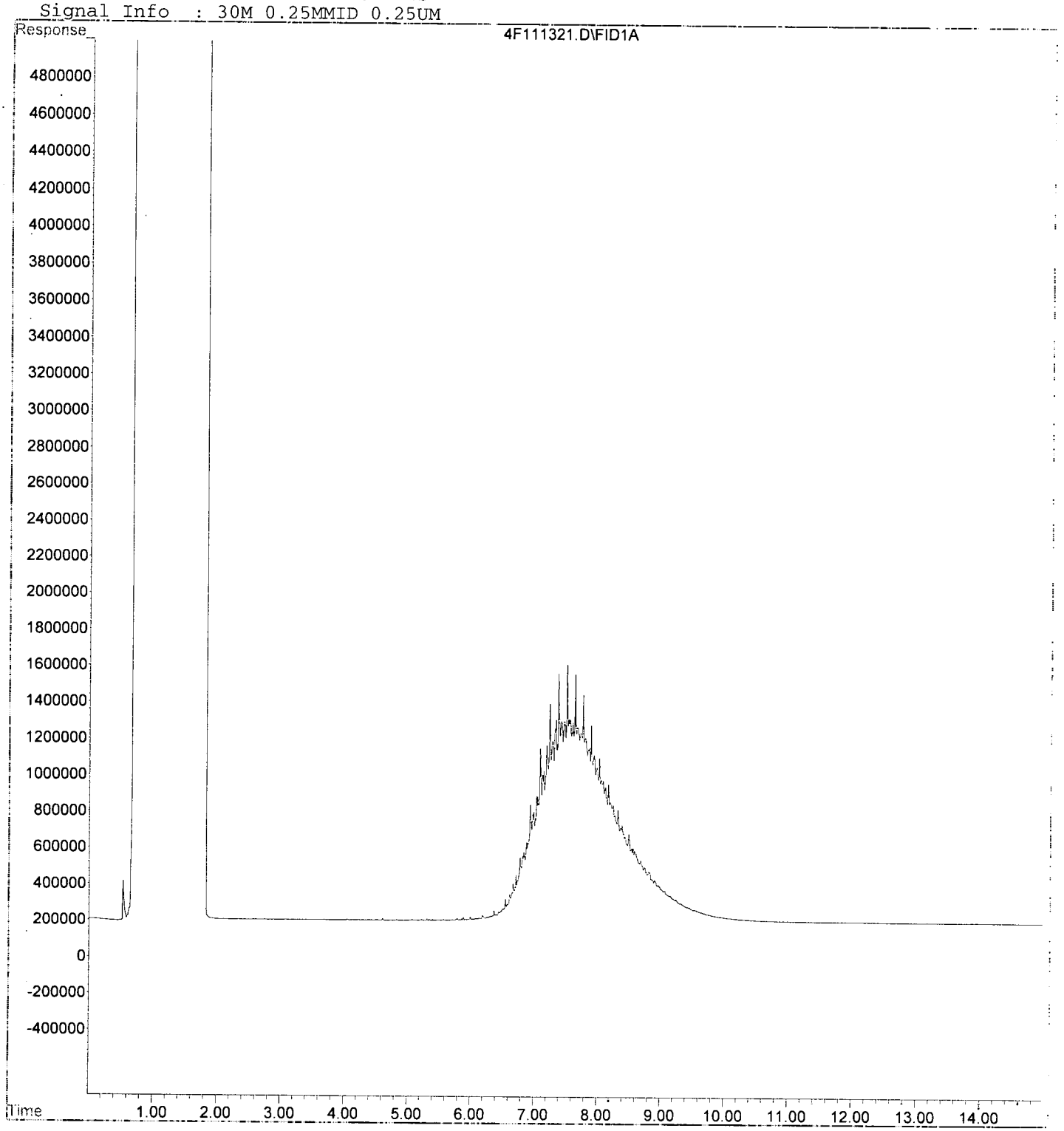
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111321.D Vial: 18
Acq On : 13 Nov 2019 16:59 Operator: BLL
Sample : 9K13037-CALI Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111322.D Vial: 19
Acq On : 13 Nov 2019 17:21 Operator: BLL
Sample : 9K13037-CALJ Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	1995711378	1857.677	ug/mL
2)	H	Diesel	6.00	1995711378	1857.677	ug/mL
3)	H	DRO(C12-C24)	6.00	1995711378	1857.677	ug/mL
4)	H	TPHd (C10-C25)	6.00	670747030	681.594	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	163561029	206.851	ug/ml
7)	H	Oil	9.00	2508442360	2747.361	ug/mL
8)	H	RRO (C24-C40)	9.00	2508442360	2747.361	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	1688667323	2859.440	ug/mL
10)	H	TPHmo (C25-C36)	8.00	1676592877	2801.738	ug/mL

AL 11.14.19

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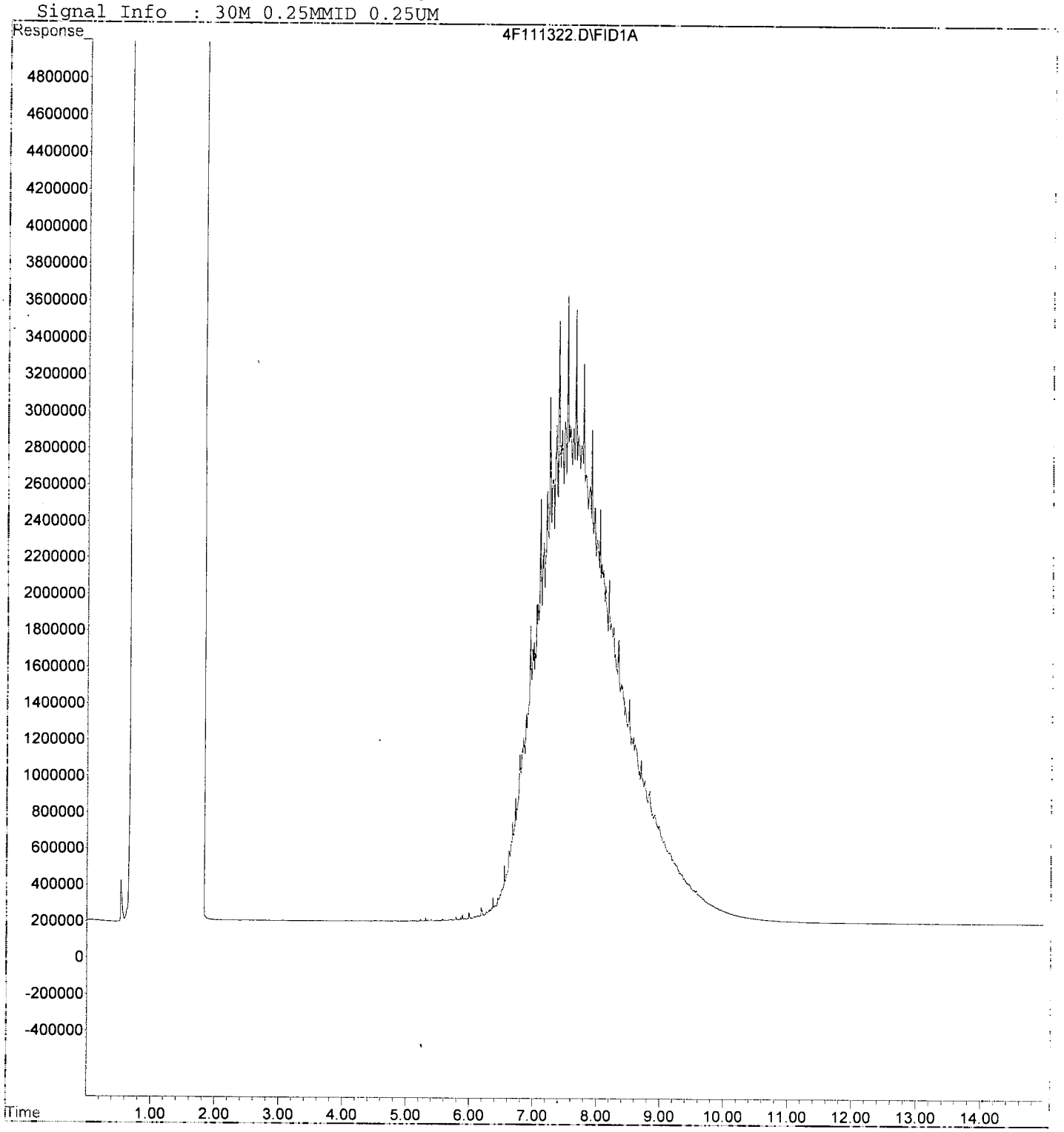
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111322.D Vial: 19
Acq On : 13 Nov 2019 17:21 Operator: BLL
Sample : 9K13037-CALJ Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111323.D Vial: 99
Acq On : 13 Nov 2019 17:42 Operator: BLL
Sample : 9K13037-IBL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	5056752	4.707	ug/mL
2)	H	Diesel	6.00	5056752	4.707	ug/mL
3)	H	DRO(C12-C24)	6.00	5056752	4.707	ug/mL
4)	H	TPHd (C10-C25)	6.00	2168906	2.204	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	982538	1.243	ug/ml
7)	H	Oil	9.00	16311296	17.865	ug/mL
8)	H	RRO (C24-C40)	9.00	16311296	17.865	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2399588	4.063	ug/mL
10)	H	TPHmo (C25-C36)	8.00	3713751	6.206	ug/mL

11.14.19

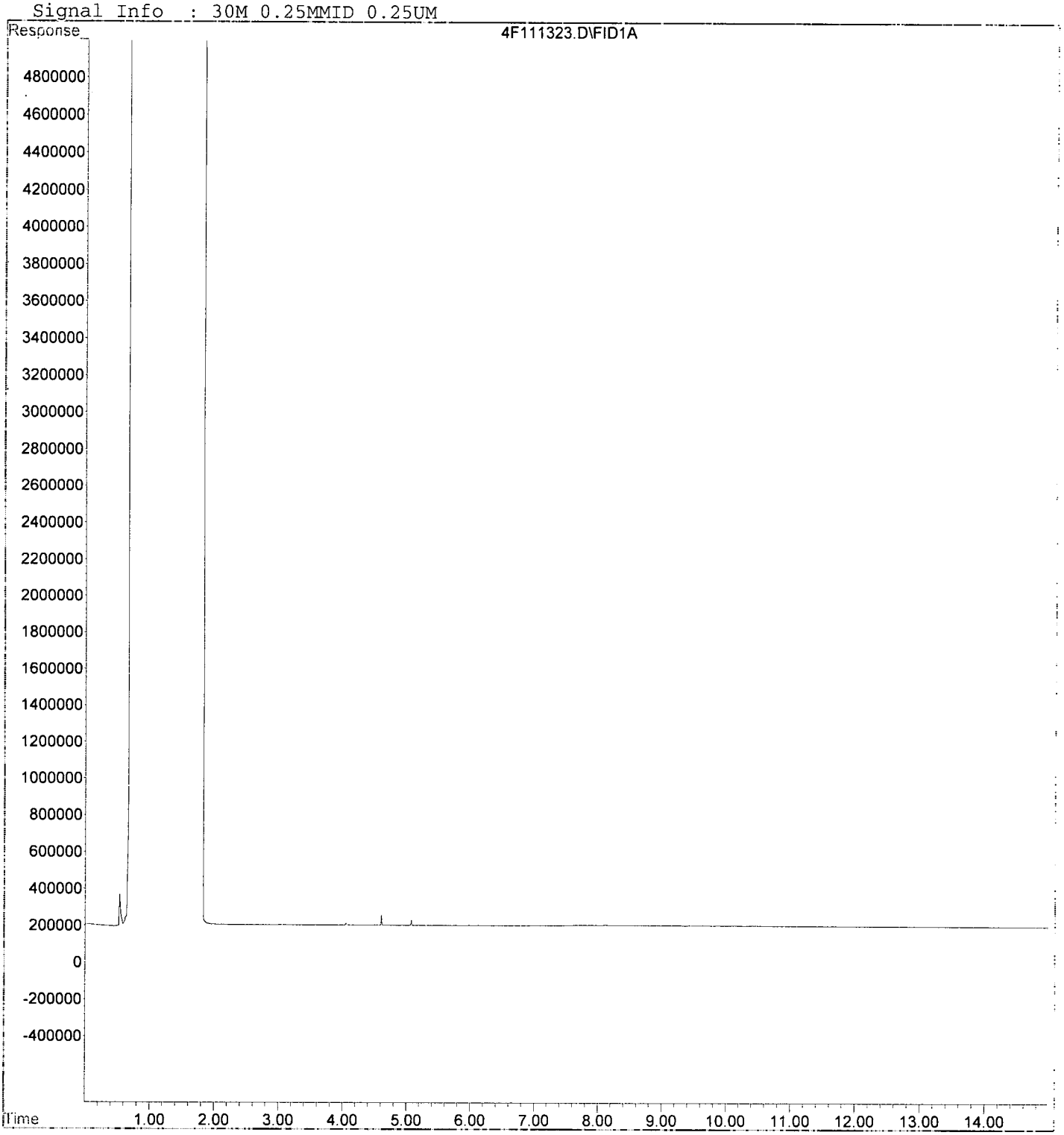
(f)=RT Delta > 1/2 window (m)=manual int.
4F111323.D 4F91113D.M Thu Nov 14 08:16:25 2019 SV-GCMS3

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111323.D Vial: 99
Acq On : 13 Nov 2019 17:42 Operator: BLL
Sample : 9K13037-IBL1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111324.D Vial: 20
Acq On : 13 Nov 2019 18:03 Operator: BLL
Sample : 9K13037-CALK Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	3894746195	3625.365	ug/mL
2)	H	Diesel	6.00	3894746195	3625.365	ug/mL
3)	H	DRO(C12-C24)	6.00	3894746195	3625.365	ug/mL
4)	H	TPHd (C10-C25)	6.00	1278557220	1299.233	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	319699128	404.315	ug/ml
7)	H	Oil	9.00	4935930504	5406.058	ug/mL
8)	H	RRO (C24-C40)	9.00	4935930504	5406.058	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	3295776403	5580.776	ug/mL
10)	H	TPHmo (C25-C36)	8.00	3307352179	5526.884	ug/mL

AN 11.14.19

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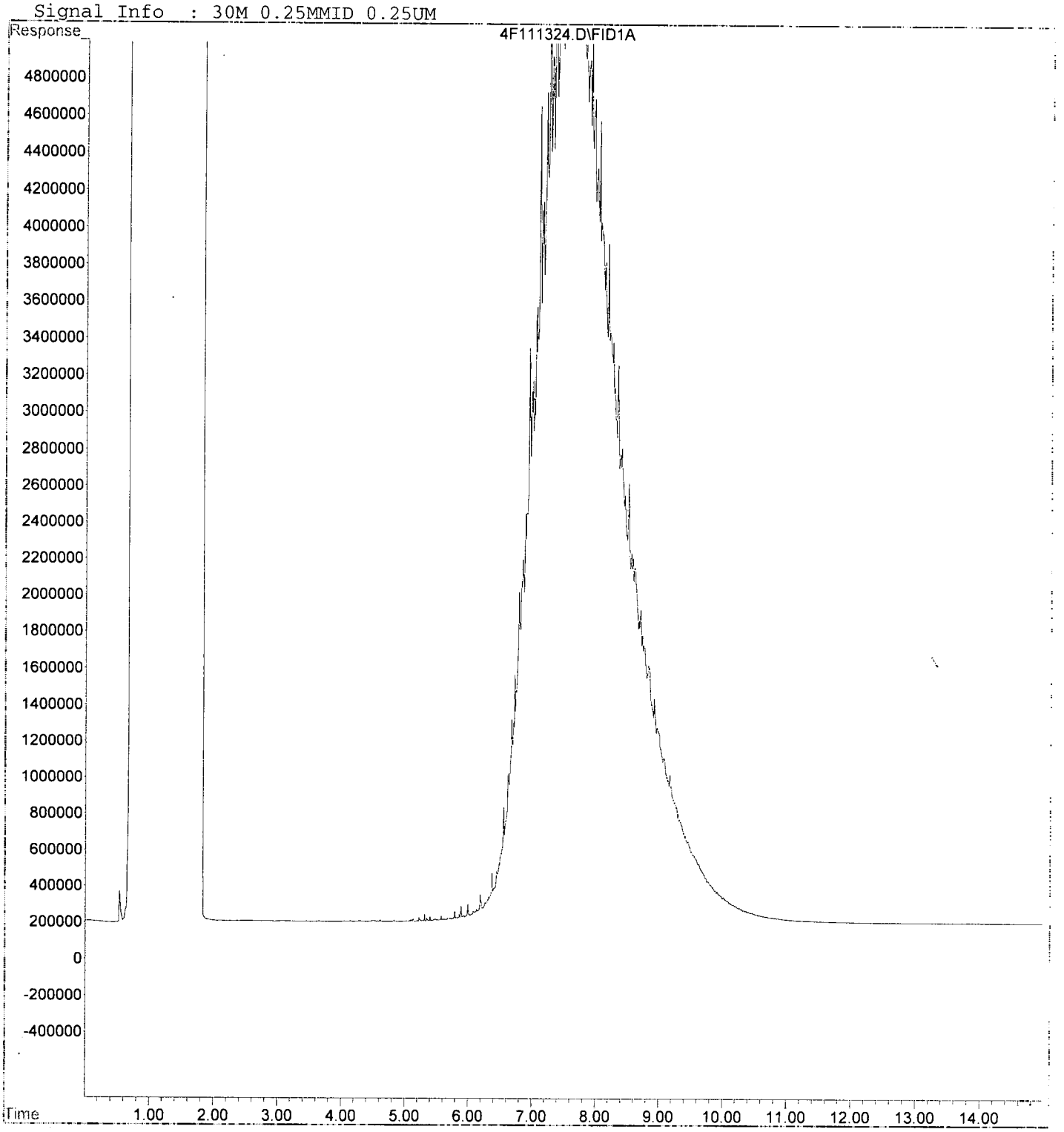
(f)=RT Delta > 1/2 window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111324.D Vial: 20
Acq On : 13 Nov 2019 18:03 Operator: BLL
Sample : 9K13037-CALK Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111325.D Vial: 99
Acq On : 13 Nov 2019 18:23 Operator: BLL
Sample : 9K13037-IBL2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	5875393	5.469	ug/mL
2)	H	Diesel	6.00	5875393	5.469	ug/mL
3)	H	DRO(C12-C24)	6.00	5875393	5.469	ug/mL
4)	H	TPHd (C10-C25)	6.00	2421319	2.460	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	1185852	1.500	ug/ml
7)	H	Oil	9.00	15087519	16.525	ug/mL
8)	H	RRO (C24-C40)	9.00	15087519	16.525	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	2540423	4.302	ug/mL
10)	H	TPHmo (C25-C36)	8.00	3763214	6.289	ug/mL

11.14.19

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

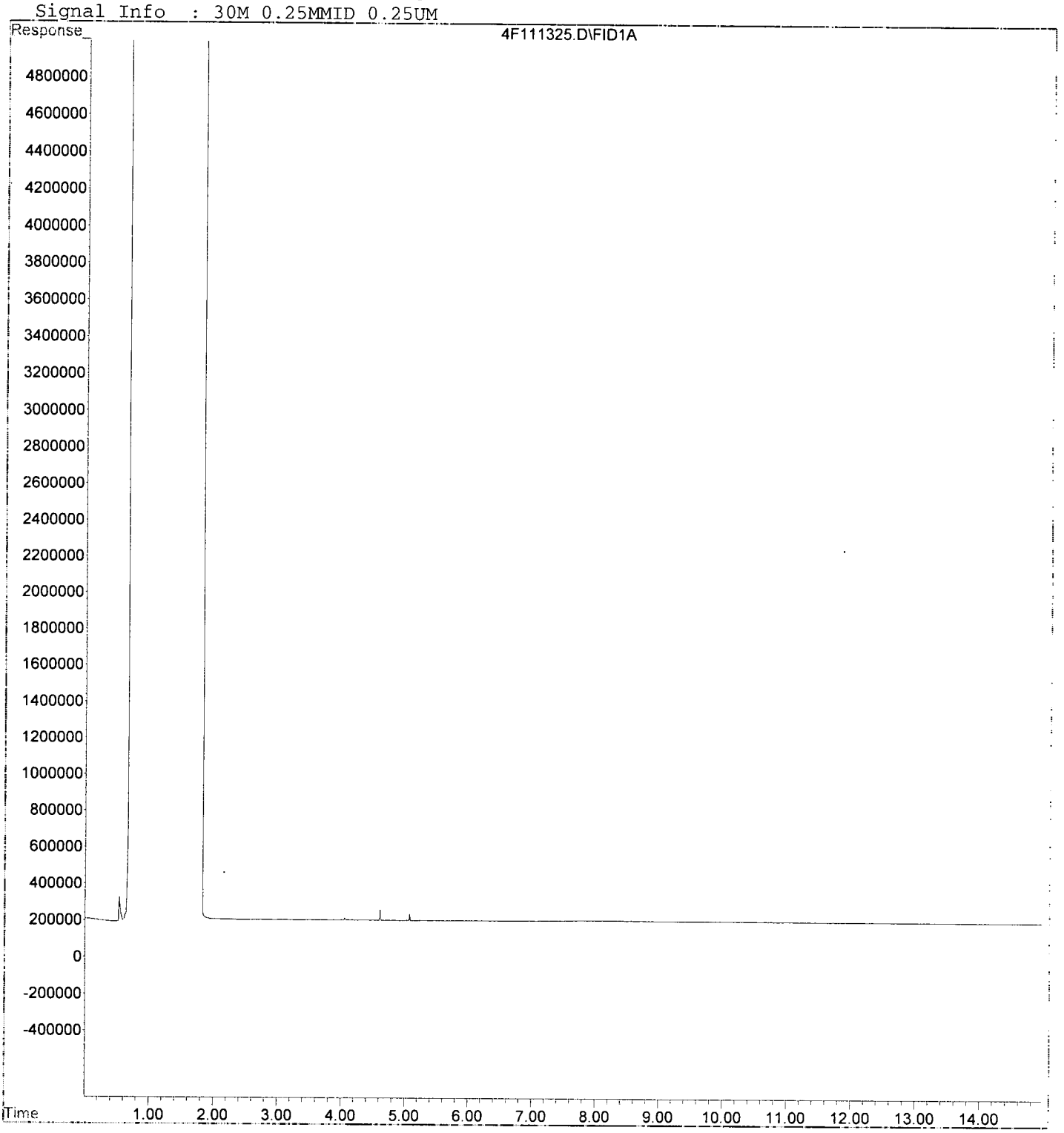
4F111325.D 4F91113D.M Thu Nov 14 08:16:48 2019 SV-GCMS3 Page 1

Quantitation Report (Not Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111325.D Vial: 99
Acq On : 13 Nov 2019 18:23 Operator: BLL
Sample : 9K13037-IBL2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:16 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111326.D Vial: 21
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13037-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	1036109839	964.447	ug/mL
2)	H	Diesel	6.00	1036109839	964.447	ug/mL
3)	H	DRO(C12-C24)	6.00	1036109839	964.447	ug/mL
4)	H	TPHd (C10-C25)	6.00	961502305	977.051	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	770946849	974.997	ug/ml
7)	H	Oil	9.00	264889245	290.119	ug/mL
8)	H	RRO (C24-C40)	9.00	264889245	290.119	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	29014209	49.130	ug/mL
10)	H	TPHmo (C25-C36)	8.00	11403235	19.056	ug/mL

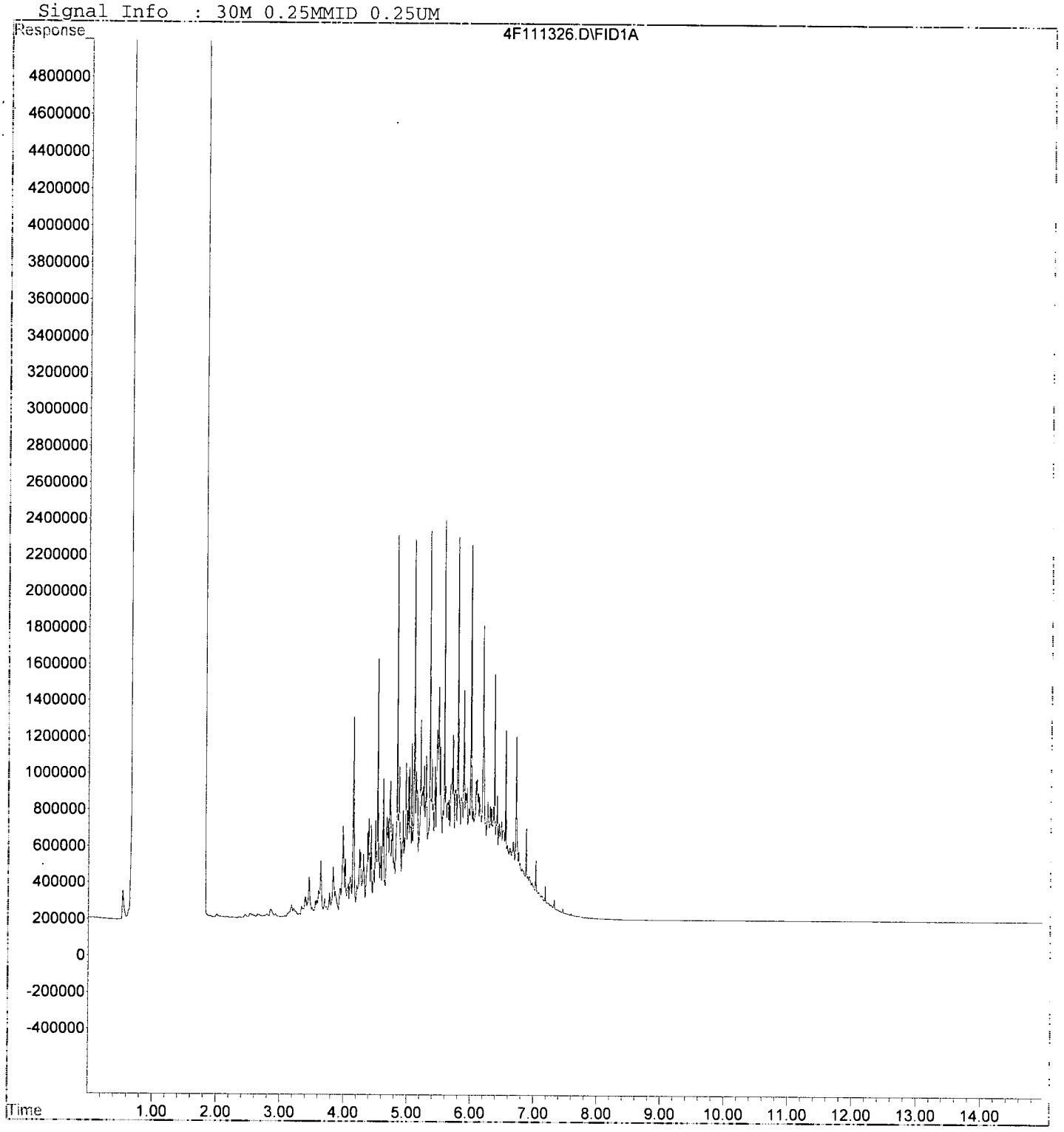
AN 11.14.19

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111326.D Vial: 21
Acq On : 13 Nov 2019 18:44 Operator: BLL
Sample : 9K13037-ICV1 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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\9K13037\4F111327.D Vial: 22
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13037-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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	718791332	669.076	ug/mL
2)	H	Diesel	6.00	718791332	669.076	ug/mL
3)	H	DRO(C12-C24)	6.00	718791332	669.076	ug/mL
4)	H	TPHd (C10-C25)	6.00	238315489	242.169	ug/ml
5)	H	CA LUFT DRO (C12-C22)	6.00	54783986	69.284	ug/ml
7)	H	Oil	9.00	905140299	991.351	ug/mL
8)	H	RRO (C24-C40)	9.00	905140299	991.351	ug/mL
9)	H	CA LUFT ORO (C23-C32)	8.00	613517917	1038.877	ug/mL
10)	H	TPHmo (C25-C36)	8.00	604401644	1010.010	ug/mL

AR 11.14.19

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

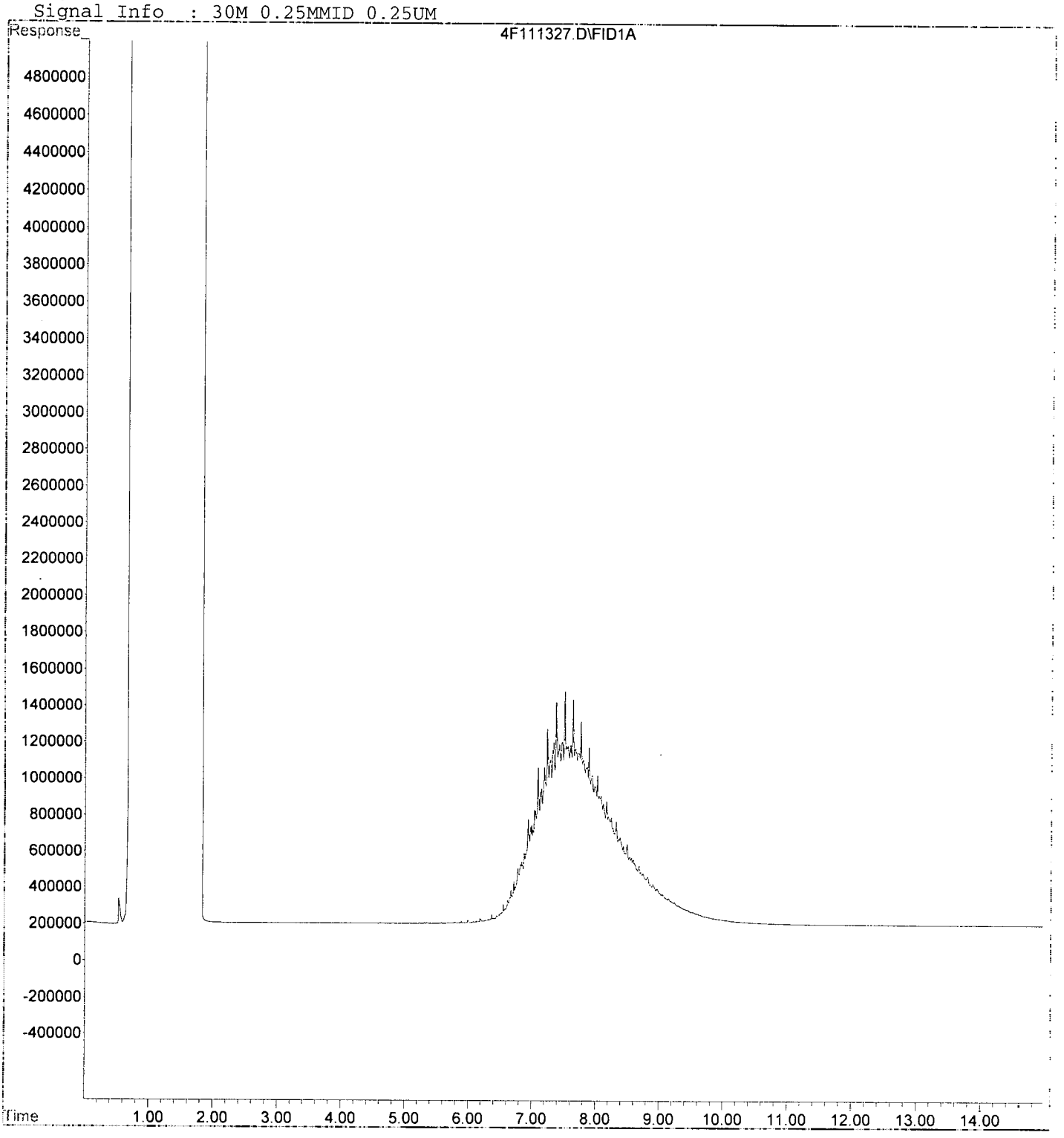
4F111327.D 4F91113D.M Thu Nov 14 08:17:25 2019 SV-GCMS3

Quantitation Report (QT Reviewed)

Data File : G:\4\DATA\2019-11\9K13037\4F111327.D Vial: 22
Acq On : 13 Nov 2019 19:05 Operator: BLL
Sample : 9K13037-ICV2 Inst : HP G1530A
Misc : Multiplr: 1.00
IntFile : SUR.E
Quant Time: Nov 14 8:17 2019 Quant Results File: 4F91113D.RES

Quant Method : G:\4\METHODS\4F91113D.M (Chemstation Integrator)
Title : DUALFID4F, NWTPH-Dx/TPH-8015M
Last Update : Thu Nov 14 08:10:31 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

Volatile Organic Compounds by EPA 1311/8260C
Benchsheet & Analysis Sequence Data

Batch 9110745
Sequence 9K13043 (A9K0332-04,05,06)

PREPARATION BENCH SHEET

BATCH #: 9110745 (Soil)

Apex Laboratories

NOV 19 2019

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*
9110745-BLK1		QC	11/13/19 09:30	7.5	5							
9110745-BS1		QC	11/13/19 09:30	5	5	A19K081		250				
9110745-BS2		QC	11/13/19 09:30	5	5	A19K086		250				
A9J0728-01	B	8260C BTEX+N	(Date Sampled)	6.26	5					SPB@12'BGS	FP okd out of hold	
A9K0179-01	C	8260C Full List	(Date Sampled)	7.84	5					RATE-6'	FP Added for BatchQC in: 9110745	
A9K0179-01	C	8260C BTEX	(Date Sampled)	7.84	5					RATE-6'	FP	
A9K0179-01	C	8260C BTEX+N	(Date Sampled)	7.84	5					RATE-6'	FP Added for BatchQC in: 9110745	
A9K0179-01	C	8260C RBDM List	(Date Sampled)	7.84	5					RATE-6'	FP Added for BatchQC in: 9110745	
A9K0179-01	C	NWTPH-Gx	(Date Sampled)	7.84	5					RATE-6'	FP Added for BatchQC in: 9110745	
9110745-DUP1		QC	11/06/19 11:30	6.94	5		A9K0179-01					
A9K0241-02	B	8260C BTEX+N	(Date Sampled)	6.61	5					EPB@12' BGS	FP	
A9K0266-03RE2	B	8260C Full List	11/11/19 16:00	5.16	5					Drums #8 & 11	MOD 50X (RR01) 8260	
A9K0266-05RE2	C	8260C Full List	11/11/19 16:00	4.96	5					Drums #12 Solid	MOD 50X (RR01) 8260	
A9K0270-09RE1	B	NWTPH-Gx	(Date Sampled)	6.49	5					JC08-P8-16.5'	FP 50X (RR03) GX	
A9K0314-01	B	NWTPH-Gx	(Date Sampled)	6.57	5					19-29753 WF(OT)-103"	FP	
A9K0314-02	B	NWTPH-Gx	(Date Sampled)	7.14	5					19-29753 E(OT)-103"	FP	
A9K0318-01	B	8260C BTEX+N	(Date Sampled)	3.93	5					NTE@72"BGS	FP	
A9K0329-01	B	8260C RBDM List	(Date Sampled)	6.26	5					MW-1-12.0-13.0	FP BTEX//MTBE/EDC Custom Li	
A9K0329-01	B	NWTPH-Gx	(Date Sampled)	6.26	5					MW-1-12.0-13.0	FP	
A9K0329-03	B	8260C RBDM List	(Date Sampled)	6.37	5					MW-2-6.5-7.3	FP BTEX//MTBE/EDC Custom Li	
A9K0329-03	B	NWTPH-Gx	(Date Sampled)	6.37	5					MW-2-6.5-7.3	FP	
A9K0329-05	B	8260C Full List	(Date Sampled)	~~7.01~~ TB 11/14/19 6.4	5					MW-3-14.0-15.0	FP Added for BatchQC in: 9110745	

IMA 11/14/19

Prepared By: Date

Reviewed By: 11/14/19

Date

PREPARATION BENCH SHEET

BATCH #: 9110745 (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*
A9K0329-05	B	8260C BTEX	(Date Sampled)	7.04 6.4	5					MW-3-14.0-15.0	FP Added for BatchQC in: 9110745	
A9K0329-05	B	8260C BTEX+N	(Date Sampled)	7.04	5					MW-3-14.0-15.0	FP Added for BatchQC in: 9110745	
A9K0329-05	B	8260C RBDM List	(Date Sampled)	7.04	5					MW-3-14.0-15.0	FP BTEX//MTBE/EDC Custom Li	
A9K0329-05	B	NWTPH-Gx	(Date Sampled)	7.04	5					MW-3-14.0-15.0	FP	
9110745-MS1		QC	11/11/19 10:20	7.04	5	A19K081	A9K0329-05	1104 ~~1114~~			DW = 91.9% @200X	
A9K0329-06	B	8260C RBDM List	(Date Sampled)	6.98	5					MW-3-26.0-27.0	FP BTEX//MTBE/EDC Custom Li	
A9K0329-06	B	NWTPH-Gx	(Date Sampled)	6.98	5					MW-3-26.0-27.0	FP	
A9K0329-07	B	8260C RBDM List	(Date Sampled)	6.11	5					MW-4-20.0-21.0	FP BTEX//MTBE/EDC Custom Li	
A9K0329-07	B	NWTPH-Gx	(Date Sampled)	6.11	5					MW-4-20.0-21.0	FP	
A9K0332-04	B	8260C Full List	(Date Sampled)	5.83	5					PDI-140RAB-00-10-191108	FP Custom List from 4C	
A9K0332-05	B	8260C Full List	(Date Sampled)	3.02	5					PDI-140RAB-10-12.7-191108	FP Custom List from 4C	
A9K0332-06	B	8260C Full List	(Date Sampled)	4.04	5					PDI-141RAB-00-10-191107	FP Custom List from 4C	

*pH <2 verified _____

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18J327	11/30/23	Balance s/n 593312
A19I219	09/16/20	Methanol - Fisher (P/T) #191546
A19I220	09/16/20	Methanol - B&J (P/T) #DX075-US

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K081	04/17/20	8260 Cal. Std. B VOC+OXY Spike (20-40ug/mL
A19K086	04/21/20	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: 9110745

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
6.400	5	200	91.9
			0.919

Final Spike Level	**Spike Amount**
ug/kg	**ul**
3752.99	**1104**

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

A9K0329-05

IMA
11/14/19

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A9J0728-01	B	40.33	34.07	6.26	
A9K0179-01	C	41.67	33.83	7.84	
1	D	40.85	33.91	6.94	
A9K0241-02	B	40.3	33.69	6.61	
A9K0314-01	B	40.52	33.95	6.57	TB 11/4/19
2	B	41.07	33.93	7.14	7.08
A9K0318-01	B	37.24	33.31	3.93	
A9K0329-01	B	40.97	34.71	6.26	
2	B	39.85	33.19	6.66	
3	B	40	33.63	6.37	
~~4~~	~~B~~	~~40.49~~	~~33.45~~	~~7.04~~	NR
5	B	40.14	33.74	6.4	
6	B	40.75	33.77	6.98	
7	B	39.52	33.41	6.11	
~~8~~	~~B~~	~~41.4~~	~~34.07~~	~~7.33~~	NR
A9K0332-04	B	39.65	33.82	5.83	
5	B	36.98	33.96	3.02	
6	B	37.78	33.74	4.04	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA
11/14/19

A9J0728

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9J0728-01	SPB@12BGS	Sampled	10/18/19 14:30

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA 5035 (MeOH)	40.33	34.07	(5) 10 15 Other	Dx@11,000 (200X)

BTEX + N

Due: TAT:

Weighed by: HAC @ 1900 10/18/19

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

A9K0179

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0179-01 RATE-6 Sampled: 11/06/19 11:30

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
C Soil	40 mL VOA - 5035 (MeOH)	41.67	33.83	(5) 10 15 Other	overweight 0x@3,200 (100X)
D Soil	40 mL VOA - 5035 (MeOH)	40.85	33.91	(5) 10 15 Other	Notes: DUP

BTEX

Due: TAT:

A9K0179-02 RATW-6 Sampled: 11/06/19 11:30

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
C Soil	40 mL VOA - 5035 (MeOH)	41.34	33.50	(5) 10 15 Other	overweight
D Soil	40 mL VOA - 5035 (MeOH)	41.99	33.81	(5) 10 15 Other	Notes: overweight

Due: TAT:

Weighed by: AMC @ 1228 11/7/19

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

Print Date: 11/7/2019 12:11:23PM

A9K0241

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0241-01	WPB@12' BGS	Sampled: 11/08/19 12:00

B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		39.79	33.51	5 10 15 Other	

Due: TAT:

A9K0241-02	EPB@12' BGS	Sampled: 11/08/19 12:10

B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		40.30	33.69	5 10 15 Other	DX=2500

BTEXN

Due: TAT:

50X

Weighed by CB @ 11/8/19 1755

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

A9K0314

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0314-01		19-29753 WF(OT)-103"			Sampled: 11/12/19 14:00
B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g): 40.52	Tare Weight (g): 33.95	Volume MeOH (mL): (5) 10 15 Other	Notes:
6x		Due:	TAT:		

A9K0314-02		19-29753 E(OT)-103"			Sampled: 11/12/19 14:00
B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g): 41.07	Tare Weight (g): 33.93	Volume MeOH (mL): (5) 10 15 Other	Notes:
6x		Due:	TAT:		

akk 11/12/19

Weighed by: AKK @ ~~1740~~ 1740 11/12/19

Methanol Reagent ID: A19I219 Balance ID: A18J327

A9K0318

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0318-01 NTE@72"BGS — Sampled: **11/12/19 13:45**

B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		37.24	33.31	(5) 10 15 Other	0x@ 29,200 (500X)

BTEX + N — Due: — TAT:

A9K0318-02 STE@72"BGS — Sampled: **11/12/19 13:38**

B Soil	40 mL VOA - 5035 (MeOH)	Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
		37.25	33.54	(5) 10 15 Other	

Due: — TAT:

Weighed by: TAG @ 11-12-19 17:53

A9K0329

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0329-01 MW-1-12.0-13.0 Sampled: 11/12/19 13:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.97	34.71	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.32	33.33	(5) 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	40.19	34.12	(5) 10 15 Other	

6X RBDM +Sim Due: TAT:

A9K0329-02 MW-1-24.0-25.0 Sampled: 11/12/19 13:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.85	33.19	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.92	33.42	(5) 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	40.63	33.96	(5) 10 15 Other	

Due: TAT:

A9K0329-03 MW-2-6.5-7.3 Sampled: 11/11/19 14:35

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.00	33.63	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	38.97	33.07	(5) 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	40.08	33.57	(5) 10 15 Other	

6X RBDM +Sim Due: TAT:

A9K0329-04 MW-2-19.0-20.0 Sampled: 11/11/19 14:40

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.49	33.45	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.20	33.76	(5) 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	40.34	33.34	(5) 10 15 Other	

Due: TAT:

Weighed by: [illegible] @ 11-13-19 12:30

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

A9K0329

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0329-05 MW-3-14.0-15.0 Sampled: 11/11/19 10:20

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.14	33.74	5 10 15 Other	MS
C Soil	40 mL VOA - 5035 (MeOH)	39.84	33.50	5 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	40.72	33.78	5 10 15 Other	

GX ABOM + Sim Due: TAT:

A9K0329-06 MW-3-26.0-27.0 Sampled: 11/11/19 10:30

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	40.75	33.77	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.03	33.62 11/13/19	5 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	41.85	33.95	5 10 15 Other	

Due: TAT:

A9K0329-07 MW-4-20.0-21.0 Sampled: 11/12/19 09:50

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.52	33.41	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.07	33.59	5 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	39.34	33.21	5 10 15 Other	

Due: TAT:

A9K0329-08 MW-4-29.0-30.0 Sampled: 11/12/19 09:55

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	41.40	34.07	5 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.53	33.34	5 10 15 Other	
D Soil	40 mL VOA - 5035 (MeOH)	41.65	34.11	5 10 15 Other	

Due: TAT:

Weighed by: TMM @ 11-13-19 12:30

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

A9K0332

5035 Container Prep Worksheet
~Field MeOH Preserved~

Do not do MS MSD on These pending TS Result

(Prepared = Sampled Date/Time)

A9K0332-04 — **PDI-140RAB-00-10-191108** — Sampled: **11/08/19 11:40**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.65	33.82	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.96	33.25	(5) 10 15 Other	

8260 ~~BTEX Halo6 Custom~~ Due: TAT:

A9K0332-05 — **PDI-140RAB-10-12.7-191108** — Sampled: **11/08/19 12:15**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	36.98	33.96	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.33	33.68	(5) 10 15 Other	

8260 Due: TAT:

A9K0332-06 — **PDI-141RAB-00-10-191107** — Sampled: **11/07/19 15:15**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	37.78	33.74	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.85	33.21	(5) 10 15 Other	

Due: TAT:

A9K0332-07 — **PDI-141RAB-10-17.7-191107** — Sampled: **11/07/19 16:45**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.36	33.73	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.41	33.39	(5) 10 15 Other	

Due: TAT:

A9K0332-08 — **PDI-143RAB-00-10-191111** — Sampled: **11/11/19 12:30**

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.01	33.82	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	38.30	33.37	(5) 10 15 Other	

Due: TAT:

Weighed by: [signature] @ 11/13/19 1300

Methanol Reagent ID: A19I219- Balance ID: A18J327-

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K13043**	Instrument:	**VOA-GCMS10**
Date:	**11/13/19 09:28**	Calibration:	**A9J2404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K13043-IBL1	Soil	QC	QC			A19G118	
2	9K13043-TUN1	Soil	QC	QC			A19G118	
3	9K13043-CCV1	Soil	QC	QC			A19G118	
4	9110745-BS1	Soil	QC	QC		9110745	A19G118	
5	9K13043-CCV2	Soil	QC	QC			A19G118	
6	9110745-BS2	Soil	QC	QC		9110745	A19G118	
7	9110745-BLK1	Soil	QC	QC		9110745	A19G118	
8	A9K0314-01	Soil	NWTPH-Gx		11/14/19	9110745	A19G118	
9	A9K0314-02	Soil	NWTPH-Gx		11/14/19	9110745	A19G118	
10	A9K0179-01	Soil	8260C BTEX		11/19/19	9110745	A19G118	
"	"	Soil	8260C Full List	(QC Source)		9110745	A19G118	
"	"	Soil	8260C BTEX+N	(QC Source)		9110745	A19G118	
"	"	Soil	8260C RBDM List	(QC Source)		9110745	A19G118	
"	"	Soil	NWTPH-Gx	(QC Source)		9110745	A19G118	
11	9110745-DUP1	Soil	QC	QC		9110745	A19G118	
12	A9J0728-01	Soil	8260C BTEX+N		11/15/19	9110745	A19G118	
13	9K13043-IBL2	Soil	QC	QC			A19G118	
14	A9K0266-03RE2	Soil	8260C Full List		11/15/19	9110745	A19G118	
15	A9K0266-05RE2	Soil	8260C Full List		11/15/19	9110745	A19G118	
16	9K13043-IBL3	Soil	QC	QC			A19G118	
17	A9K0270-09RE1	Soil	NWTPH-Gx		11/18/19	9110745	A19G118	
18	9K13043-IBL4	Soil	QC	QC			A19G118	
19	A9K0329-01	Soil	8260C RBDM List		11/20/19	9110745	A19G118	
"	"	Soil	NWTPH-Gx	"	11/20/19	9110745	A19G118	
20	A9K0329-03	Soil	8260C RBDM List		11/20/19	9110745	A19G118	
"	"	Soil	NWTPH-Gx	"	11/20/19	9110745	A19G118	
21	A9K0329-06	Soil	8260C RBDM List		11/20/19	9110745	A19G118	
"	"	Soil	NWTPH-Gx	"	11/20/19	9110745	A19G118	
22	A9K0329-07	Soil	8260C RBDM List		11/20/19	9110745	A19G118	
"	"	Soil	NWTPH-Gx	"	11/20/19	9110745	A19G118	
23	A9K0241-02	Soil	8260C BTEX+N		11/15/19	9110745	A19G118	
24	A9K0329-05	Soil	8260C RBDM List		11/20/19	9110745	A19G118	
"	"	Soil	NWTPH-Gx	"	11/20/19	9110745	A19G118	
"	"	Soil	8260C Full List	(QC Source)		9110745	A19G118	
"	"	Soil	8260C BTEX	(QC Source)		9110745	A19G118	
"	"	Soil	8260C BTEX+N	(QC Source)		9110745	A19G118	
25	9110745-MS1	Soil	QC	QC		9110745	A19G118	
26	9K13043-IBL5	Soil	QC	QC			A19G118	
27	A9K0332-04	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110745	A19G118	
28	A9K0332-05	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110745	A19G118	
29	A9K0332-06	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110745	A19G118	
30	A9K0318-01	Soil	8260C BTEX+N		11/15/19	9110745	A19G118	
31	9K13043-IBL6	Soil	QC	QC			A19G118	

Data Entered By: IMA 11/14/19

Data Reviewed By: MWJ 11/15/19

Comments:

↑ 12DCPA to 1/2 ppb

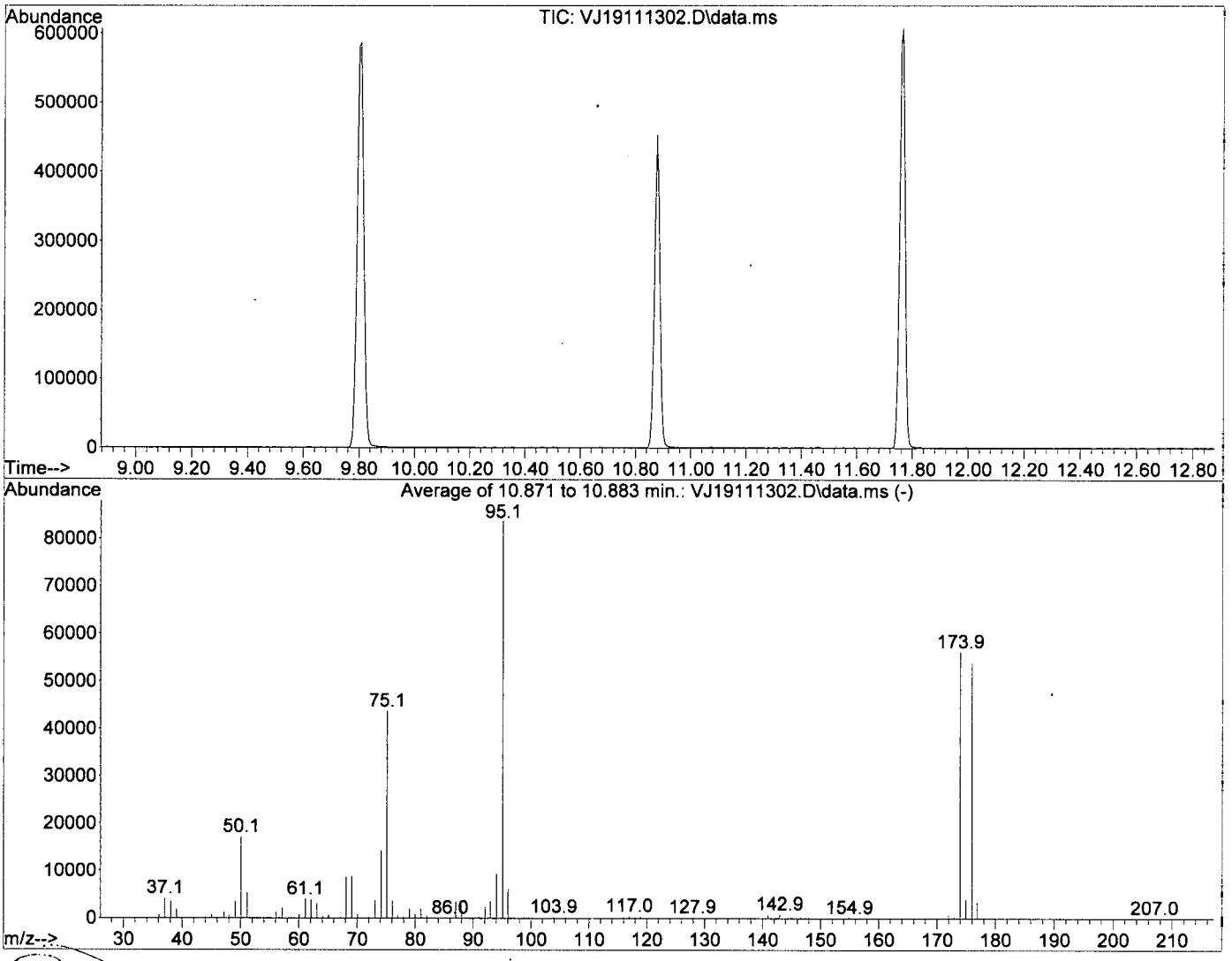
BFB

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111302.D
Acq On : 13 Nov 2019 10:21 am
Operator : IMA
Sample : 9K13043-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

IMA
11/14/19

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019



AutoFind: Scans 1527, 1528, 1529; 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	148.8	83781	PASS
96	95	5	9	7.2	6031	PASS
173	174	0.00	2	0.8	437	PASS
174	95	50	200	67.2	56307	PASS
175	174	5	9	7.1	4011	PASS
176	174	95	105	95.8	53931	PASS
177	176	5	10	6.4	3477	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111302.D
Acq On : 13 Nov 2019 10:21 am
Operator : IMA
Sample : 9K13043-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 14 10:24:41 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

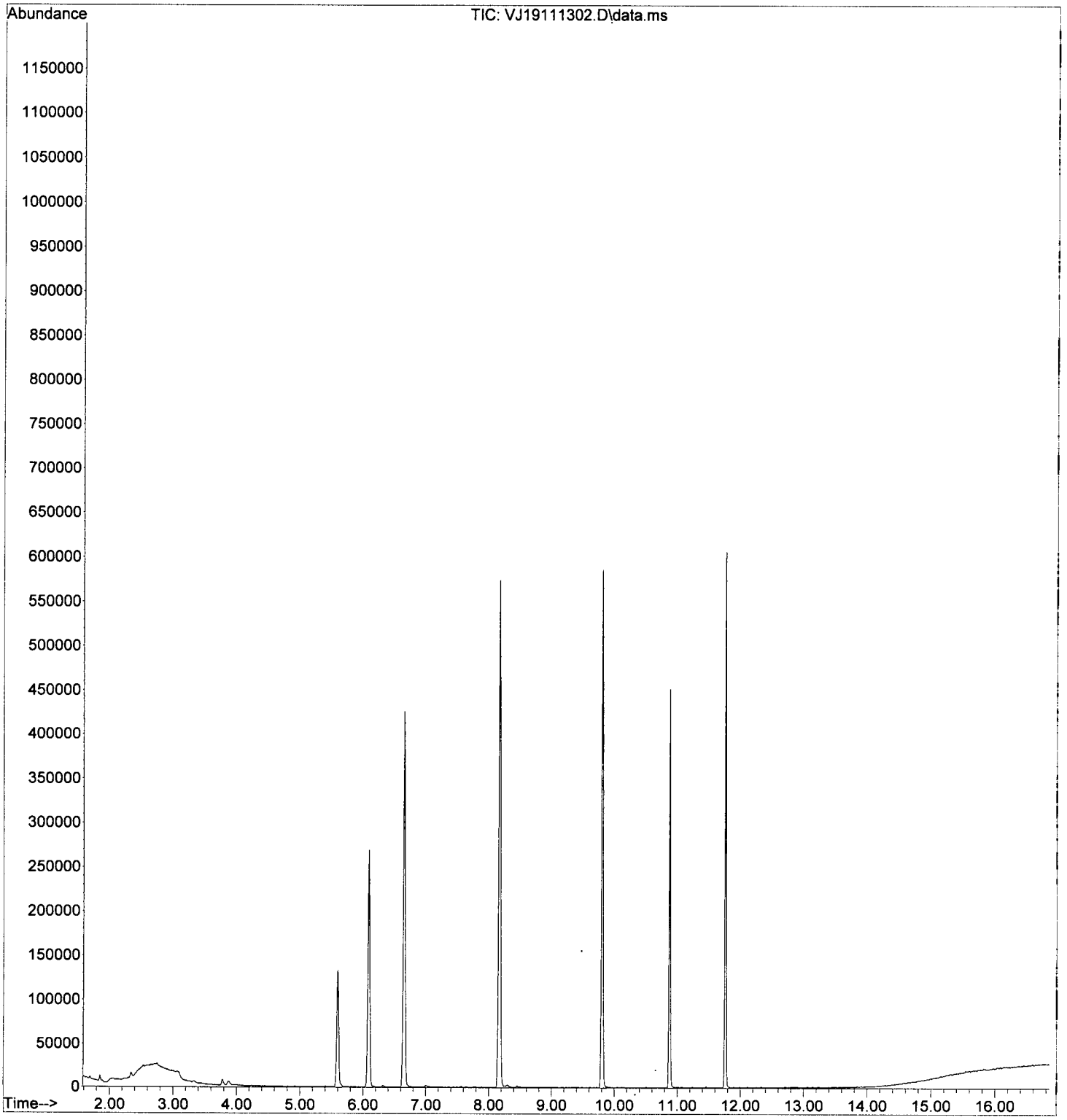
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	116630	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	305144	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	126006	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	93743	50.85	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	349433	48.70	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	436786	51.33	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	89781	49.35	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	1007	0.22	ug/L		90
5) Bromomethane	2.342	96	4199	0.50	ug/L		87
6) Chloroethane	2.488	64	177	1.59	ug/L	#	1
8) Ethanol	3.340	45	6125	Below Cal			93
13) Methylene Chloride	3.784	84	2874	0.20	ug/L		95
14) Acetone	3.869	43	4591	2.58	ug/L		90
18) tert-Butanol (TBA)	4.246	59	390	0.43	ug/L	#	1
28) Tetrahydrofuran	5.609	42	398	0.17	ug/L	#	30
32) 2-Butanone (MEK)	5.749	43	733	0.23	ug/L		52
36) iso-Butyl Alcohol	6.320	43	588	1.64	ug/L	#	63

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111302.D
Acq On : 13 Nov 2019 10:21 am
Operator : IMA
Sample : 9K13043-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 14 10:24:41 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 10:26:55 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	125	0.00
2		Dichlorodifluoromethane	20.000	18.595	7.0	118	0.00
3	P	Chloromethane	20.000	18.050	9.7	114	0.00
4	C	Vinyl Chloride	20.000	17.983	10.1	110	-0.01
5		Bromomethane	20.000	25.858	H -29.3#	151	0.00
6		Chloroethane	20.000	26.758	-33.8#	200	0.00 Q56
7		Trichlorofluoromethane	20.000	21.759	-8.8	137	0.00
8		Ethanol	1250.000	1162.914	7.0	111	0.02
9	C	1,1-Dichloroethene	20.000	19.308	3.5	120	0.00
10		Carbon Disulfide	20.000	17.530	12.3	118	0.00
11		Freon 113	20.000	18.623	6.9	114	0.00
12		Iodomethane	20.000	7.841	NR 60.8#	49	0.00
13		Methylene Chloride	20.000	19.329	3.4	116	0.00
14		Acetone	40.000	36.721	8.2	107	0.00
15		t-1,2-Dichloroethene	20.000	19.250	3.8	119	0.00
16		n-Hexane	20.000	18.943	5.3	118	0.00
17		Methyl-tert-butyl-ether	20.000	19.205	4.0	119	0.00
18		tert-Butanol (TBA)	1250.000	1168.532	6.5	105	0.05
19		Diisopropyl ether (DIPE)	5.000	5.274	-5.5	126	0.00
20	P	1,1-Dichloroethane	20.000	20.355	-1.8	122	0.00
21		Acrylonitrile	20.000	21.279	-6.4	118	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	4.576	8.5	111	0.00
23		c-1,2-Dichloroethene	20.000	18.696	6.5	115	0.00
24		2,2-Dichloropropane	20.000	21.161	-5.8	134	0.00
25		Bromochloromethane	20.000	20.199	-1.0	121	0.00
26	C	Chloroform	20.000	19.704	1.5	118	0.00
27		Carbon Tetrachloride	20.000	21.106	-5.5	122	0.00
28		Tetrahydrofuran	20.000	16.419	17.9	105	0.00
29		1,1,1-Trichloroethane	20.000	20.233	-1.2	120	0.00
30	S	Dibromofluoromethane (S)	50.000	49.965	0.1	125	0.00
31		1,1-Dichloropropene	20.000	18.300	8.5	112	0.00
32		2-Butanone (MEK)	40.000	35.478	11.3	110	0.00
33		Benzene	20.000	18.111	9.4	113	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.420	11.6	112	0.00
35		1,2-Dichloroethane (EDC)	20.000	20.373	-1.9	121	0.00
36		iso-Butyl Alcohol	500.000	443.987	11.2	104	0.02
37	S	1,4-Difluorobenzene (S)	50.000	47.993	4.0	121	0.00
38		Trichloroethene (TCE)	20.000	19.098	4.5	115	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.632	7.4	107	0.00
40		Dibromomethane	20.000	19.907	0.5	119	0.00
41	C	1,2-Dichloropropane	20.000	18.945	5.3	116	0.00
42		Bromodichloromethane	20.000	21.086	-5.4	121	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	122	0.00
44		c-1,3-Dichloropropene	20.000	20.075	-0.4	115	0.00
45	S	Toluene-d8 (S)	50.000	50.352	-0.7	124	0.00
46	C	Toluene	20.000	18.466	7.7	112	0.00
47		Tetrachloroethene (PCE)	20.000	19.147	4.3	111	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	39.095	2.3	109	0.00
49		t-1,3-Dichloropropene	20.000	22.822	-14.1	125	0.00
50		1,1,2-Trichloroethane	20.000	20.317	-1.6	116	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:26:55 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	20.666	-3.3	122	0.00
52		1,3-Dichloropropane	20.000	19.888	0.6	115	0.00
53		1,2-Dibromoethane (EDB)	20.000	19.842	0.8	111	0.00
54		2-Hexanone	40.000	36.360	9.1	103	0.00
55	P	Chlorobenzene	20.000	19.134	4.3	115	0.00
56	C	Ethylbenzene	20.000	19.903	0.5	114	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.698	-3.5	120	0.00
58		m,p-Xylenes (2)	40.000	40.995	-2.5	114	0.00
59		o-Xylene	20.000	19.389	3.1	107	0.00
60		Styrene	20.000	17.568	12.2	111	0.00
61	P	Bromoform	20.000	18.176	9.1	115	0.00
62		Isopropylbenzene	20.000	19.969	0.2	109	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	117	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.089	1.8	116	0.00
65		Bromobenzene	20.000	19.094	4.5	109	0.00
66		n-Propylbenzene	20.000	20.183	-0.9	113	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	18.103	9.5	100	0.00
68		2-Chlorotoluene	20.000	19.775	1.1	110	0.00
69		1,3,5-Trimethylbenzene	20.000	23.186	-15.9	121	0.00
70		1,2,3-Trichloropropane	20.000	19.940	0.3	111	0.00
71		t-1,4-Dichloro-2-butene	20.000	22.803	-14.0	124	0.00
72		4-Chlorotoluene	20.000	20.557	-2.8	113	0.00
73		tert-Butylbenzene	20.000	20.668	-3.3	112	0.00
74		1,2,4-Trimethylbenzene	20.000	23.715	-18.6	125	0.00
75		sec-Butylbenzene	20.000	20.931	-4.7	112	0.00
76		4-Isopropyltoluene	20.000	22.006	-10.0	117	0.00
77		1,3-Dichlorobenzene	20.000	19.807	1.0	111	0.00
78		1,4-Dichlorobenzene	20.000	18.543	7.3	110	0.00
79		n-Butylbenzene	20.000	22.377	-11.9	124	0.00
80		1,2-Dichlorobenzene	20.000	19.041	4.8	106	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	17.926	10.4	105	0.00
82		Hexachlorobutadiene	20.000	21.165	-5.8	117	0.00
83		1,2,4-Trichlorobenzene	20.000	18.073	9.6	100	0.00
84		Naphthalene	20.000	18.984	5.1	102	0.00
85		1,2,3-Trichlorobenzene	20.000	18.798	6.0	104	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
Internal Standards								
1) Pentafluorobenzene (I)	6.089	99	117373	50.00	ug/L		0.00	
43) Chlorobenzene-d5 (I)	9.806	117	309319	50.00	ug/L		0.00	
63) 1,4-Dichlorobenzene-d4...	11.765	152	130775	50.00	ug/L		0.00	
System Monitoring Compounds								
30) Dibromofluoromethane (S)	5.596	111	92697	49.97	ug/L		0.00	
37) 1,4-Difluorobenzene (S)	6.649	114	346541	47.99	ug/L		0.00	
45) Toluene-d8 (S)	8.170	98	434343	50.35	ug/L		0.00	
64) 4-Bromofluorobenzene (S)	10.877	174	92692	49.09	ug/L		0.00	
Target Compounds							Qvalue	
2) Dichlorodifluoromethane	1.685	85	50512	18.60	ug/L		99	
3) Chloromethane	1.891	50	83090	18.05	ug/L		99	
4) Vinyl Chloride	1.983	62	63850	17.98	ug/L		96	
5) Bromomethane	2.342	96	38558	25.86	ug/L		99	
6) Chloroethane	2.469	64	12392	26.76	ug/L		91	
7) Trichlorofluoromethane	2.603	101	17240	21.76	ug/L		97	
8) Ethanol	3.333	~~45~~	~~109813~~	~~917.31~~	~~ug/L~~		~~90~~	M.I.
9) 1,1-Dichloroethene	3.139	61	84320	19.31	ug/L		88	
10) Carbon Disulfide	3.157	76	142799	17.53	ug/L		99	
11) Freon 113	3.199	101	49413	18.62	ug/L		84	
12) Iodomethane	3.297	142	6972	7.84	ug/L		88	
13) Methylene Chloride	3.777	84	53746	19.33	ug/L		83	
14) Acetone	3.863	~~43~~	~~48930~~	~~27.32~~	~~ug/L~~		~~98~~	M.I.
15) t-1,2-Dichloroethene	3.942	61	87884	19.25	ug/L		90	
16) n-Hexane	4.039	86	13100	18.94	ug/L	#	65	
17) Methyl-tert-butyl-ether	4.100	73	209733	19.21	ug/L		97	
18) tert-Butanol (TBA)	4.258	~~59~~	~~271269~~	~~294.33~~	~~ug/L~~	#	~~96~~	M.I.
19) Diisopropyl ether (DIPE)	4.501	45	59129	5.27	ug/L		92	
20) 1,1-Dichloroethane	4.574	63	98065	20.35	ug/L		98	
21) Acrylonitrile	4.629	~~53~~	~~32166~~	~~15.86~~	~~ug/L~~		~~95~~	M.I.
22) Ethyl-tert-butyl ether...	4.866	59	46222	4.58	ug/L		92	
23) c-1,2-Dichloroethene	5.128	61	84195	18.70	ug/L		93	
24) 2,2-Dichloropropane	5.237	77	96511	21.16	ug/L		97	
25) Bromochloromethane	5.323	49	55388	20.20	ug/L		74	
26) Chloroform	5.414	83	101440	19.70	ug/L		96	
27) Carbon Tetrachloride	5.554	117	71781	21.11	ug/L		98	
28) Tetrahydrofuran	5.584	42	39104	16.42	ug/L		94	
29) 1,1,1-Trichloroethane	5.621	97	95730	20.23	ug/L		96	
31) 1,1-Dichloropropene	5.748	75	84169	18.30	ug/L		94	
32) 2-Butanone (MEK)	5.730	~~43~~	~~80041~~	~~25.37~~	~~ug/L~~		~~94~~	M.I.
33) Benzene	5.998	78	272981	18.11	ug/L		98	
34) tert-Amyl methyl ether...	6.150	73	43058	4.42	ug/L		92	
35) 1,2-Dichloroethane (EDC)	6.205	62	94581	20.37	ug/L		99	
36) iso-Butyl Alcohol	6.308	43	160241	443.99	ug/L		95	
38) Trichloroethene (TCE)	6.618	130	57196	19.10	ug/L		93	
39) tert-Amyl ethyl ether ...	6.904	59	31344	4.63	ug/L		85	
40) Dibromomethane	7.056	93	37659	19.91	ug/L	#	80	
41) 1,2-Dichloropropane	7.166	63	70668	18.94	ug/L		100	
42) Bromodichloromethane	7.245	83	76860	21.09	ug/L		98	
44) c-1,3-Dichloropropene	7.951	75	92531	20.07	ug/L		100	
46) Toluene	8.224	91	266932	18.47	ug/L		99	
47) Tetrachloroethene (PCE)	8.675	166	51359	19.15	ug/L		84	
48) 4-Methyl-2-Pentanone (...	8.669	43	175139	39.09	ug/L		98	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

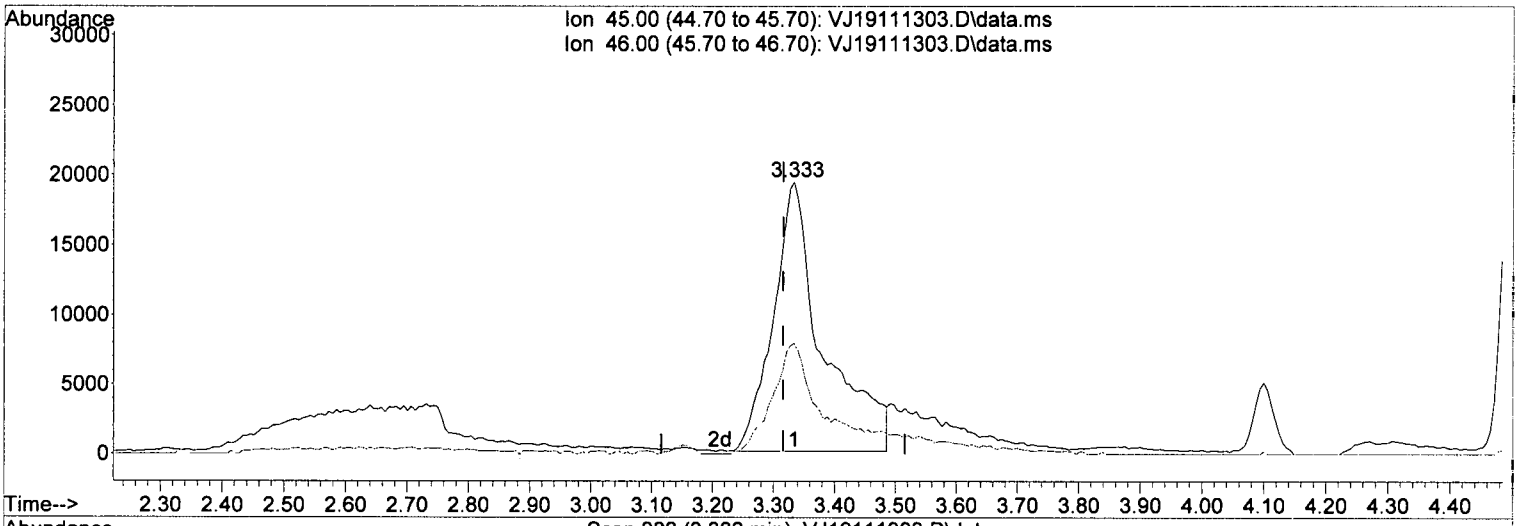
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	102004	22.82	ug/L		95
50) 1,1,2-Trichloroethane	8.875	97	59603	20.32	ug/L		93
51) Dibromochloromethane	9.064	129	48936	20.67	ug/L		98
52) 1,3-Dichloropropane	9.155	76	109611	19.89	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.295	107	55790	19.84	ug/L		99
54) 2-Hexanone	9.545	43	121216	36.36	ug/L		98
55) Chlorobenzene	9.818	112	157775	19.13	ug/L		92
56) Ethylbenzene	9.855	91	279590	19.90	ug/L		96
57) 1,1,1,2-Tetrachloroethane	9.885	131	52865	20.70	ug/L		94
58) m,p-Xylenes (2)	9.995	91	410011	40.99	ug/L		95
59) o-Xylene	10.372	91	185123	19.39	ug/L		93
60) Styrene	10.421	104	128857	17.57	ug/L		96
61) Bromoform	10.433	173	30295	18.18	ug/L		97
62) Isopropylbenzene	10.652	105	229726	19.97	ug/L		95
65) Bromobenzene	10.962	156	51668	19.09	ug/L	#	69
66) n-Propylbenzene	10.992	91	287887	20.18	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	74767	18.10	ug/L		97
68) 2-Chlorotoluene	11.114	126	50330	19.78	ug/L	#	74
69) 1,3,5-Trimethylbenzene	11.151	105	202432	23.19	ug/L		92
70) 1,2,3-Trichloropropane	11.151	110	26444	19.94	ug/L		95
71) t-1,4-Dichloro-2-butene	11.187	88	12132	22.80	ug/L		96
72) 4-Chlorotoluene	11.248	91	169871	20.56	ug/L		91
73) tert-Butylbenzene	11.406	91	106991	20.67	ug/L		88
74) 1,2,4-Trimethylbenzene	11.461	105	209131	23.71	ug/L		96
75) sec-Butylbenzene	11.546	105	233624	20.93	ug/L		95
76) 4-Isopropyltoluene	11.656	119	187225	22.01	ug/L		97
77) 1,3-Dichlorobenzene	11.704	146	97000	19.81	ug/L		93
78) 1,4-Dichlorobenzene	11.777	146	96537	18.54	ug/L		95
79) n-Butylbenzene	11.972	91	184597	22.38	ug/L		95
80) 1,2-Dichlorobenzene	12.094	146	85438	19.04	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.696	157	14021	17.93	ug/L	#	52
82) Hexachlorobutadiene	13.213	223	12010	21.16	ug/L		94
83) 1,2,4-Trichlorobenzene	13.237	180	48977	18.07	ug/L		93
84) Naphthalene	13.511	128	184605	18.98	ug/L		97
85) 1,2,3-Trichlorobenzene	13.675	180	49583	18.80	ug/L		96

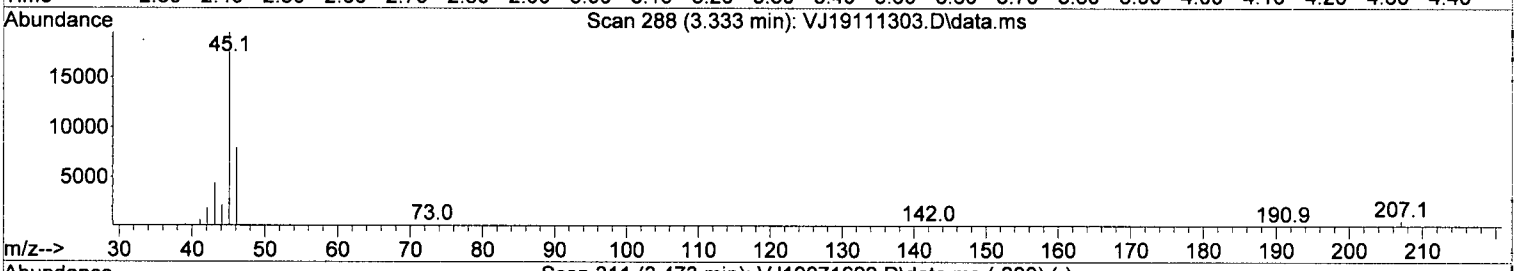
(#) = qualifier out of range (m) = manual integration (+) = signals summed

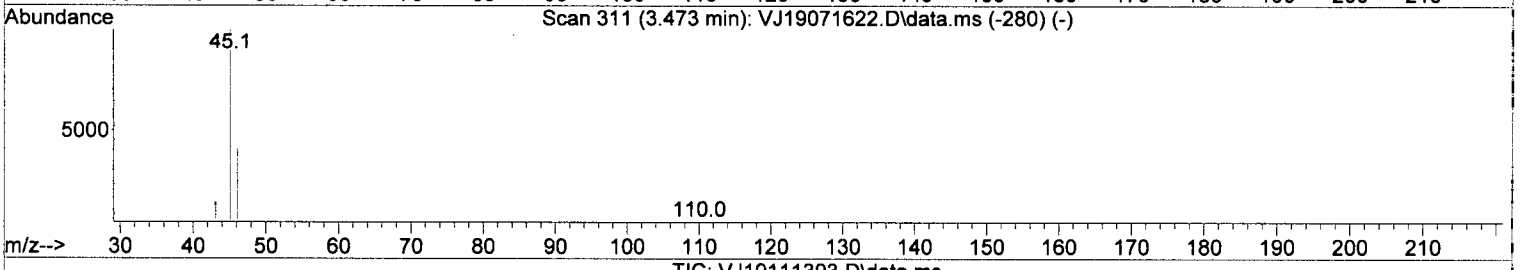
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(8) Ethanol

3.333min (+ 0.018) 917.31 ug/L

response 109813

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.85
0.00	0.00	0.00
0.00	0.00	0.00

M.I.

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
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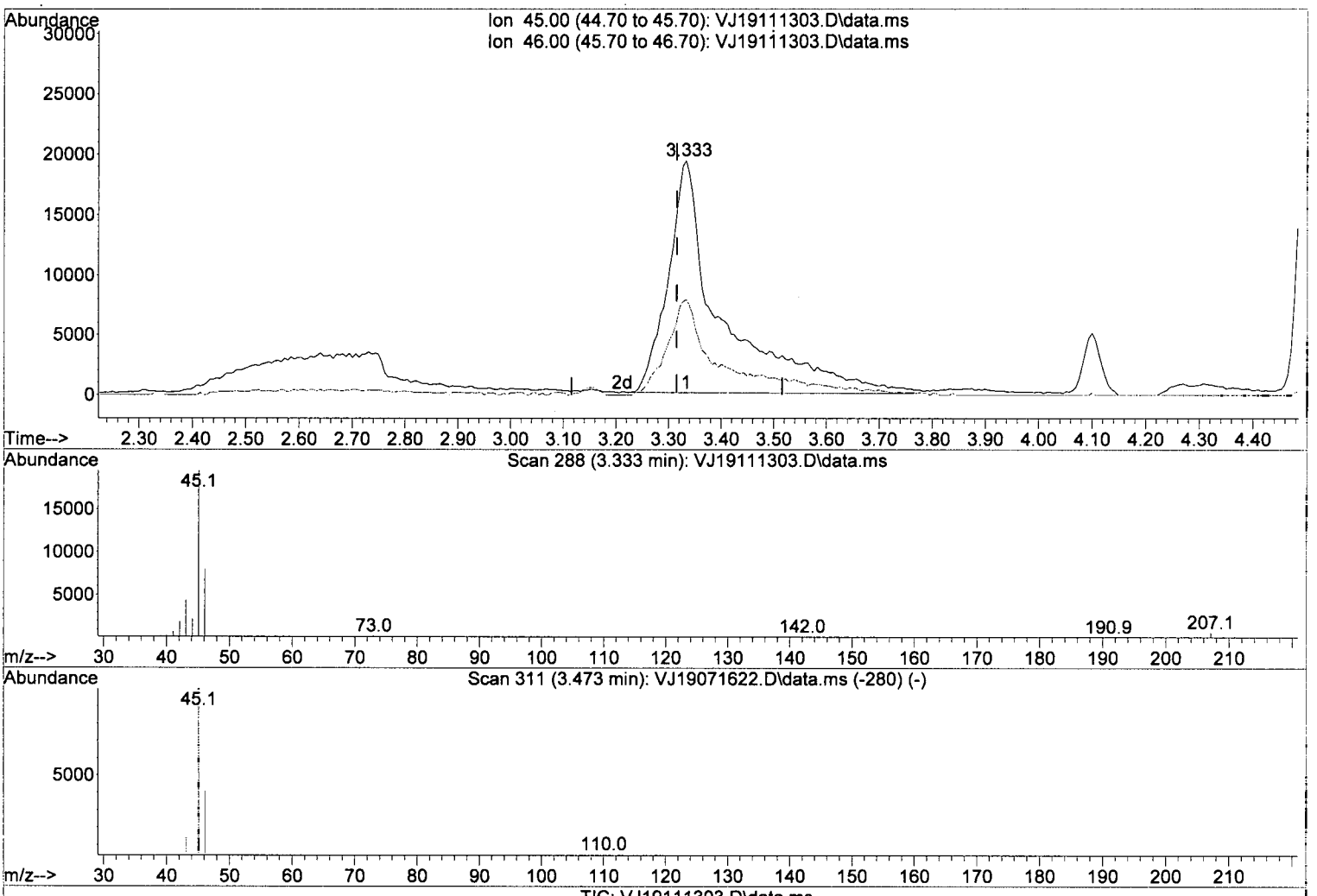
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



TIC: VJ19111303.D\data.ms

(8) Ethanol

3.333min (+ 0.018) 1162.91 ug/L (m)

response 135812

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	40.85
0.00	0.00	0.00
0.00	0.00	0.00

IMA
11/14/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
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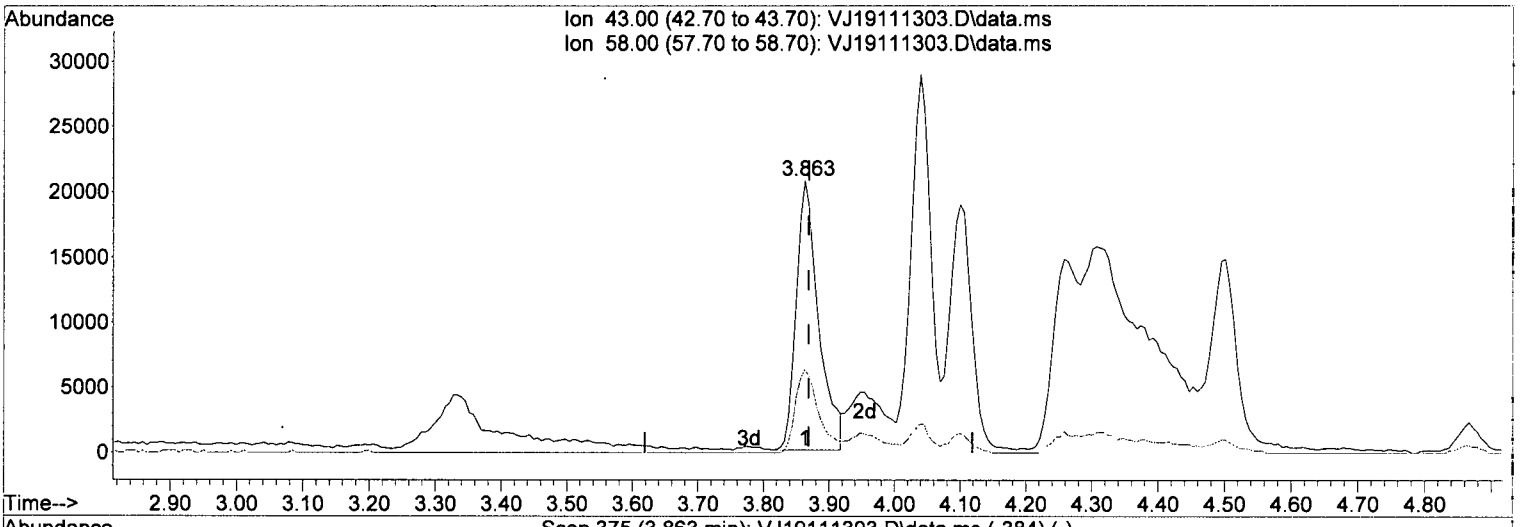
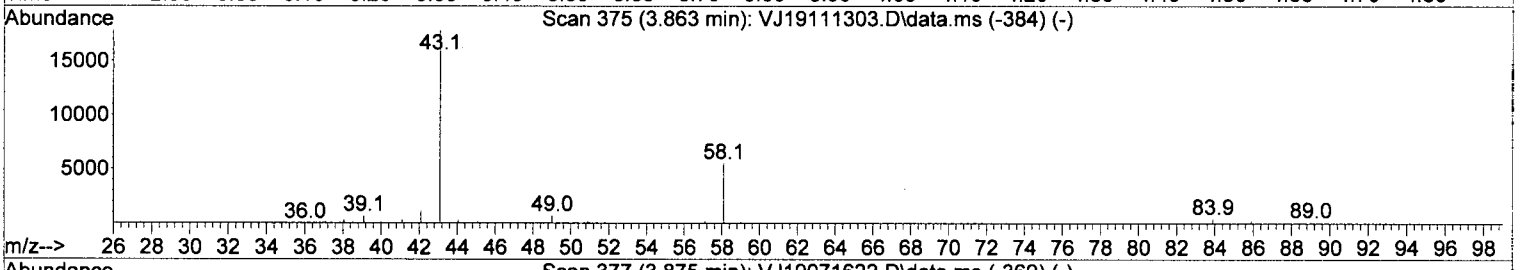
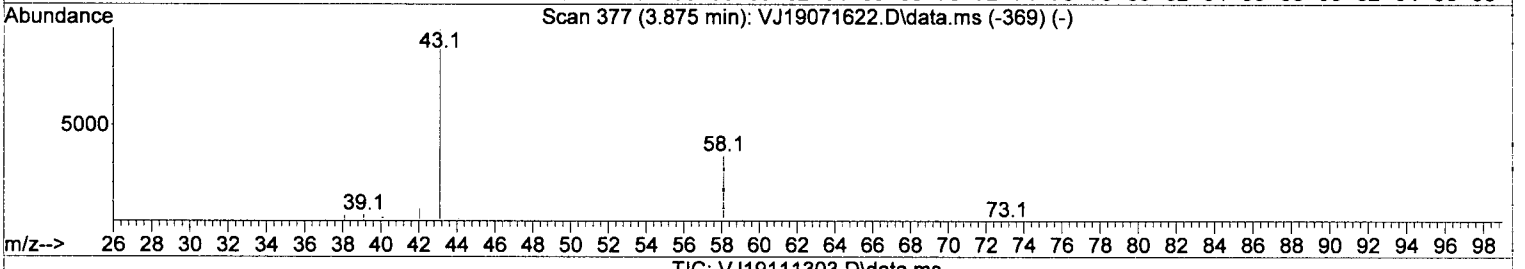
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(14) Acetone

3.863min (-0.005) 27.32 ug/L

response 48930

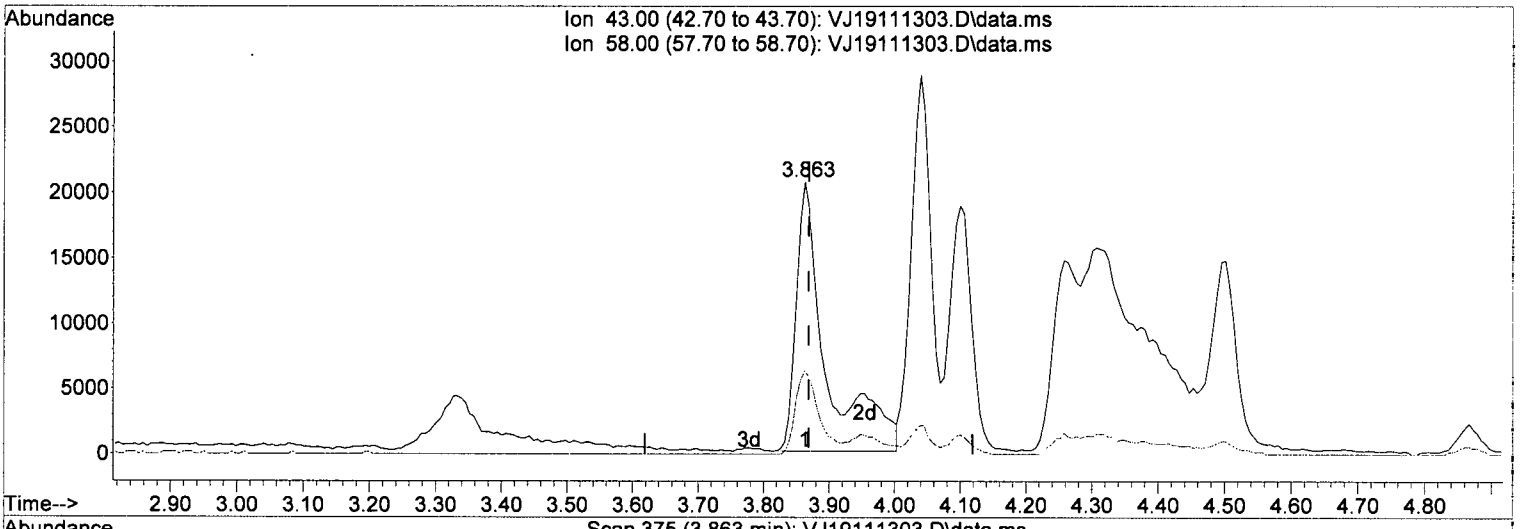
M.I.

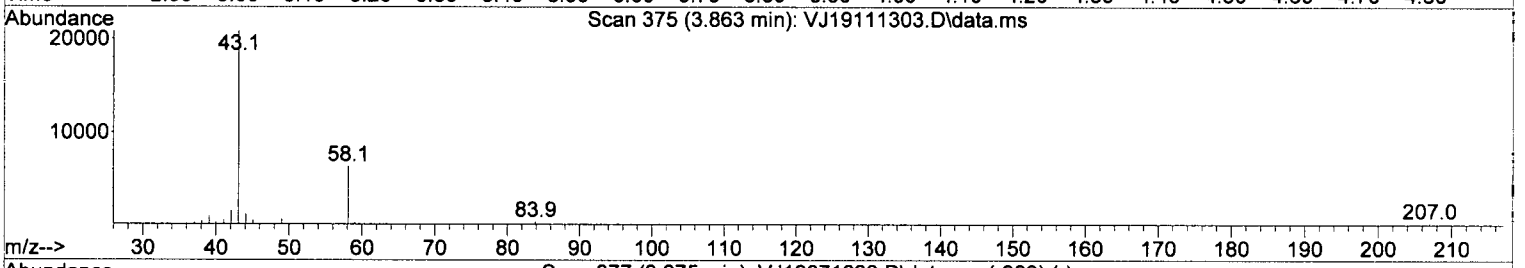
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.95
0.00	0.00	0.00
0.00	0.00	0.00

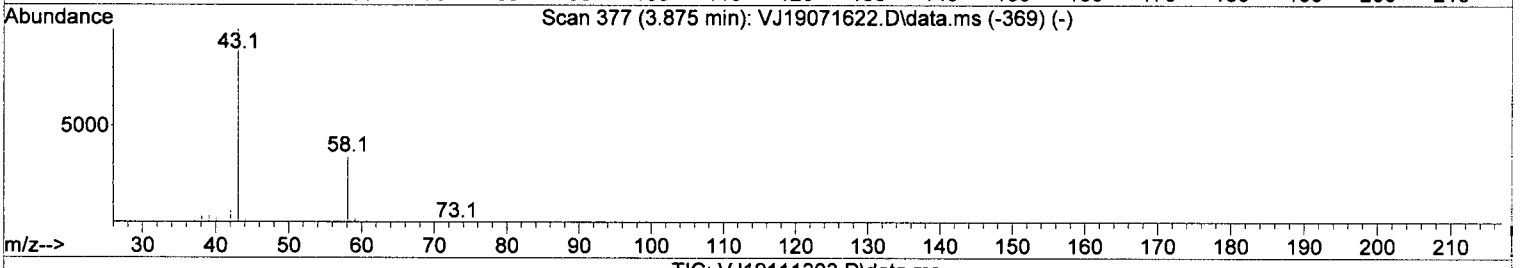
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(14) Acetone

3.863min (-0.005) 36.72 ug/L (m)

IMA 11/14/19

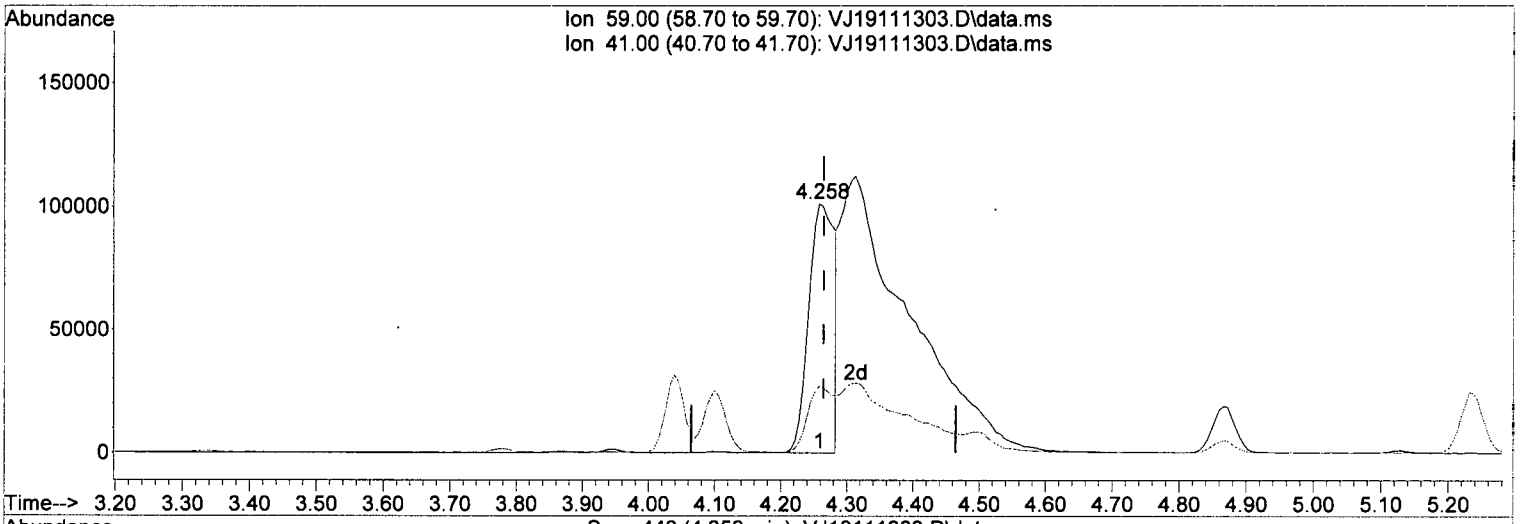
response 65775

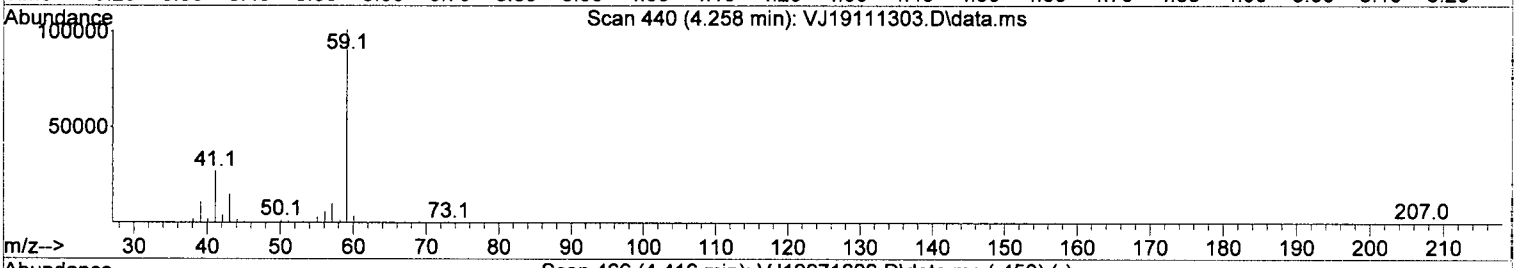
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	30.63
0.00	0.00	0.00
0.00	0.00	0.00

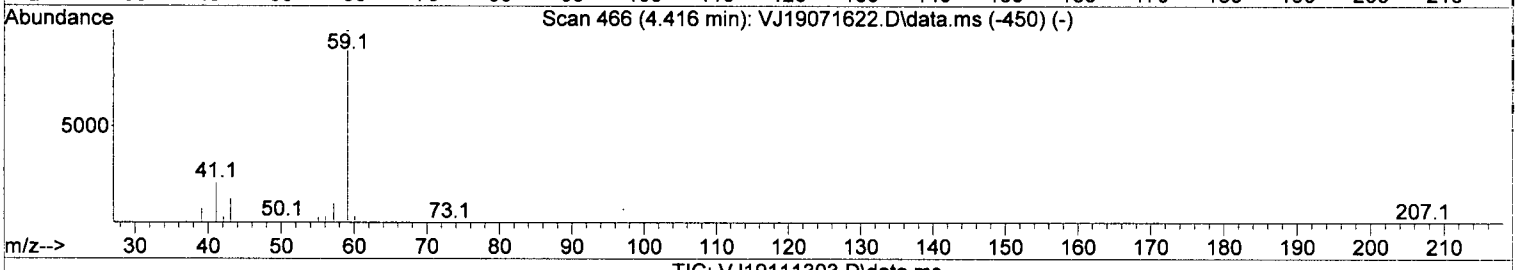
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(18) tert-Butanol (TBA)

4.258min (-0.006) 294.33 ug/L

response 271269

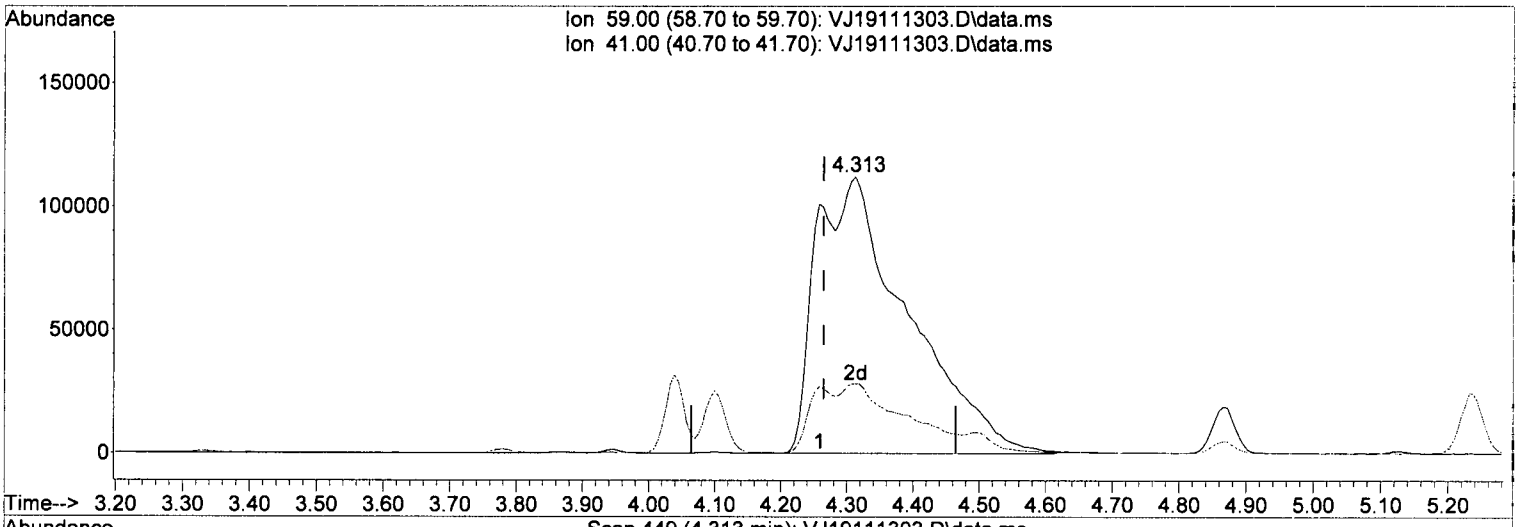
M. I.

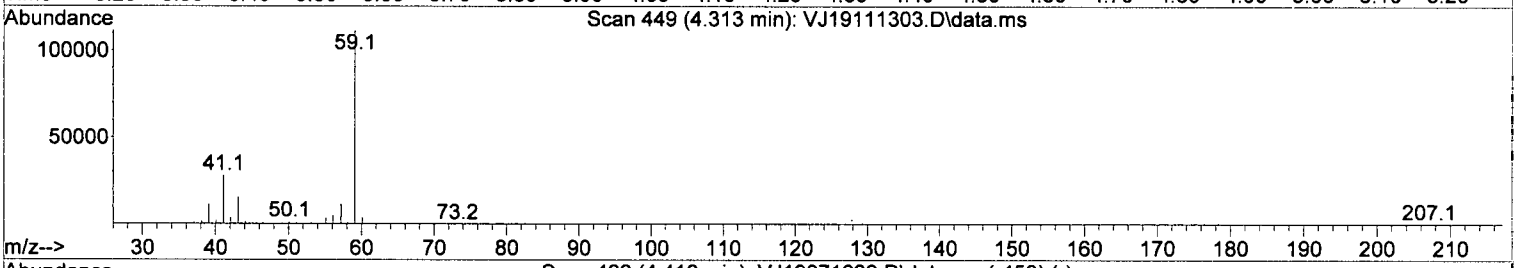
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	26.73#
0.00	0.00	0.00
0.00	0.00	0.00

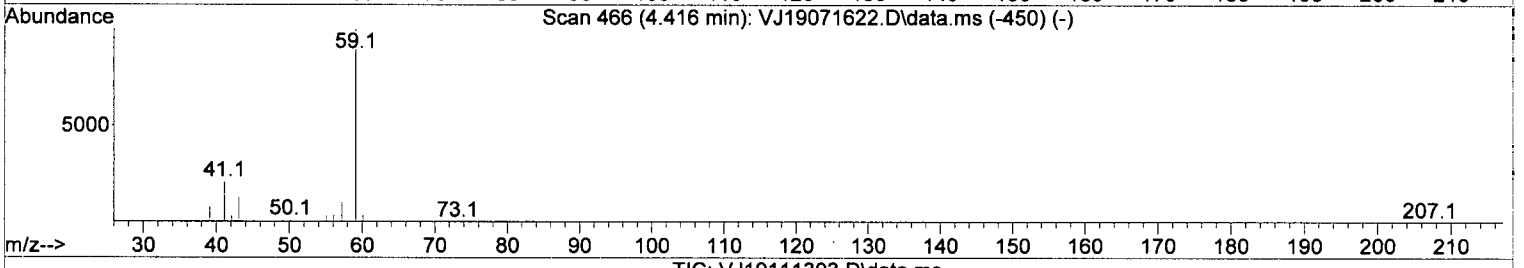
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(18) tert-Butanol (TBA)

4.313min (+ 0.049) 1168.53 ug/L (m)

response 1076977

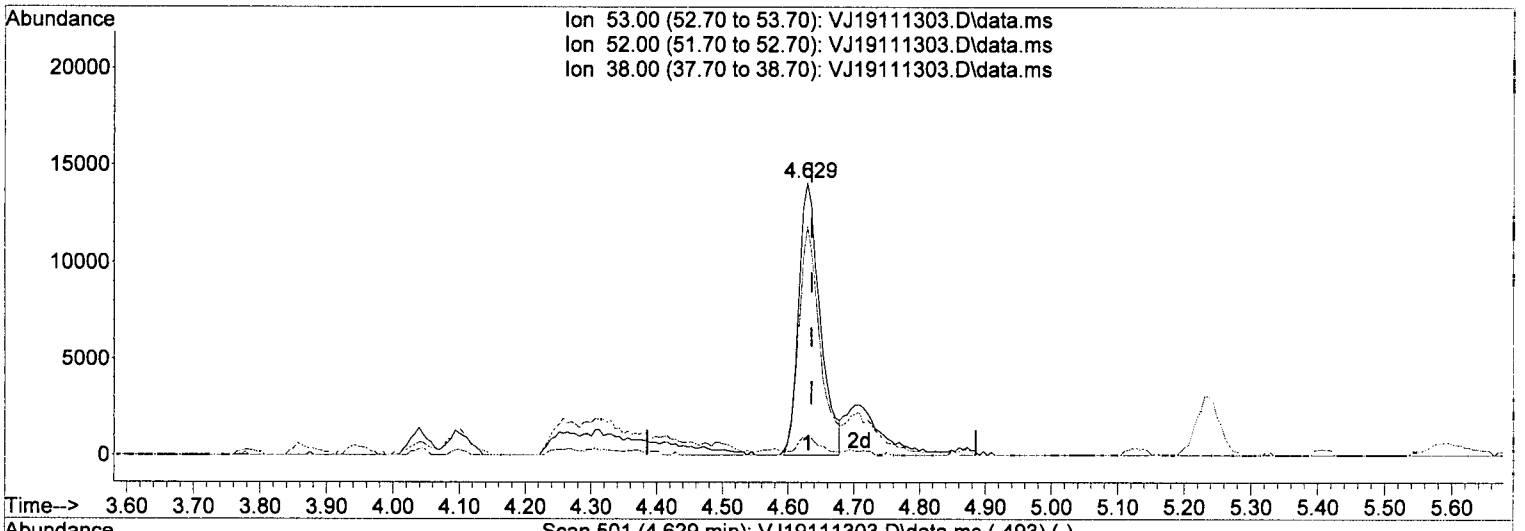
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	25.18#
0.00	0.00	0.00
0.00	0.00	0.00

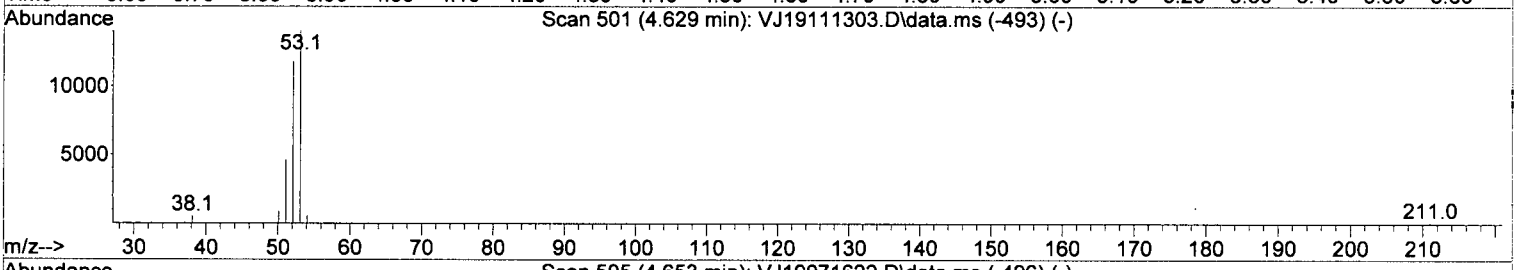
IMA
11/14/19

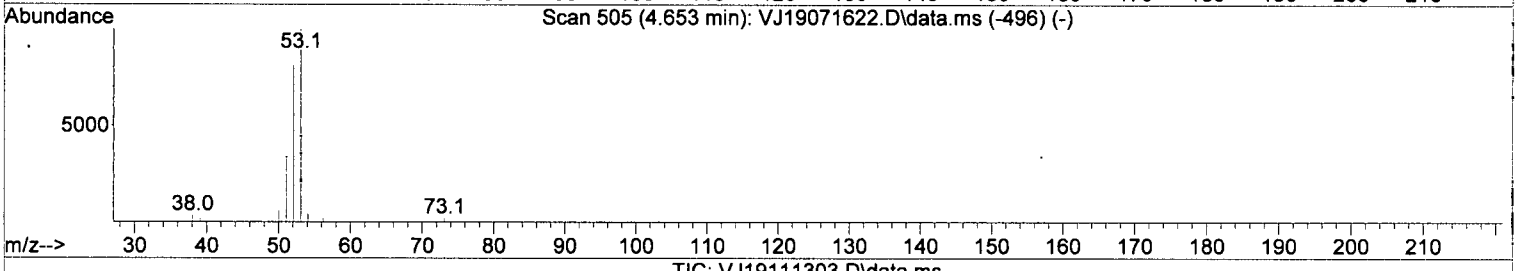
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 15.86 ug/L

response 32166

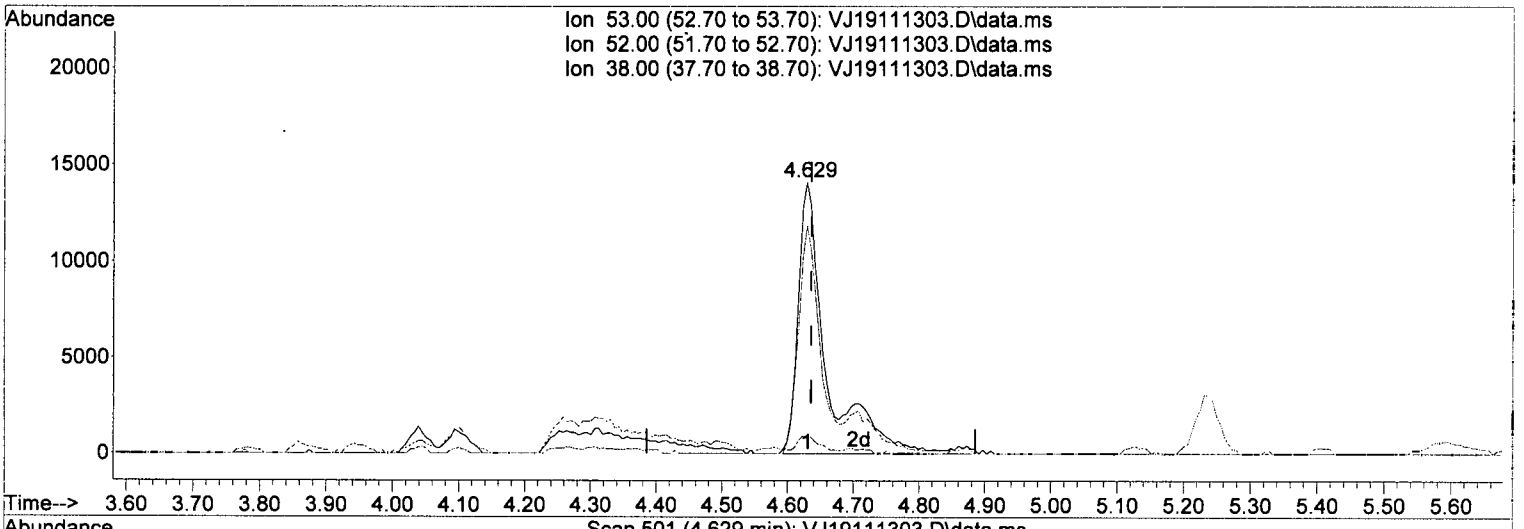
M.I.

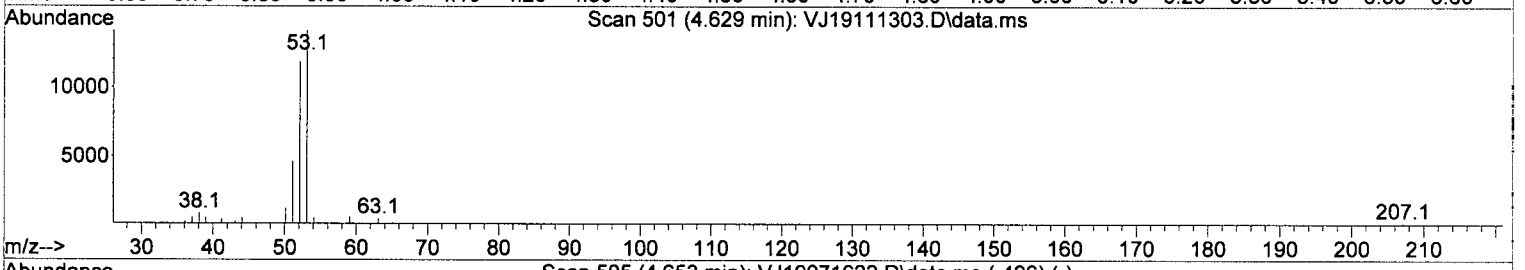
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	84.12
38.00	5.50	5.24
0.00	0.00	0.00

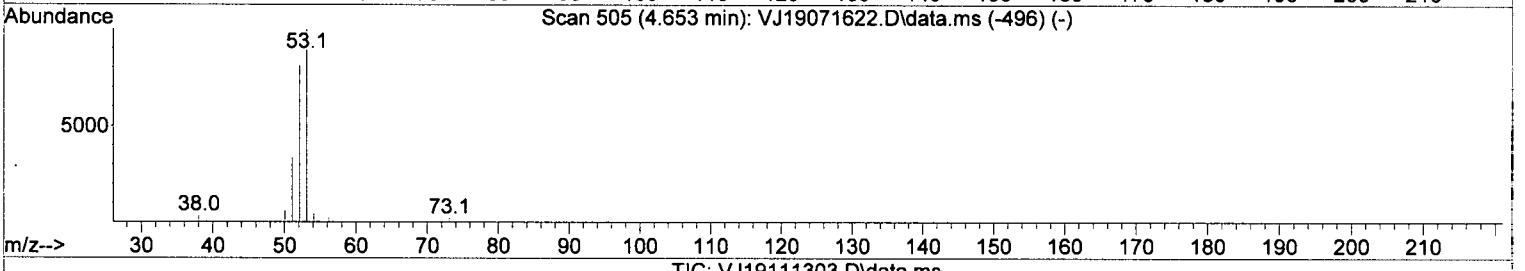
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 21.28 ug/L (m) IMA 11/14/19

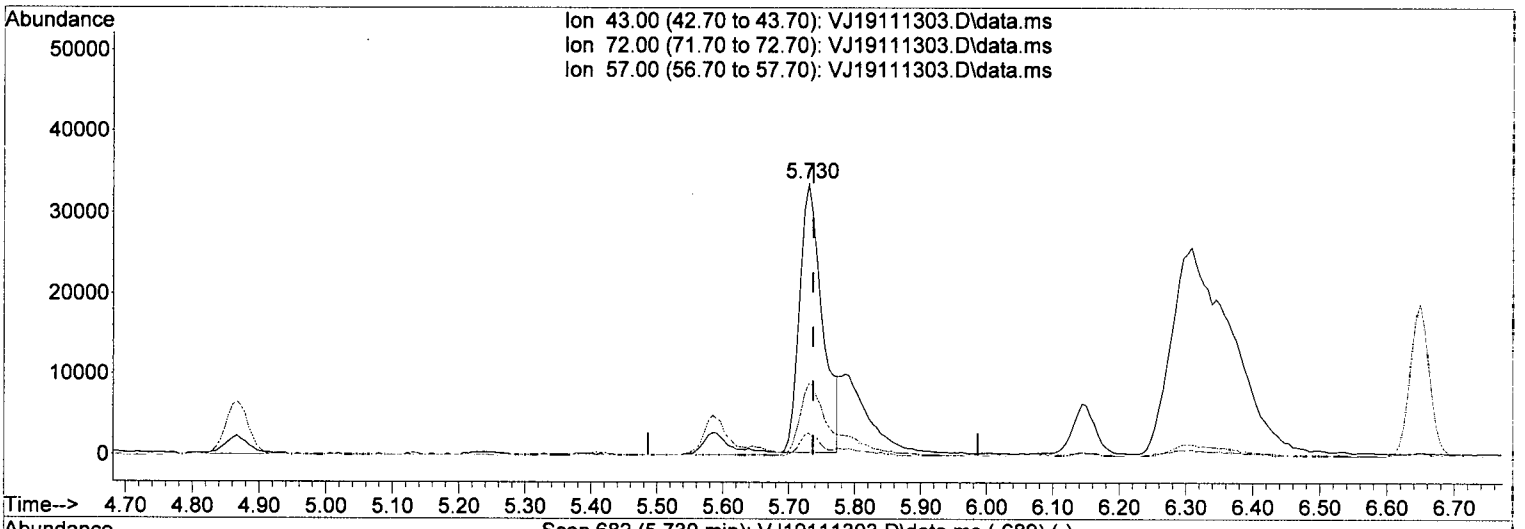
response 43145

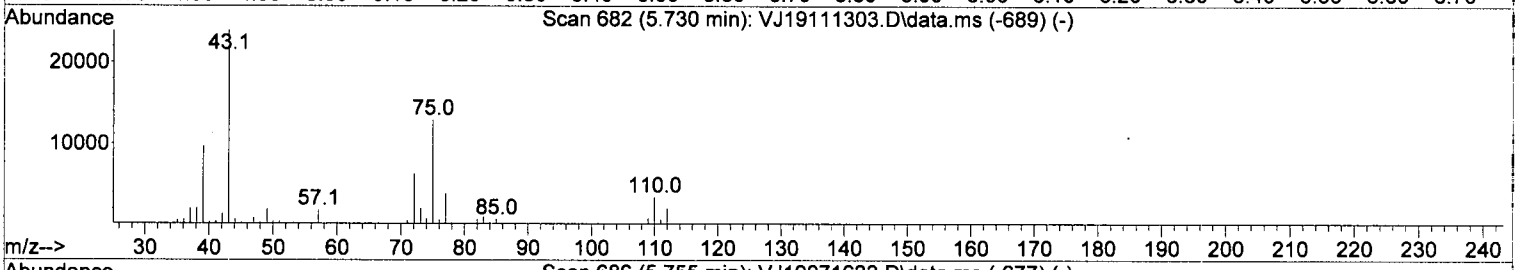
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	84.12
38.00	5.50	6.39
0.00	0.00	0.00

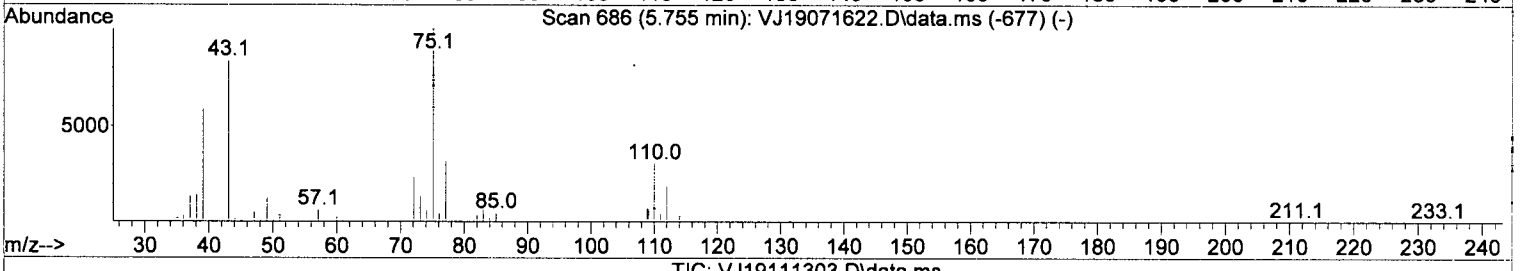
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 25.37 ug/L

response 80041

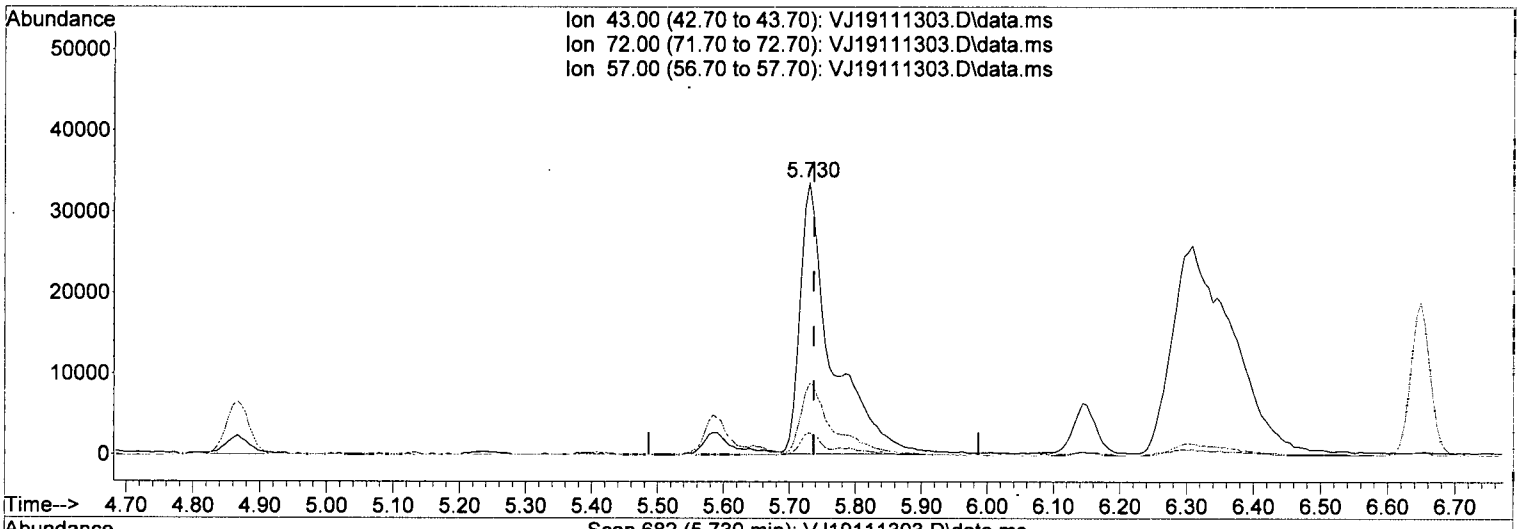
M.I.

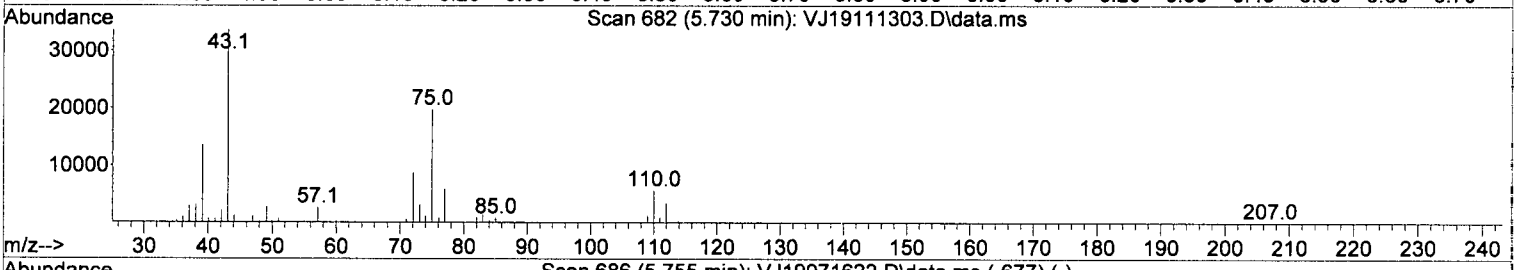
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	25.44
57.00	7.20	8.17
0.00	0.00	0.00

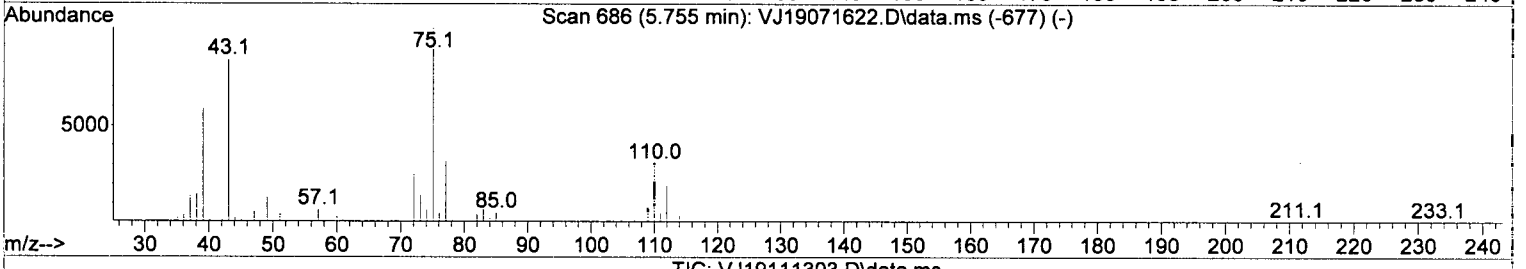
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111303.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 35.48 ug/L (m)

response 111928

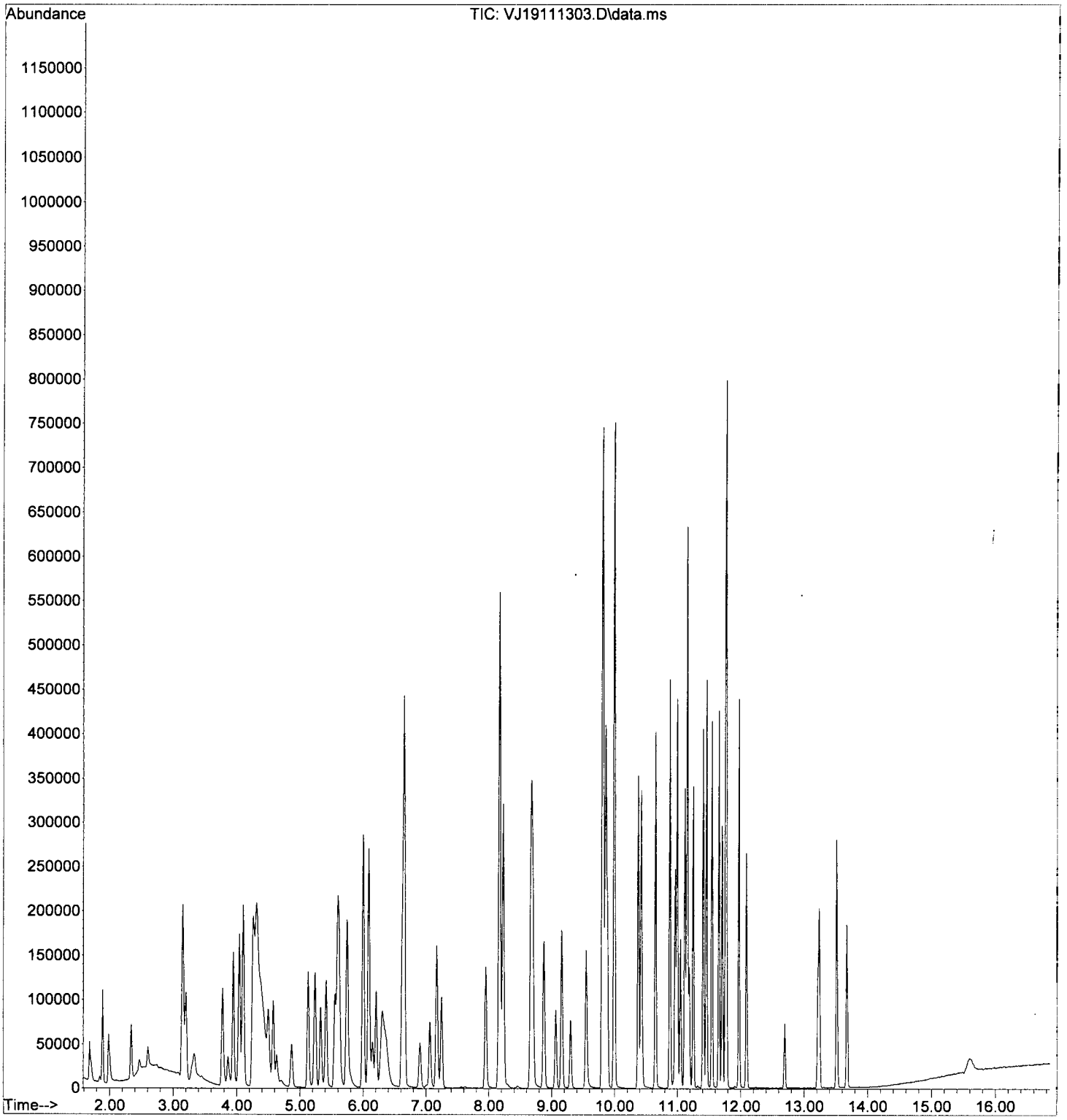
IMA
11/14/19

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.24
57.00	7.20	8.08
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111303.D
Acq On : 13 Nov 2019 10:47 am
Operator : IMA
Sample : 9110745-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 14 10:24:53 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111304.D
Acq On : 13 Nov 2019 11:14 am
Operator : IMA
Sample : 9110745-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 10:27:48 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

IMA
11/19/19

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	Pentafluorobenzene (IS)	50.000	50.000	0.0	110	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	51.449	-2.9	112	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	48.663	2.7	106	0.00
4	H	NWTPH-Gx (TPH)	500.000	520.367	-4.1	118	0.00
5	H	TPHg (C5-C9)	500.000	539.949	-8.0	119	0.00
6	H	TPHg (C6-C10)	500.000	538.609	-7.7	118	0.00
7	H	CA-LUFT (C5-C12)	500.000	532.101	-6.4	119	0.00
8		Benzene (NR)	-1.000	0.000	0.0	120	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	115	0.00
10		Toluene (NR)	-1.000	0.000	0.0	113	0.00
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	110	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	103	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111304.D
Acq On : 13 Nov 2019 11:14 am
Operator : IMA
Sample : 9110745-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 10:27:48 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

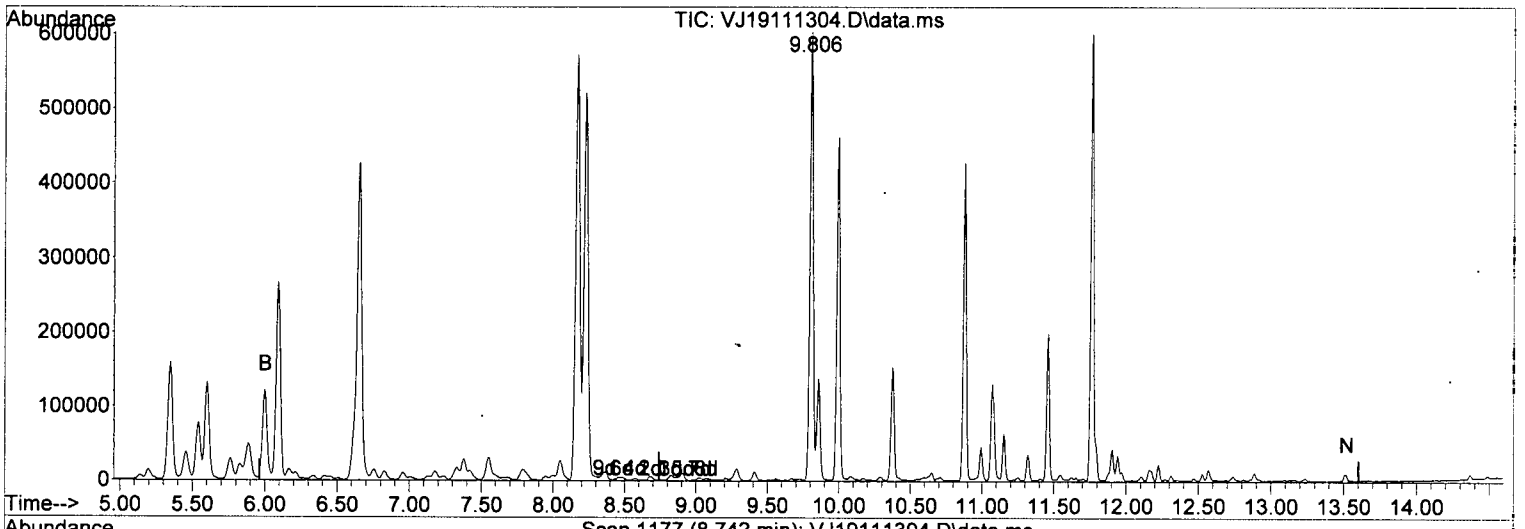
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	175435	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	343416	51.45	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	87503	48.66	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	430838	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	301041	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	192509	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	4567832m	520.37	ug/L	
5) TPHg (C5-C9)	9.239	TIC	6500407m	539.95	ug/L	
6) TPHg (C6-C10)	9.239	TIC	5509402m	538.61	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	7544236m	532.10	ug/L	

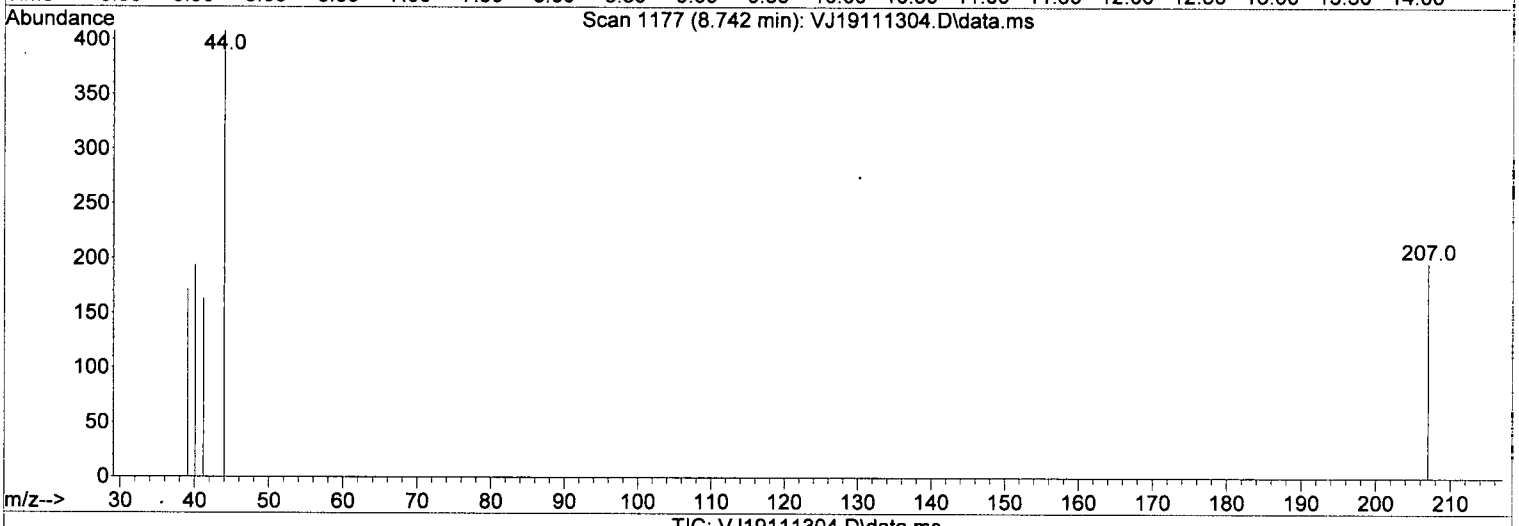
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111304.D
Acq On : 13 Nov 2019 11:14 am
Operator : IMA
Sample : 9110745-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 10:27:48 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19111304.D\data.ms

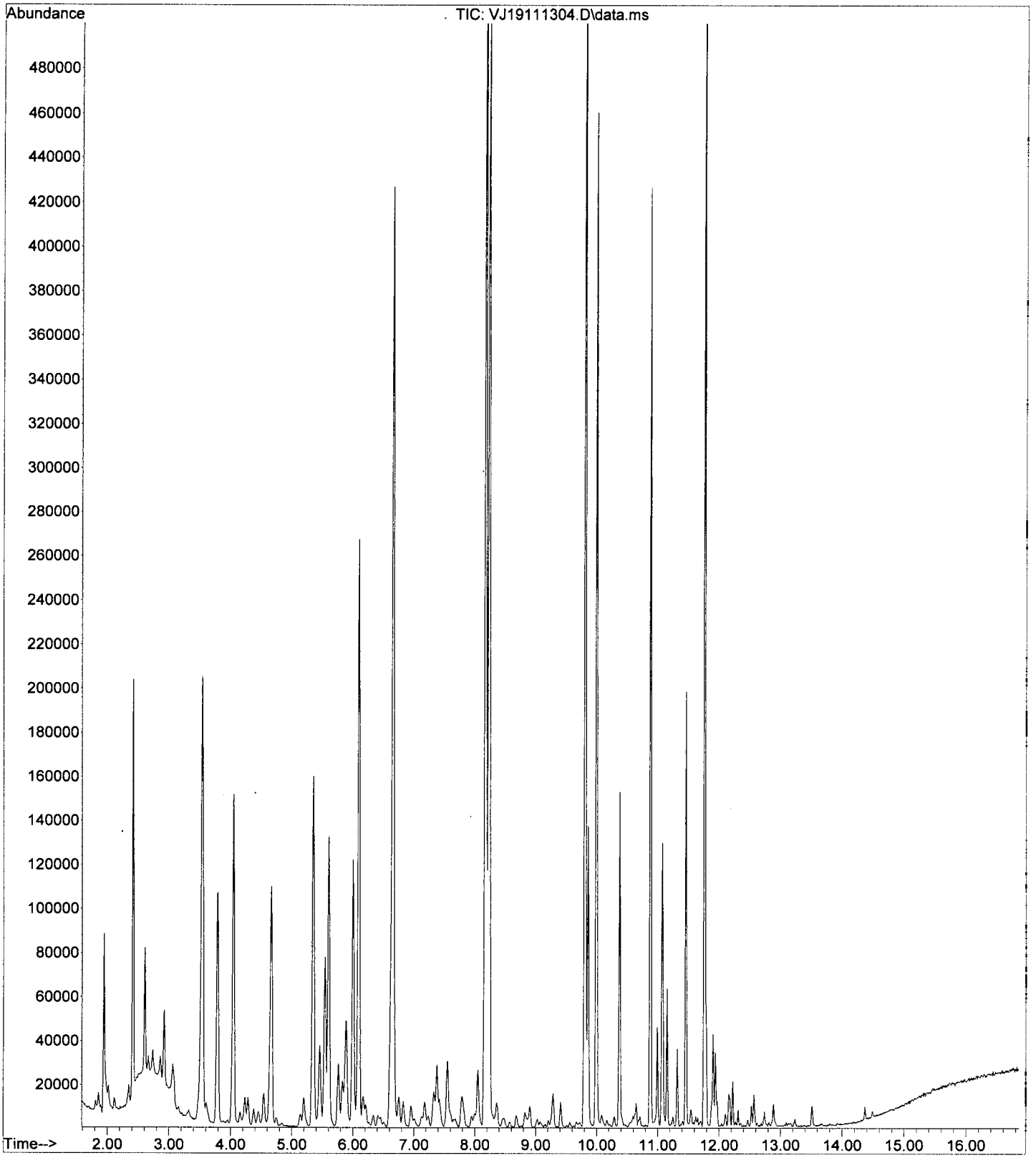
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 520.37 ug/L m

response 4567832

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\2019-11\9K13043\VJ19111304.D
Operator : IMA
Acquired : 13 Nov 2019 11:14 am using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 9110745-BS2
Misc Info : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111305.D
Acq On : 13 Nov 2019 11:41 am
Operator : IMA
Sample : 9110745-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
11/19/19

Quant Time: Nov 14 10:28:52 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.089	168	161356	50.00 ug/L	# 0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.649	114	325876	53.08 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	84593	51.15 ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	412316	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	288450	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	189824	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	85834m	14.15 ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	354427m	Below Cal	
6) TPHg (C6-C10)	9.239	TIC	339568m	12.23 ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	387517m	Below Cal	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111305.D
Acq On : 13 Nov 2019 11:41 am
Operator : IMA
Sample : 9110745-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 10:29:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

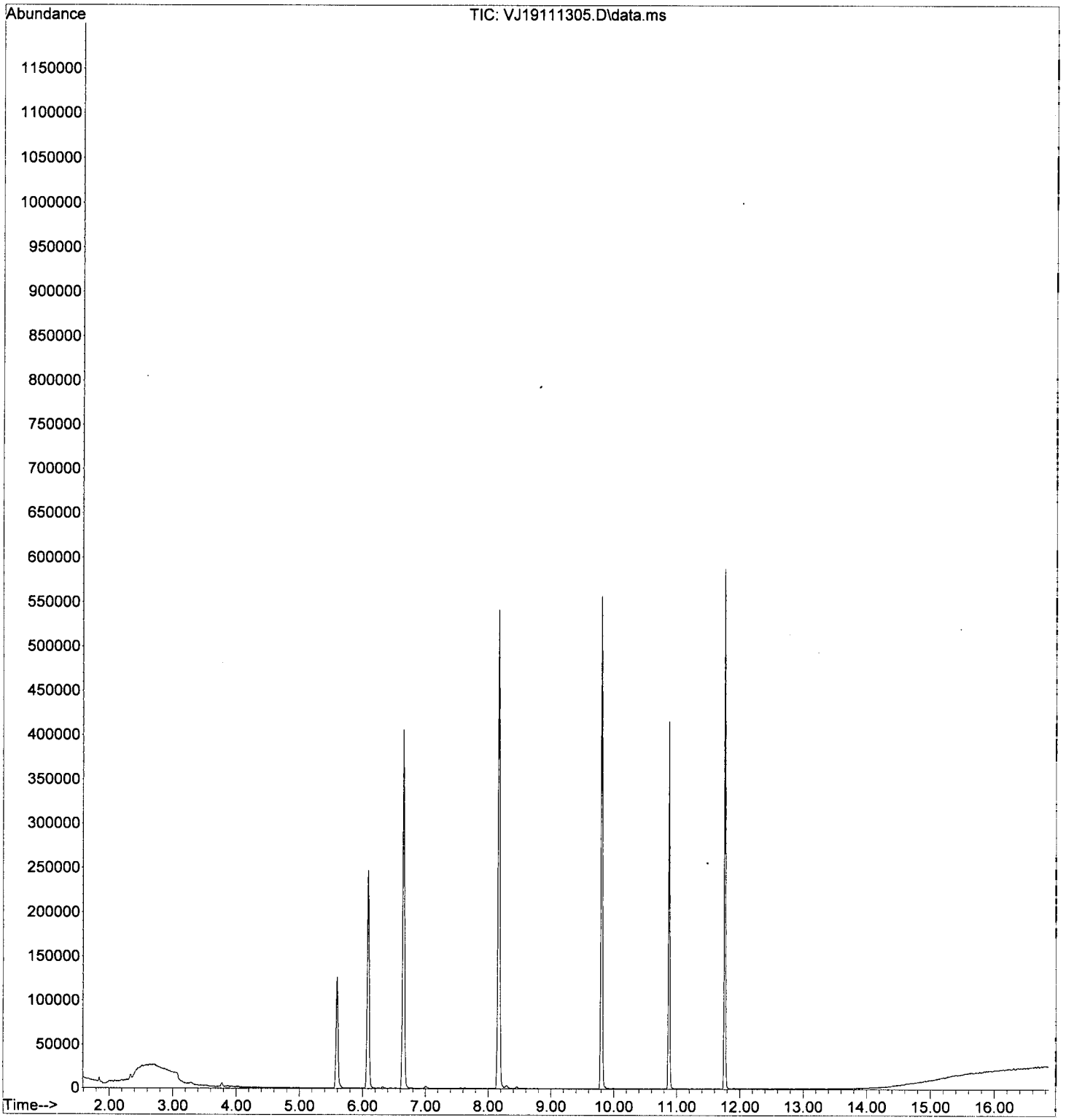
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	109880	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	288450	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	121422	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	89051	51.27 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	325876	48.21 ug/L		0.00
45) Toluene-d8 (S)	8.164	98	412316	51.26 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	84593	48.25 ug/L		0.00
Target Compounds						Qvalue
3) Chloromethane	1.885	50	1164	0.27 ug/L	<MDL	74
5) Bromomethane	2.336	96	3506	0.14 ug/L		95
6) Chloroethane	2.476	64	71	1.38 ug/L	#	49
8) Ethanol	3.297	45	5022	Below Cal		83
12) Iodomethane	3.291	142	279	0.34 ug/L	#	47
13) Methylene Chloride	3.777	84	2032	Below Cal		94
14) Acetone	3.869	43	1889	1.13 ug/L	#	42
28) Tetrahydrofuran	5.596	42	185	0.08 ug/L	#	30
32) 2-Butanone (MEK)	5.748	43	579	0.20 ug/L		52
36) iso-Butyl Alcohol	6.320	43	597	1.77 ug/L		76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111305.D
Acq On : 13 Nov 2019 11:41 am
Operator : IMA
Sample : 9110745-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 14 10:29:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111325.D
Acq On : 13 Nov 2019 8:41 pm
Operator : IMA
Sample : A9K0332-04
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 25 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 11:47:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

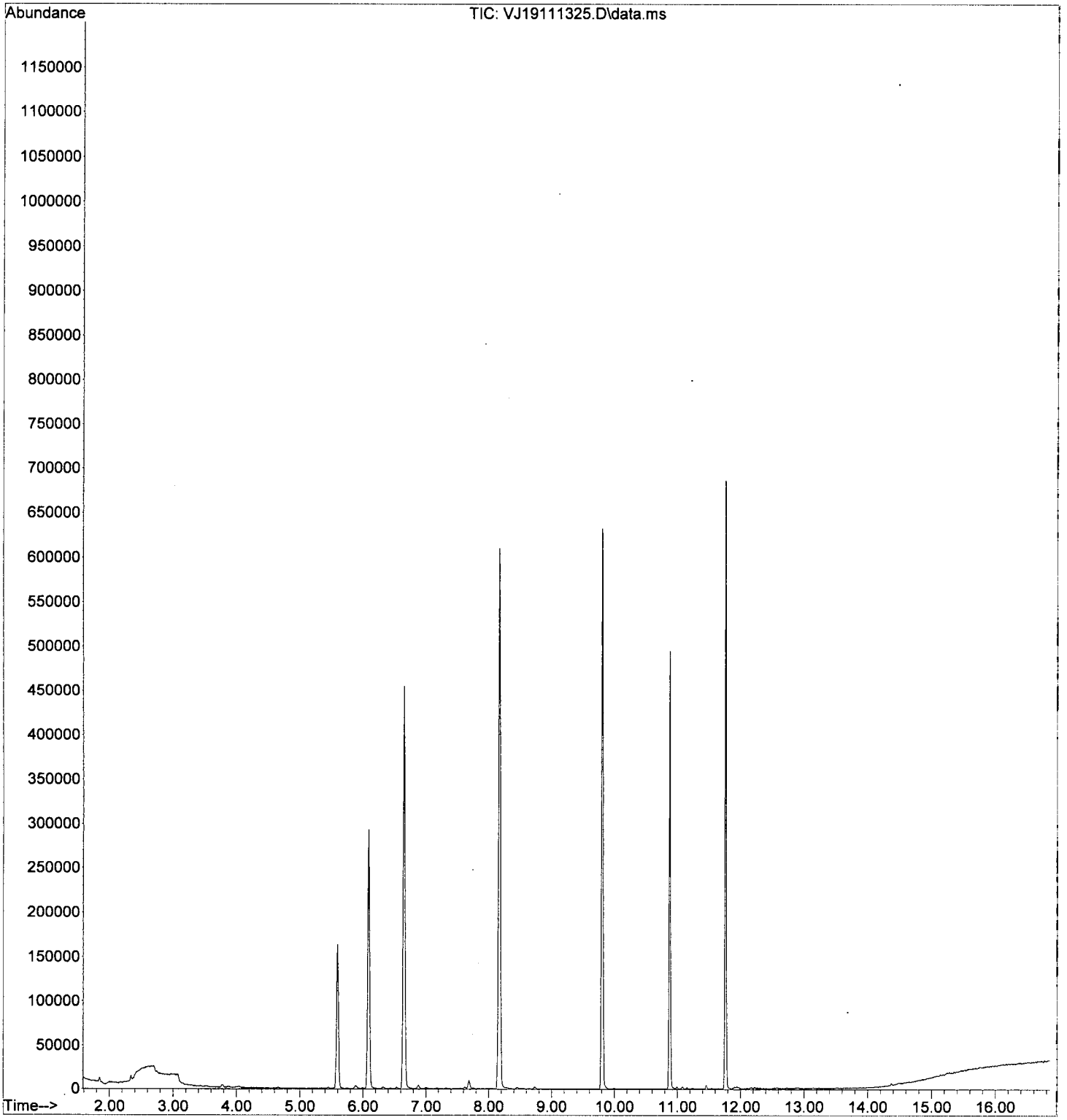
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	122963	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	341819	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	148538	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	111023	57.12	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	382059	50.51	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	473651	49.69	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	104482	48.72	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.886	50	1020	0.21	ug/L	<MDL	93
5) Bromomethane	2.342	96	3181	Below Cal			93
6) Chloroethane	2.457	64	399	2.01	ug/L	#	1
8) Ethanol	3.291	45	629	Below Cal		#	29
12) Iodomethane	3.303	142	214	0.23	ug/L	#	47
13) Methylene Chloride	3.777	84	1214	Below Cal			93
14) Acetone	3.869	43	2094	1.12	ug/L	#	42
36) iso-Butyl Alcohol	6.320	43	647	1.71	ug/L		82
39) tert-Amyl ethyl ether ...	6.880	59	704	0.10	ug/L	#	74
66) n-Propylbenzene	10.993	91	1610	0.10	ug/L		90
69) 1,3,5-Trimethylbenzene	11.151	105	1056	0.11	ug/L		99
74) 1,2,4-Trimethylbenzene	11.461	105	2428	0.24	ug/L		93
79) n-Butylbenzene	11.966	91	1023	0.11	ug/L		77

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111325.D
Acq On : 13 Nov 2019 8:41 pm
Operator : IMA
Sample : A9K0332-04
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 14 11:47:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111326.D
Acq On : 13 Nov 2019 9:07 pm
Operator : IMA
Sample : A9K0332-05
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 26 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 11:47:08 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

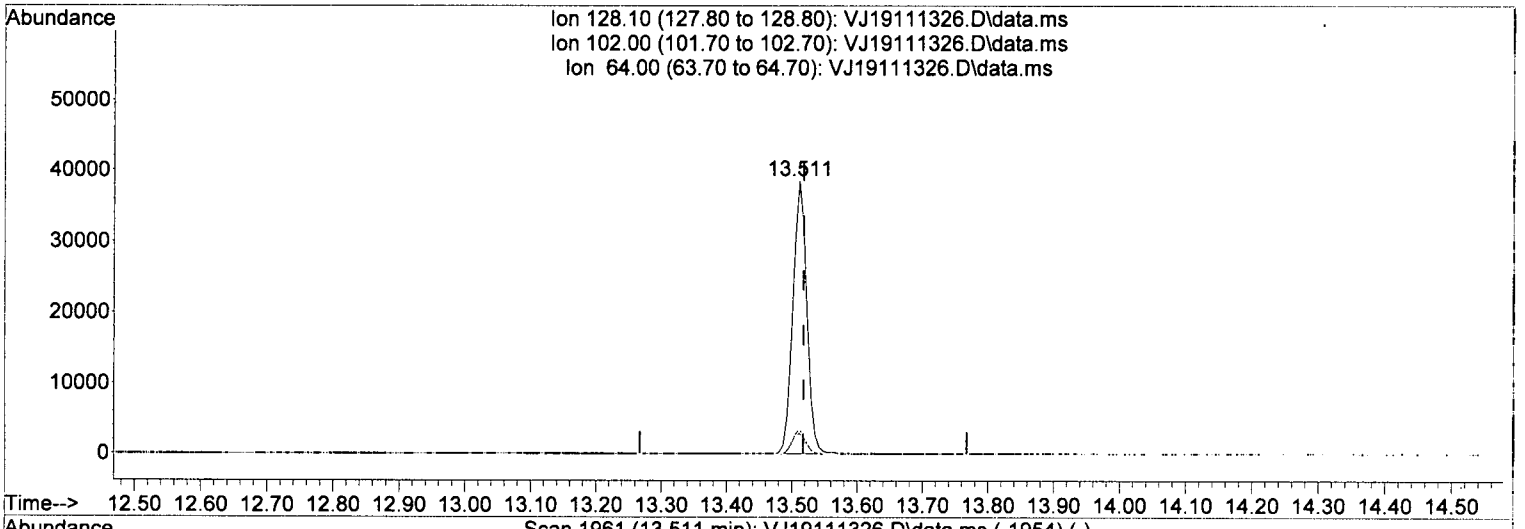
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	128078	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	354735	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	151123	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	108233	53.46 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	395905	50.25 ug/L		0.00
45) Toluene-d8 (S)	8.170	98	490403	49.57 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	107780	49.39 ug/L		0.00
Target Compounds						Qvalue
3) Chloromethane	1.898	50	1010	0.20 ug/L	<MDL	92
5) Bromomethane	2.348	96	3506	Below Cal		90
6) Chloroethane	2.469	64	229	1.66 ug/L	#	1
8) Ethanol	3.297	45	1187	Below Cal	#	29
9) 1,1-Dichloroethene	3.035	61	645	0.14 ug/L	#	25
12) Iodomethane	3.291	142	183	0.19 ug/L	#	47
13) Methylene Chloride	3.783	84	1116	Below Cal		94
14) Acetone	3.881	43	2642	1.35 ug/L		94
18) tert-Butanol (TBA)	4.264	59	549	0.55 ug/L	#	16
28) Tetrahydrofuran	5.596	42	272	0.10 ug/L	#	38
36) iso-Butyl Alcohol	6.326	43	656	1.67 ug/L		65
39) tert-Amyl ethyl ether ...	6.874	59	844	0.11 ug/L	#	67
74) 1,2,4-Trimethylbenzene	11.461	105	1455	0.14 ug/L		80
84) Naphthalene	13.511	128	56997	5.07 ug/L		96

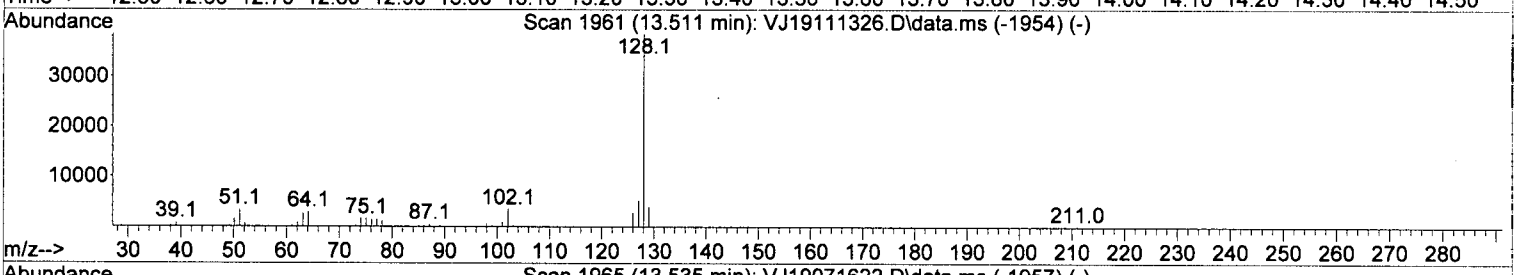
(#) = qualifier out of range (m) = manual integration (+) = signals summed

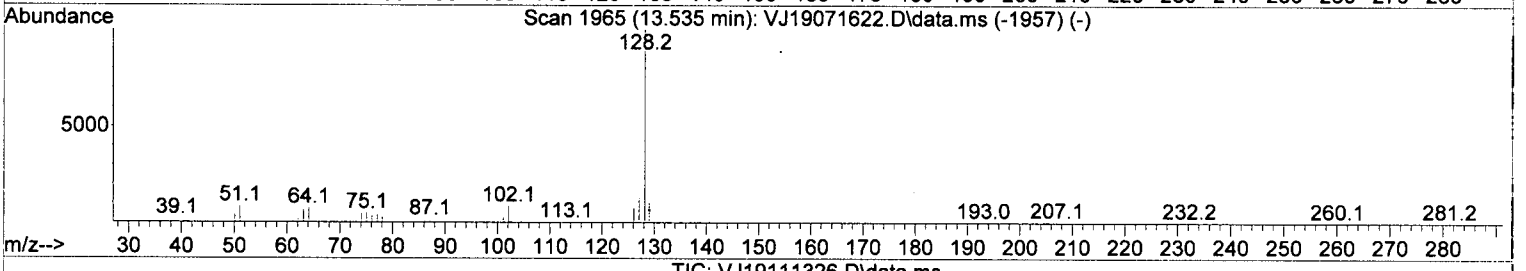
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111326.D
Acq On : 13 Nov 2019 9:07 pm
Operator : IMA
Sample : A9K0332-05
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 14 11:47:08 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111326.D\data.ms

(84) Naphthalene

13.511min (-0.006) 5.07 ug/L

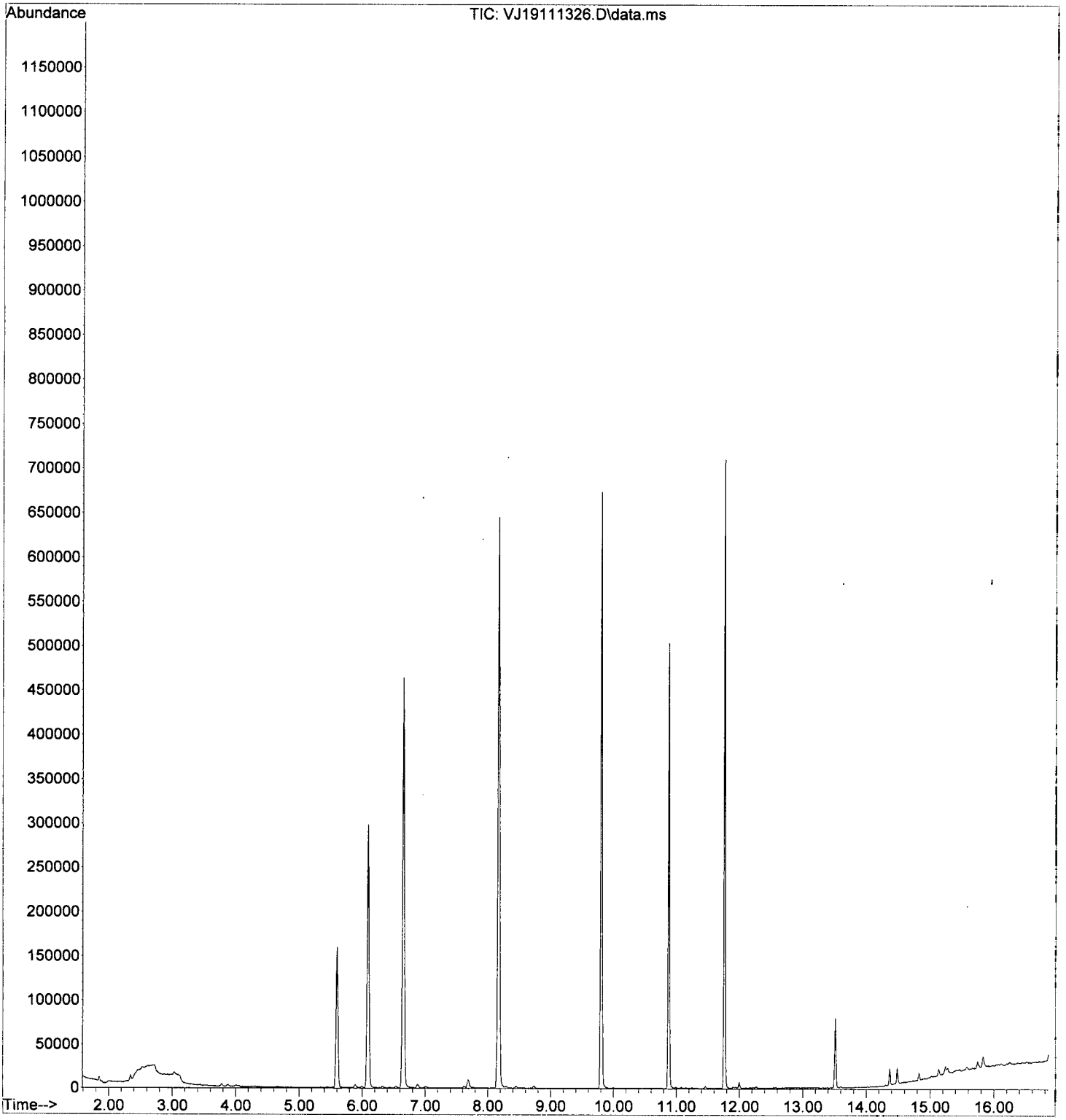
response 56997

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	9.10
64.00	6.30	7.65
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111326.D
Acq On : 13 Nov 2019 9:07 pm
Operator : IMA
Sample : A9K0332-05
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 14 11:47:08 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111327.D
Acq On : 13 Nov 2019 9:34 pm
Operator : IMA
Sample : A9K0332-06
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 27 Sample Multiplier: 1

IMA
11/14/19

Quant Time: Nov 14 11:47:11 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

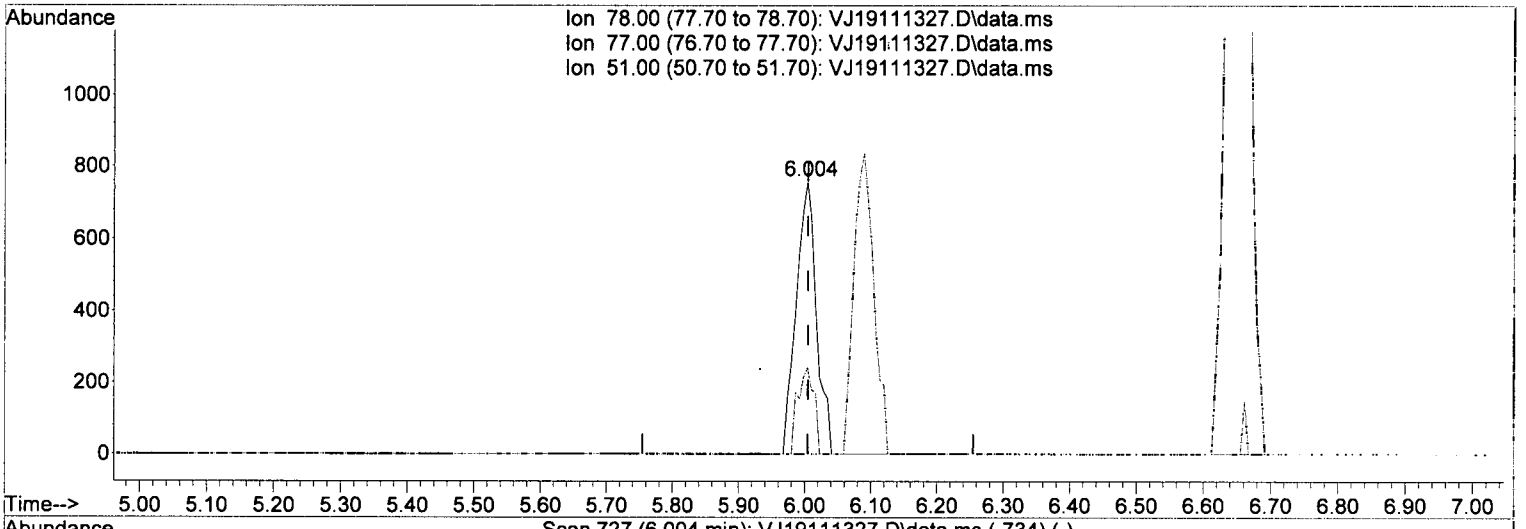
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	128339	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	350482	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	148503	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	104811	51.67	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	391396	49.57	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	484633	49.58	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	105701	49.30	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1079	0.21	ug/L	<MDL	90
5) Bromomethane	2.342	96	4054	0.12	ug/L		90
6) Chloroethane	2.457	64	62	1.34	ug/L	#	28
8) Ethanol	3.346	45	58	Below Cal		#	29
12) Iodomethane	3.291	142	216	0.22	ug/L	#	47
13) Methylene Chloride	3.784	84	961	Below Cal		#	71
14) Acetone	3.875	43	1966	1.00	ug/L		100
33) Benzene	6.004	78	1609	0.10	ug/L		75 ND
36) iso-Butyl Alcohol	6.327	43	744	1.89	ug/L	<MDL	93
39) tert-Amyl ethyl ether ...	6.880	59	873	0.12	ug/L	#	72
74) 1,2,4-Trimethylbenzene	11.455	105	1113	0.11	ug/L		85
84) Naphthalene	13.511	128	13894	1.26	ug/L		99

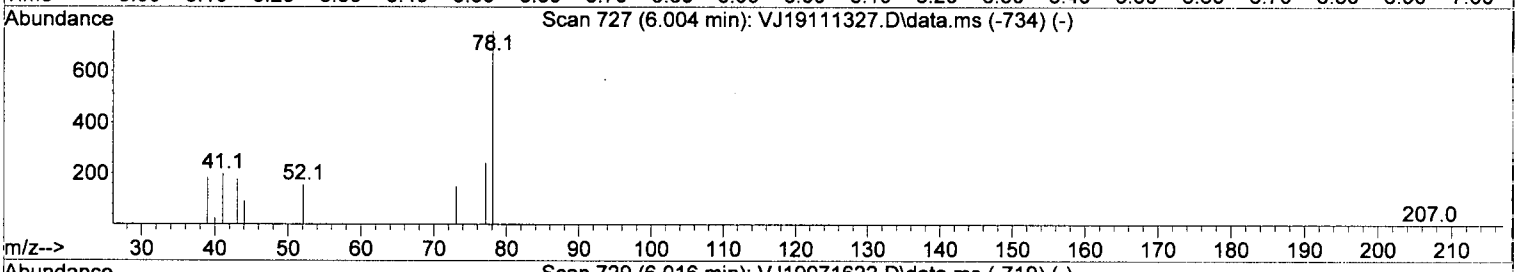
(#) = qualifier out of range (m) = manual integration (+) = signals summed

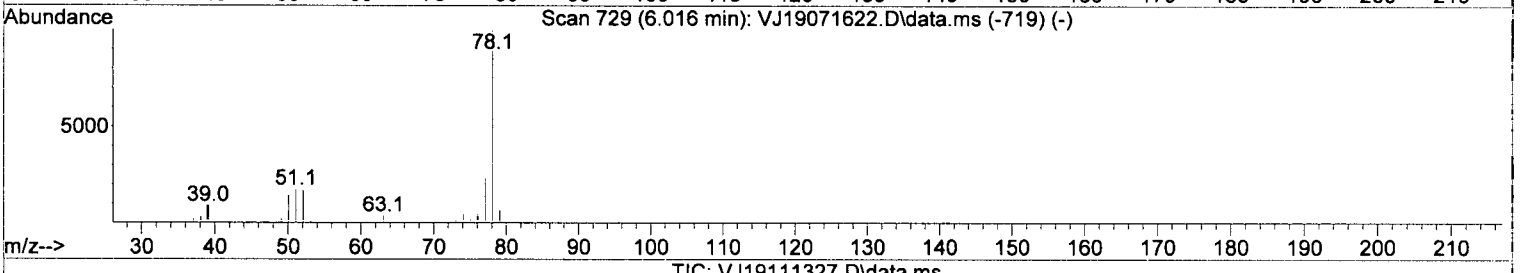
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111327.D
Acq On : 13 Nov 2019 9:34 pm
Operator : IMA
Sample : A9K0332-06
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 14 11:47:11 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111327.D\data.ms

(33) Benzene

6.004min (-0.000) 0.10 ug/L

response 1609

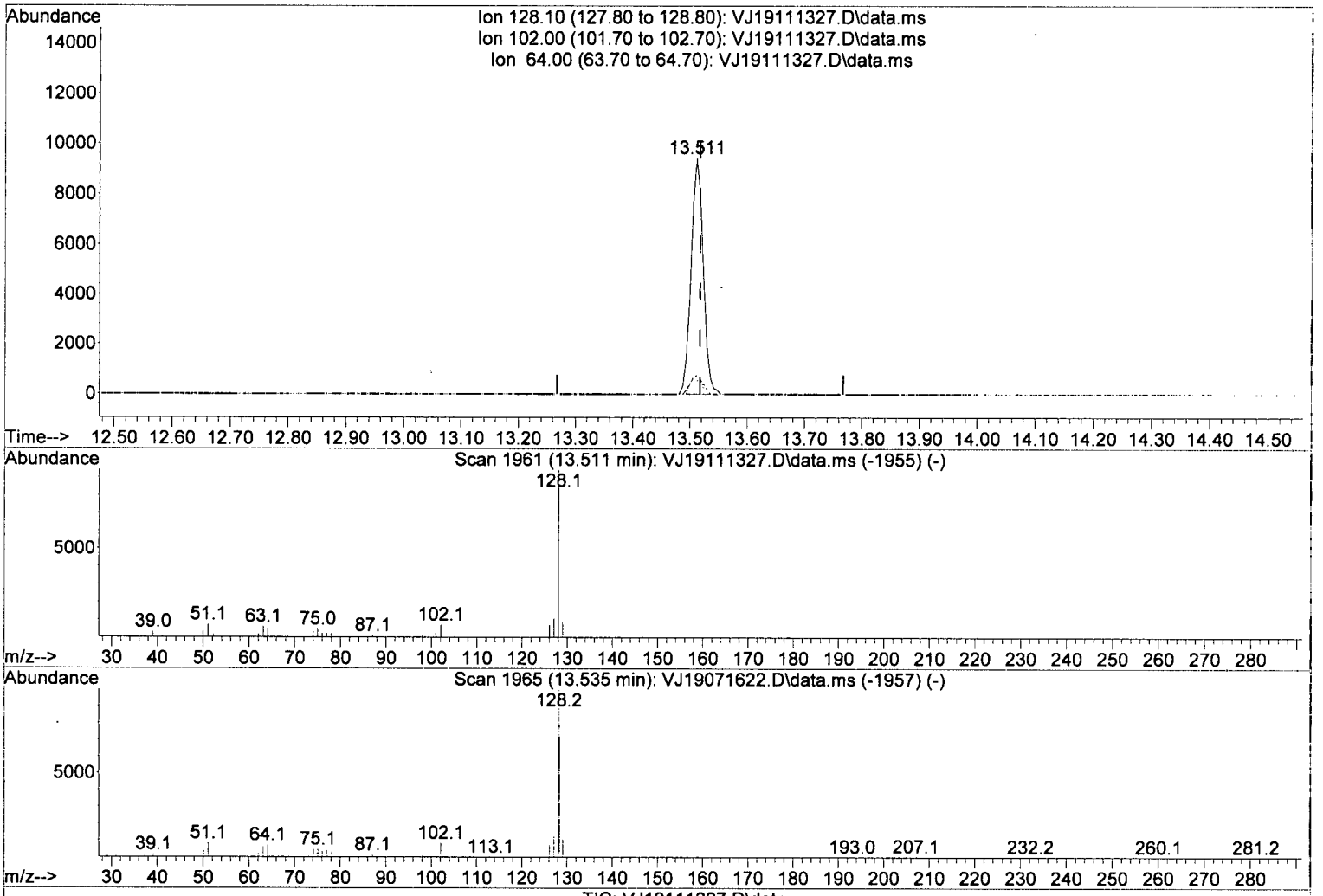
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	31.88
51.00	16.20	0.00
0.00	0.00	0.00

ND

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111327.D
Acq On : 13 Nov 2019 9:34 pm
Operator : IMA
Sample : A9K0332-06
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 14 11:47:11 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



TIC: VJ19111327.D\data.ms

(84) Naphthalene

13.511min (-0.006) 1.26 ug/L

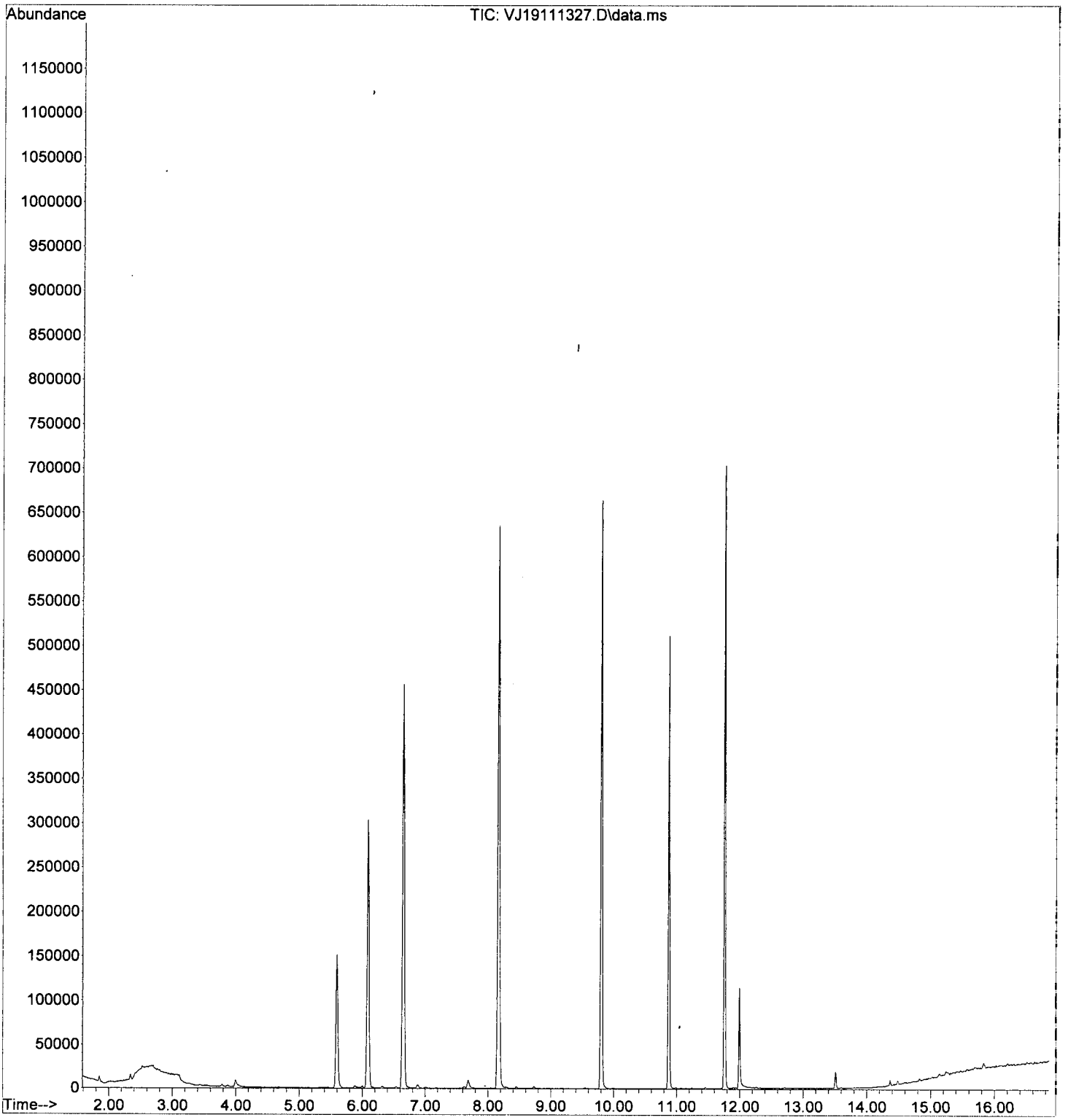
response 13894

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	8.02
64.00	6.30	5.80
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13043\
Data File : VJ19111327.D
Acq On : 13 Nov 2019 9:34 pm
Operator : IMA
Sample : A9K0332-06
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 14 11:47:11 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



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

Volatile Organic Compounds by EPA 1311/8260C
Benchsheet & Analysis Sequence Data

Batch 9110788
Sequence 9K14020 (A9K0332-07,08,09,10)

PREPARATION BENCH SHEET

BATCH #: 9110788 (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*
9110788-BLK1		QC	11/14/19 09:30	7.5	5							
9110788-BS1		QC	11/14/19 09:30	5	5	A19K081		250				
9110788-BS2		QC	11/14/19 09:30	5	5	A19K086		250				
A9K0234-01	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.26	5					SS-1	MOD	
A9K0234-01	B	8260C BTEX	11/13/19 18:10	6.26	5					SS-1	MOD	
A9K0234-02	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	5.92	5					SS-2	MOD	
A9K0234-02	B	8260C BTEX	11/13/19 18:10	5.92	5					SS-2	MOD	
A9K0234-03	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.59	5					SS-4	MOD	
A9K0234-03	B	8260C BTEX	11/13/19 18:10	6.59	5					SS-4	MOD	
A9K0234-04	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.35	5					SS-5	MOD	
A9K0234-04	B	8260C BTEX	11/13/19 18:10	6.35	5					SS-5	MOD	
A9K0234-05	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.26	5					SS-6	MOD	
A9K0234-05	B	8260C BTEX	11/13/19 18:10	6.26	5					SS-6	MOD	
A9K0234-06	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	5.63	5					SS-7	MOD	
A9K0234-06	B	8260C BTEX	11/13/19 18:10	5.63	5					SS-7	MOD	
A9K0234-07	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	4.84	5					SS-8	MOD	
A9K0234-07	B	8260C BTEX	11/13/19 18:10	4.84	5					SS-8	MOD	
A9K0234-08	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.33	5					SS-9	MOD	
A9K0234-08	B	8260C BTEX	11/13/19 18:10	6.33	5					SS-9	MOD	
A9K0234-09	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.18	5					SS-10	MOD	
A9K0234-09	B	8260C BTEX	11/13/19 18:10	6.18	5					SS-10	MOD	
A9K0234-10	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	4.96	5					SS-11	MOD	

IMA 11/15/19

Prepared By: Date

11/19/19

Reviewed By: Date

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 9110788 (Soil)

Prep Method: EPA 5035A

Lab Number	Cont.	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
A9K0234-10	B	8260C BTEX	11/13/19 18:10	4.96	5					SS-11	MOD	
A9K0234-11	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	6.48	5					SS-12	MOD	
A9K0234-11	B	8260C BTEX	11/13/19 18:10	6.48	5					SS-12	MOD	
A9K0234-12	B	8015D-Mod Gasoline (C6-C1	11/13/19 18:10	5.34	5					SS-3	MOD	
A9K0234-12	B	8260C Full List	11/13/19 18:10	5.34	5					SS-3	MOD Added for BatchQC in: 9110	
A9K0234-12	B	8260C BTEX	11/13/19 18:10	5.34	5					SS-3	MOD	
9110788-MS1		QC	11/13/19 18:10	5.34	5	A19K081	A9K0234-12	331			DW = 69.8% @50X	
A9K0238-03	A	8260C Full List	11/14/19 15:43	5	5					Half Gallon Amber Bottle QC - F	BQC Subsample 5ml from -02	
A9K0332-07	B	8260C Full List	(Date Sampled)	5.63	5					PDI-141RAB-10-17.7-191107	FP Custom List from 4C	
A9K0332-08	B	8015D-Mod Gasoline (C6-C1	(Date Sampled)	5.19	5					PDI-143RAB-00-10-191111	FP Added for BatchQC in: 9110788	
A9K0332-08	B	8260C Full List	(Date Sampled)	5.19	5					PDI-143RAB-00-10-191111	FP Custom List from 4C	
A9K0332-08	B	8260C BTEX	(Date Sampled)	5.19	5					PDI-143RAB-00-10-191111	FP Added for BatchQC in: 9110788	
9110788-DUP1		QC	11/11/19 12:30	4.93	5		A9K0332-08					
A9K0332-09	B	8260C Full List	(Date Sampled)	6.36	5					PDI-143RAB-10-20-191112	FP Custom List from 4C	
A9K0332-10	B	8260C Full List	(Date Sampled)	6.16	5					PDI-143RAB-20-31.1-191111	FP Custom List from 4C	

*pH <2 verified

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18J327	11/30/23	Balance s/n 593312
A19I219	09/16/20	Methanol - Fisher (P/T) #191546
A19I220	09/16/20	Methanol - B&J (P/T) #DX075-US

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K081	04/17/20	8260 Cal. Std. B VOC+OXY Spike (20-40ug/mL
A19K086	04/21/20	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: 9110788

Matrix Spike

Sample Weight	Final Volume	Dilution	Dry Weight
g	mL		%
5.340	5	50	69.8
			0.698

Final Spike Level	**Spike Amount**
ug/kg	**ul**
1774.11	**331**

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

A9K0234-12

IMA
11/15/19

Worksheet

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

Sample ID	Container	Container Weight (g)	Tare Weight (g)	Net Sample Weight (g)	Formula Check
A9K0332-07	B	39.36	33.73	5.63	
8	B	39.01	33.82	5.19	
8	C	38.3	33.37	4.93	
9	B	40.1	33.74	6.36	
10	B	39.84	33.68	6.16	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

IMA

11/15/19

A9K0234

5035 Container Prep Worksheet
~Soil Jar Extraction~

A9K0234-01 — **SS-1** — Sampled: **10/28/19 11:23**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.26	(5) 10 15	[initials]	@ 11/13/19 1810	Y (N)	Mod

8260C BTEX + 8015D C6-C10 Expires: 10/30/19 11:23 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-02 — **SS-2** — Sampled: **10/28/19 11:26**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	5.92	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 10/30/19 11:26 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-03 — **SS-4** — Sampled: **10/28/19 14:31**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.59	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 10/30/19 14:31 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-04 — **SS-5** — Sampled: **10/29/19 08:12**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.35	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 10/31/19 08:12 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-05 — **SS-6** — Sampled: **10/29/19 08:15**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.26	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 10/31/19 08:15 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-06 — **SS-7** — Sampled: **11/01/19 10:24**

		Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	5.63	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 11/03/19 10:24 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

A9K0234

5035 Container Prep Worksheet
~Soil Jar Extraction~

A9K0234-07 | **SS-8** | Sampled: **11/01/19 11:10**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	4.84	(5) 10 15	MD	@ 11/13/19 1810	~~Y~~ (N) MD 11/13/19	Mod

8260C BTEX + 8015D C6-C10 Expires: 11/03/19 11:10 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-08 | **SS-9** | Sampled: **11/01/19 12:40**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.33	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 11/03/19 12:40 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-09 | **SS-10** | Sampled: **11/01/19 14:48**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.18	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 11/03/19 14:48 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-10 | **SS-11** | Sampled: **11/04/19 07:28**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	4.96	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 11/06/19 07:28 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-11 | **SS-12** | Sampled: **11/05/19 10:34**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	6.48	(5) 10 15		@	Y (N)	

8260C BTEX Expires: 11/07/19 10:34 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0234-12 | **SS-3** | Sampled: **11/05/19 10:38**

	Container	Container Used	Sample Weight (g)	Volume MeOH (mL)	Prepared By:	Prepared date/time	Within 48 hours?	Notes:
B Soil	40 mL VOA - In House Prep - 5035 (MeOH)	A	5.34	(5) 10 15	↓	@ ↓	Y (N)	↓

8260C BTEX Expires: 11/07/19 10:38 Due: 11/15/19 17:00
Comments: Possible septic check for foaming

A9K0332

5035 Container Prep Worksheet
~Field MeOH Preserved~

Do not do MS MSD on these pending TS Res.

(Prepared = Sampled Date/Time)

A9K0332-04 PDI-140RAB-00-10-191108 Sampled: 11/08/19 11:40

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.65	33.82	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.96	33.25	(5) 10 15 Other	

BTEX Halo 6 Custom Due: TAT:

A9K0332-05 PDI-140RAB-10-12.7-191108 Sampled: 11/08/19 12:15

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	36.98	33.96	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	40.33	33.68	(5) 10 15 Other	

Due: TAT:

A9K0332-06 PDI-141RAB-00-10-191107 Sampled: 11/07/19 15:15

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	37.78	33.74	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.85	33.21	(5) 10 15 Other	

Due: TAT:

A9K0332-07 PDI-141RAB-10-17.7-191107 Sampled: 11/07/19 16:45

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.36	33.73	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	39.41	33.39	(5) 10 15 Other	

Due: TAT:

A9K0332-08 PDI-143RAB-00-10-191111 Sampled: 11/11/19 12:30

		Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B Soil	40 mL VOA - 5035 (MeOH)	39.01	33.82	(5) 10 15 Other	
C Soil	40 mL VOA - 5035 (MeOH)	38.30	33.37	(5) 10 15 Other	

Due: TAT:

Weighed by: [signature] @ 11/13/19 1300

Methanol Reagent ID: A19I219 Balance ID: A18J327

Print Date: 11/13/2019 12:57:56PM

A9K0332

5035 Container Prep Worksheet
~Field MeOH Preserved~

(Prepared = Sampled Date/Time)

A9K0332-09	PDI-143RAB-10-20-191112	Sampled: 11/12/19 14:05

			Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B	Soil	40 mL VOA - 5035 (MeOH)	40.10	33.74	(5) 10 15 Other	
C	Soil	40 mL VOA - 5035 (MeOH)	38.99	33.20	(5) 10 15 Other	

Due: TAT:

BTEX Halo 6 custom

A9K0332-10	PDI-143RAB-20-31.1-191111	Sampled: 11/11/19 15:30

			Container Weight (g)	Tare Weight (g)	Volume MeOH (mL)	Notes:
B	Soil	40 mL VOA - 5035 (MeOH)	39.84	33.68	(5) 10 15 Other	
C	Soil	40 mL VOA - 5035 (MeOH)	39.59	33.76	(5) 10 15 Other	

Due: TAT:

Weighed by: OB @ 11/13/19 1300

Methanol Reagent ID: A19I219~ Balance ID: A18J327~

ELEMENT SEQUENCE LOG

Apex Laboratories

DEC 0 5 2019

Sequence: **9K14020** Instrument: **VOA-GCMS10**

Date: **11/14/19 09:27** Calibration: **A9J2404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14020-IBL1	Soil	QC	QC			A19G118	
2	9K14020-TUN1	Soil	QC	QC			A19G118	
3	9K14020-CCV1	Soil	QC	QC			A19G118	
4	9110788-BS1	Soil	QC	QC		9110788	A19G118	
5	9K14020-CCV2	Soil	QC	QC			A19G118	
6	9110788-BS2	Soil	QC	QC		9110788	A19G118	
7	9110788-BLK1	Soil	QC	QC		9110788	A19G118	
8	A9K0332-08	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
"	"	Soil	8015D-Mod Gasoline (C6-C10) by GC	(QC Source)		9110788	A19G118	
"	"	Soil	8260C BTEX	(QC Source)		9110788	A19G118	
"	"	Soil	8260C Oxygenates	(QC Source)		9110788	A19G118	
9	9110788-DUP1	Soil	QC	QC		9110788	A19G118	
10	A9K0332-09	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
11	A9K0332-10	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
12	A9K0332-07	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
13	9K14020-IBL2	Soil	QC	QC			A19G118	
14	A9K0234-01	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List		12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
15	A9K0234-04	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
16	A9K0234-05	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
17	A9K0234-06	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
18	A9K0234-07	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
19	A9K0234-08	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
20	A9K0234-09	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
21	A9K0234-10	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
22	A9K0234-11	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	

Sequence:	9K14020	Instrument:	VOA-GCMS10
Date:	11/14/19 09:27	Calibration:	A9J2404

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
23	A9K0234-03	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
24	A9K0234-02	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
25	A9K0234-12	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
26	9110788-MS1	Soil	QC	QC		9110788	A19G118	
27	9K14020-IBL3	Soil	QC	QC			A19G118	
28	A9K0238-03	Soil	8260C Full List		11/15/19	9110788	A19G118	
29	9K14020-IBL4	Soil	QC	QC			A19G118	

8260 & OXY

Comments: Add on T12DCPA to 1/2 ppb

Data Entered By: [signature] 11/22/19

Data Reviewed By: [signature] 12/4/19

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:25:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

[handwritten initials] 11/22/19

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	141	0.00
2		Dichlorodifluoromethane	20.000	17.585	12.1	127	0.00
3	P	Chloromethane	20.000	17.091	14.5	122	0.00
4	C	Vinyl Chloride	20.000	17.199	14.0	119	-0.01
5		Bromomethane	20.000	23.821	-19.1	159	0.00
6		Chloroethane	20.000	24.056	-20.3#	203	0.00
7		Trichlorofluoromethane	20.000	19.113	4.4	136	0.01
8		Ethanol	1250.000	1194.431	4.4	129	0.04
9	C	1,1-Dichloroethene	20.000	18.507	7.5	130	0.00
10		Carbon Disulfide	20.000	17.560	12.2	134	0.00
11		Freon 113	20.000	18.042	9.8	125	0.00
12		Iodomethane	20.000	8.277	58.6#	58	0.00 —NR
13		Methylene Chloride	20.000	19.409	3.0	131	0.00
14		Acetone	40.000	35.439	11.4	116	0.00
15		t-1,2-Dichloroethene	20.000	18.785	6.1	131	0.00
16		n-Hexane	20.000	19.258	3.7	136	0.00
17		Methyl-tert-butyl-ether	20.000	19.041	4.8	133	0.00
18		tert-Butanol (TBA)	1250.000	1168.369	6.5	119	0.07
19		Diisopropyl ether (DIPE)	5.000	4.954	0.9	134	0.00
20	P	1,1-Dichloroethane	20.000	19.987	0.1	136	0.00
21		Acrylonitrile	20.000	20.572	-2.9	130	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	4.648	7.0	127	0.00
23		c-1,2-Dichloroethene	20.000	18.538	7.3	129	0.00
24		2,2-Dichloropropane	20.000	20.606	-3.0	147	0.00
25		Bromochloromethane	20.000	18.957	5.2	128	0.00
26	C	Chloroform	20.000	19.172	4.1	130	0.00
27		Carbon Tetrachloride	20.000	20.444	-2.2	134	0.00
28		Tetrahydrofuran	20.000	16.265	18.7	118	0.00
29		1,1,1-Trichloroethane	20.000	19.569	2.2	131	0.00
30	S	Dibromofluoromethane (S)	50.000	49.687	0.6	140	0.00
31		1,1-Dichloropropene	20.000	18.578	7.1	128	0.00
32		2-Butanone (MEK)	40.000	33.939	15.2	119	0.00
33		Benzene	20.000	18.022	9.9	128	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.528	9.4	130	0.00
35		1,2-Dichloroethane (EDC)	20.000	19.310	3.5	130	0.00
36		iso-Butyl Alcohol	500.000	456.235	8.8	121	0.02
37	S	1,4-Difluorobenzene (S)	50.000	49.697	0.6	142	0.00
38		Trichloroethene (TCE)	20.000	19.643	1.8	134	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.758	4.8	125	0.00
40		Dibromomethane	20.000	19.321	3.4	130	0.00
41	C	1,2-Dichloropropane	20.000	19.058	4.7	132	0.00
42		Bromodichloromethane	20.000	20.529	-2.6	133	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	141	0.00
44		c-1,3-Dichloropropene	20.000	20.164	-0.8	133	0.00
45	S	Toluene-d8 (S)	50.000	50.042	-0.1	142	0.00
46	C	Toluene	20.000	18.116	9.4	127	0.00
47		Tetrachloroethene (PCE)	20.000	19.293	3.5	129	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	37.242	6.9	119	0.00
49		t-1,3-Dichloropropene	20.000	21.637	-8.2	137	0.00
50		1,1,2-Trichloroethane	20.000	19.481	2.6	128	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:25:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	20.109	-0.5	137	0.00
52		1,3-Dichloropropane	20.000	19.270	3.7	128	0.00
53		1,2-Dibromoethane (EDB)	20.000	19.582	2.1	126	0.00
54		2-Hexanone	40.000	35.124	12.2	114	0.00
55	P	Chlorobenzene	20.000	18.692	6.5	129	0.00
56	C	Ethylbenzene	20.000	19.255	3.7	127	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.201	-1.0	135	0.00
58		m,p-Xylenes (2)	40.000	39.744	0.6	128	0.00
59		o-Xylene	20.000	19.331	3.3	124	0.00
60		Styrene	20.000	17.460	12.7	127	0.00
61	P	Bromoform	20.000	17.896	10.5	131	0.00
62		Isopropylbenzene	20.000	19.856	0.7	125	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	135	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.857	0.3	136	0.00
65		Bromobenzene	20.000	18.953	5.2	125	0.00
66		n-Propylbenzene	20.000	19.570	2.1	126	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	17.517	12.4	112	0.00
68		2-Chlorotoluene	20.000	19.362	3.2	125	0.00
69		1,3,5-Trimethylbenzene	20.000	22.722	-13.6	137	0.00
70		1,2,3-Trichloropropane	20.000	18.872	5.6	121	0.00
71		t-1,4-Dichloro-2-butene	20.000	21.409	-7.0	135	0.00
72		4-Chlorotoluene	20.000	19.943	0.3	126	0.00
73		tert-Butylbenzene	20.000	19.647	1.8	123	0.00
74		1,2,4-Trimethylbenzene	20.000	23.150	-15.7	141	0.00
75		sec-Butylbenzene	20.000	20.439	-2.2	127	0.00
76		4-Isopropyltoluene	20.000	21.759	-8.8	133	0.00
77		1,3-Dichlorobenzene	20.000	19.071	4.6	123	0.00
78		1,4-Dichlorobenzene	20.000	18.223	8.9	125	0.00
79		n-Butylbenzene	20.000	21.673	-8.4	139	0.00
80		1,2-Dichlorobenzene	20.000	18.497	7.5	119	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	17.380	13.1	118	0.00
82		Hexachlorobutadiene	20.000	20.747	-3.7	133	0.00
83		1,2,4-Trichlorobenzene	20.000	18.316	8.4	117	0.00
84		Naphthalene	20.000	18.969	5.2	118	0.00
85		1,2,3-Trichlorobenzene	20.000	18.743	6.3	120	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111407.D
Acq On : 14 Nov 2019 12:28 pm
Operator : IMA
Sample : A9K0332-08
Misc : 50X 5g/5mLx1000uL/50mL 8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 15 10:27:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

11/22/19

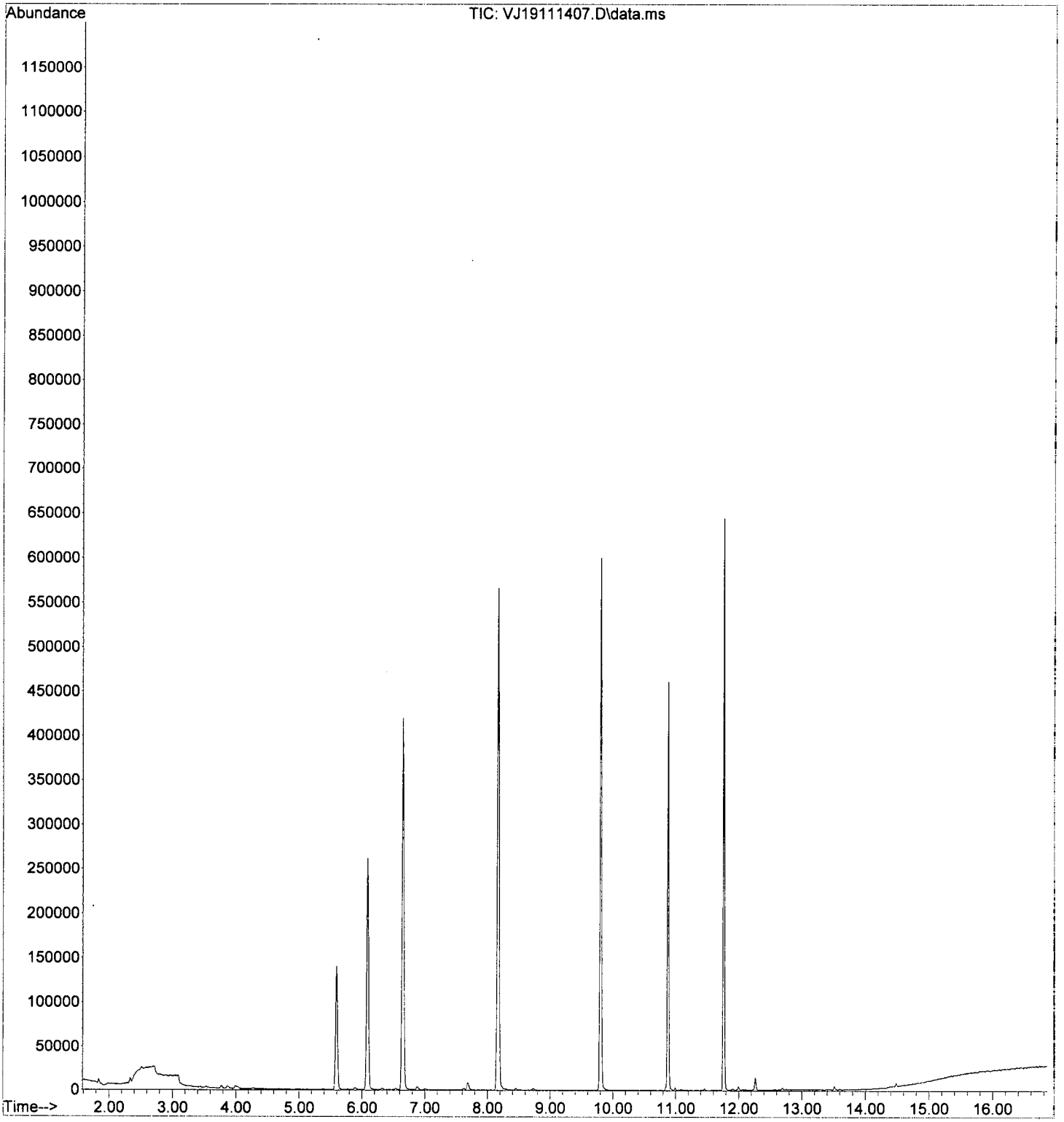
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	114620	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	310552	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	132086	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.596	111	95527	52.73 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.649	114	342591	48.59 ug/L	0.00
45) Toluene-d8 (S)	8.170	98	431741	49.85 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.877	174	93737	49.15 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.885	50	1056	0.23 ug/L	89 <MRL
5) Bromomethane	2.336	96	3158	Below Cal	94
6) Chloroethane	2.463	64	408	2.09 ug/L #	52
8) Ethanol	3.297	45	1114	Below Cal #	29
12) Iodomethane	3.279	142	118	0.14 ug/L #	47
13) Methylene Chloride	3.777	84	1402	Below Cal	93
14) Acetone	3.875	43	3408	1.95 ug/L	91
18) tert-Butanol (TBA)	4.288	59	996	1.11 ug/L #	17
28) Tetrahydrofuran	5.590	42	196	0.08 ug/L #	58
36) iso-Butyl Alcohol	6.314	43	680	1.93 ug/L #	64
39) tert-Amyl ethyl ether ...	6.874	59	646	0.10 ug/L #	61
46) Toluene	8.225	91	1245	0.09 ug/L	92
74) 1,2,4-Trimethylbenzene	11.461	105	1125	0.13 ug/L	86
75) sec-Butylbenzene	11.461	105	1125	0.10 ug/L	69
84) Naphthalene	13.511	128	3071	0.31 ug/L	95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111407.D
Acq On : 14 Nov 2019 12:28 pm
Operator : IMA
Sample : A9K0332-08
Misc : 50X 5g/5mLx1000uL/50mL 8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 15 10:27:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111408.D
Acq On : 14 Nov 2019 12:55 pm
Operator : IMA
Sample : 9110788-DUP1
Misc : 50X 5g/5mLx1000uL/50mL (A9K0332-08)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 15 10:28:01 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

11/22/19

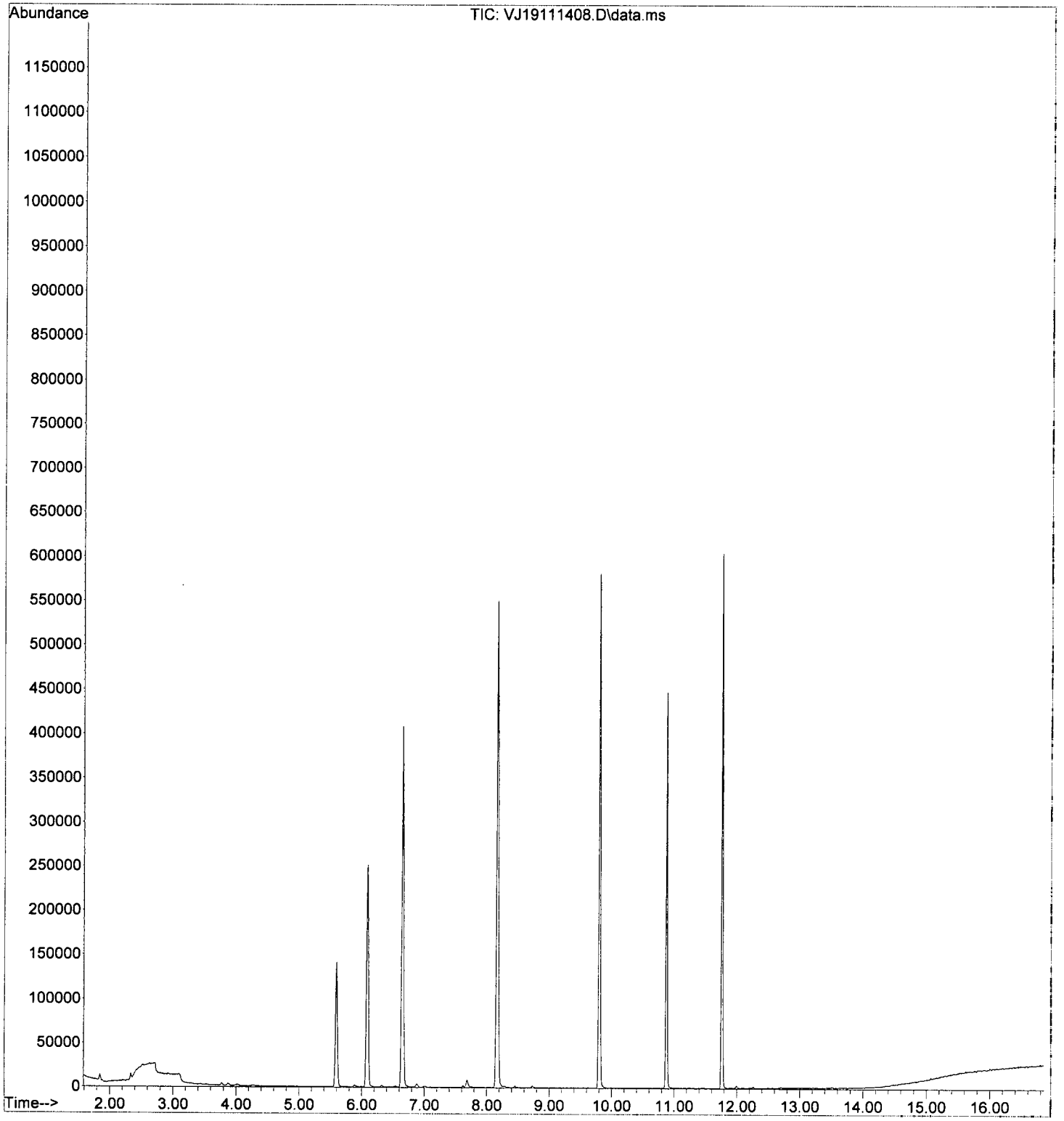
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	111574	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	302872	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	126354	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	95222	53.99	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	331136	48.24	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	420879	49.83	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	89102	48.84	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1137	0.26	ug/L		68
5) Bromomethane	2.336	96	3599	0.17	ug/L		98
6) Chloroethane	2.475	64	127	1.50	ug/L	#	40
8) Ethanol	3.297	45	969	Below Cal		#	29
12) Iodomethane	3.285	142	68	0.08	ug/L	#	47
13) Methylene Chloride	3.771	84	1294	Below Cal			87
14) Acetone	3.863	43	3537	2.08	ug/L		75
18) tert-Butanol (TBA)	4.270	59	1165	1.33	ug/L	#	26
28) Tetrahydrofuran	5.609	42	250	0.11	ug/L	#	30
32) 2-Butanone (MEK)	5.755	43	245	0.08	ug/L		52
36) iso-Butyl Alcohol	6.326	43	613	1.79	ug/L	#	65
39) tert-Amyl ethyl ether ...	6.880	59	715	0.11	ug/L	#	72
84) Naphthalene	13.511	128	990	0.11	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111408.D
Acq On : 14 Nov 2019 12:55 pm
Operator : IMA
Sample : 9110788-DUP1
Misc : 50X 5g/5mLx1000uL/50mL (A9K0332-08)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 15 10:28:01 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9K14020** Instrument: **VOA-GCMS10**

Date: **11/14/19 09:27** Calibration: **A9J2404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14020-IBL1	Soil	QC	QC			A19G118	
2	9K14020-TUN1	Soil	QC	QC			A19G118	
3	9K14020-CCV1	Soil	QC	QC			A19G118	
4	9110788-BS1	Soil	QC	QC		9110788	A19G118	
5	9K14020-CCV2	Soil	QC	QC			A19G118	
6	9110788-BS2	Soil	QC	QC		9110788	A19G118	
7	9110788-BLK1 ✓	Soil	QC	QC		9110788	A19G118	
8	A9K0332-08	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
"	"	Soil	8015D-Mod Gasoline (C6-C10) by GC	(QC Source)		9110788	A19G118	
"	"	Soil	8260C BTEX	(QC Source)		9110788	A19G118	
"	"	Soil	8260C Oxygenates	(QC Source)		9110788	A19G118	
9	9110788-DUP1	Soil	QC	QC		9110788	A19G118	
10	A9K0332-09	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
11	A9K0332-10	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
12	A9K0332-07	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
13	9K14020-IBL2	Soil	QC	QC			A19G118	
14	A9K0234-01 ✓	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) ✓	"	12/02/19	9110788	A19G118	
15	A9K0234-04	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) – RR3	"	12/02/19	9110788	A19G118	
16	A9K0234-05 ✓	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) ✓	"	12/02/19	9110788	A19G118	
17	A9K0234-06 ✓	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics)	"	12/02/19	9110788	A19G118	
18	A9K0234-07	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) – RR3	"	12/02/19	9110788	A19G118	
19	A9K0234-08 ✓	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics)	"	12/02/19	9110788	A19G118	
20	A9K0234-09 ✓	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics)	"	12/02/19	9110788	A19G118	

Sequence: **9K14020** Instrument: **VOA-GCMS10**

Date: **11/14/19 09:27** Calibration: **A9J2404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
21	A9K0234-10	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) RR3	"	12/02/19	9110788	A19G118	
22	A9K0234-11	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) RR3	"	12/02/19	9110788	A19G118	
23	A9K0234-03	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics)	"	12/02/19	9110788	A19G118	
24	A9K0234-02	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) RR3	"	12/02/19	9110788	A19G118	
25	A9K0234-12	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Oxygenates	"	12/02/19	9110788	A19G118	
"	"	Soil	8260C TICs (Forensics) RR3	"	12/02/19	9110788	A19G118	
26	9110788-MS1	Soil	QC	QC		9110788	A19G118	
27	9K14020-IBL3	Soil	QC	QC			A19G118	
28	A9K0238-03	Soil	8260C Full List		11/15/19	9110788	A19G118	
29	9K14020-IBL4	Soil	QC	QC			A19G118	

Data Entered By: 12/2/19

Data Reviewed By: 12/4/19

Comments: F TICS only

Library Search Compound Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds

TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: RTEINT.P

****

Peak Number 1 Methane, bromo- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.348	1.11 ug/L	12797	Pentafluorobenzene (I)	6.089

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methane, bromo-	94	CH3Br	000074-83-9	90
2	Methane, bromo-	94	CH3Br	000074-83-9	56
3	Methane, bromo-	94	CH3Br	000074-83-9	45
4	Fumaric acid, butyl cyclohex-3-e...	266	C15H22O4	1000345-14-1	32
5	Fumaric acid, di(cyclohex-3-enyl...	304	C18H24O4	1000345-15-3	25

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds

TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: RTEINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
Methane, bromo-	2.348	1.1	ug/L	12797	1	6.089	578862	50.0

LSC Area Percent Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 10 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 50

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds

Signal : TIC: VJ19111405.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.855	42	45	50	rVB	7127	9188	0.76%	0.161%
2	2.348	121	126	129	rBV2	8677	12797	1.05%	0.225%
3	2.451	131	143	145	rBV8	9218	31490	2.60%	0.553%
4	3.783	357	362	370	rBV4	3386	7150	0.59%	0.126%
5	3.881	374	378	386	rVB2	1427	3085	0.25%	0.054%
6	4.039	400	404	411	rVB3	2071	4831	0.40%	0.085%
7	4.106	411	415	423	rBV2	829	2453	0.20%	0.043%
8	4.380	459	460	465	rBV2	575	769	0.06%	0.014%
9	4.477	474	476	481	rBV	562	764	0.06%	0.013%
10	4.653	503	505	507	rBV	642	665	0.05%	0.012%
11	4.897	541	545	546	rVB2	427	501	0.04%	0.009%
12	4.915	546	548	552	rBV2	453	637	0.05%	0.011%
13	5.134	579	584	586	rBV	599	814	0.07%	0.014%
14	5.237	598	601	602	rBV	376	492	0.04%	0.009%
15	5.262	604	605	612	rVB2	505	835	0.07%	0.015%
16	5.329	612	616	617	rBV	492	584	0.05%	0.010%
17	5.450	635	636	641	rVB	451	492	0.04%	0.009%
18	5.596	651	660	678	rVB	139358	301555	24.85%	5.299%
19	5.736	678	683	687	rBV2	667	1321	0.11%	0.023%
20	5.791	691	692	698	rVB	378	601	0.05%	0.011%
21	5.998	722	726	731	rBV	421	688	0.06%	0.012%
22	6.089	731	741	753	rBV	275001	578862	47.71%	10.173%
23	6.320	769	779	785	rBV4	1609	4165	0.34%	0.073%
24	6.430	794	797	805	rVB3	527	1231	0.10%	0.022%
25	6.655	825	834	850	rBV	430556	884961	72.94%	15.552%
26	6.910	874	876	880	rBV2	482	484	0.04%	0.009%
27	7.008	884	892	905	rBV2	2754	7803	0.64%	0.137%
28	7.294	936	939	942	rVB	462	546	0.04%	0.010%
29	7.409	953	958	959	rVB2	468	639	0.05%	0.011%
30	7.446	959	964	968	rBV2	487	1053	0.09%	0.019%
31	7.494	968	972	975	rVB	343	577	0.05%	0.010%
32	7.567	979	984	988	rBV2	1485	2682	0.22%	0.047%
33	7.616	988	992	1000	rVB	1222	2182	0.18%	0.038%
34	7.793	1020	1021	1025	rVB	791	734	0.06%	0.013%
35	7.835	1025	1028	1030	rBV	511	619	0.05%	0.011%
36	8.170	1069	1083	1097	rBV	605974	1213334	100.00%	21.322%
37	8.291	1097	1103	1114	rVB3	3575	10110	0.83%	0.178%
38	8.450	1122	1129	1138	rBV4	2517	5439	0.45%	0.096%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 10 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 50

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds

39	8.802	1185	1187	1191	rVB2	397	505	0.04%	0.009%
40	8.851	1191	1195	1197	rBV	352	508	0.04%	0.009%
41	8.900	1202	1203	1206	rBV	492	490	0.04%	0.009%
42	8.985	1211	1217	1222	rVB	304	690	0.06%	0.012%
43	9.070	1227	1231	1235	rVB	1096	1464	0.12%	0.026%
44	9.228	1254	1257	1260	rVB	556	651	0.05%	0.011%
45	9.265	1260	1263	1265	rBV	537	621	0.05%	0.011%
46	9.301	1265	1269	1272	rVB2	474	788	0.06%	0.014%
47	9.332	1272	1274	1278	rBV	397	560	0.05%	0.010%
48	9.502	1293	1302	1306	rVB2	874	2217	0.18%	0.039%
49	9.545	1306	1309	1313	rBV2	506	977	0.08%	0.017%
50	9.709	1334	1336	1340	rBV	420	582	0.05%	0.010%
51	9.806	1344	1352	1366	rBV	632035	1020001	84.07%	17.925%
52	9.989	1378	1382	1387	rVB2	1129	1632	0.13%	0.029%
53	10.025	1387	1388	1392	rVB	588	473	0.04%	0.008%
54	10.074	1392	1396	1399	rBV	526	682	0.06%	0.012%
55	10.104	1399	1401	1404	rBV2	520	581	0.05%	0.010%
56	10.159	1407	1410	1413	rVB2	598	768	0.06%	0.013%
57	10.287	1428	1431	1434	rBV2	407	482	0.04%	0.008%
58	10.378	1440	1446	1449	rVB2	757	1407	0.12%	0.025%
59	10.500	1462	1466	1468	rBV2	600	829	0.07%	0.015%
60	10.542	1471	1473	1477	rVB	351	534	0.04%	0.009%
61	10.652	1488	1491	1494	rBV	392	522	0.04%	0.009%
62	10.816	1511	1518	1519	rVB	592	956	0.08%	0.017%
63	10.877	1519	1528	1539	rBV	480930	643349	53.02%	11.306%
64	11.035	1552	1554	1558	rBV3	540	796	0.07%	0.014%
65	11.078	1558	1561	1564	rVB2	911	1020	0.08%	0.018%
66	11.102	1564	1565	1569	rBV3	387	499	0.04%	0.009%
67	11.145	1569	1572	1577	rVB3	685	1180	0.10%	0.021%
68	11.205	1577	1582	1585	rBV2	478	838	0.07%	0.015%
69	11.242	1585	1588	1591	rVB2	1138	1315	0.11%	0.023%
70	11.285	1593	1595	1600	rVB	328	479	0.04%	0.008%
71	11.321	1600	1601	1606	rVB	391	493	0.04%	0.009%
72	11.400	1611	1614	1616	rBV	556	565	0.05%	0.010%
73	11.461	1622	1624	1627	rBV	1177	1290	0.11%	0.023%
74	11.534	1631	1636	1637	rBV	613	729	0.06%	0.013%
75	11.656	1653	1656	1659	rVB2	640	748	0.06%	0.013%
76	11.765	1667	1674	1689	rBV	645483	879035	72.45%	15.448%
77	11.911	1692	1698	1700	rVB2	1625	2136	0.18%	0.038%
78	11.978	1704	1709	1715	rBV3	1024	2091	0.17%	0.037%
79	12.100	1727	1729	1734	rVB2	484	584	0.05%	0.010%
80	12.167	1736	1740	1745	rBV	621	1502	0.12%	0.026%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 10 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 50

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds

81	12.343	1766	1769	1773	rBV2	396	611	0.05%	0.011%
82	12.477	1788	1791	1792	rBV	722	609	0.05%	0.011%
83	12.647	1817	1819	1824	rVB2	480	504	0.04%	0.009%
84	12.696	1824	1827	1832	rBV2	537	1045	0.09%	0.018%
85	12.787	1840	1842	1850	rVB3	651	1018	0.08%	0.018%
86	12.854	1850	1853	1855	rBV2	492	611	0.05%	0.011%
87	12.921	1863	1864	1867	rVB2	560	497	0.04%	0.009%
88	13.110	1892	1895	1899	rBV2	604	835	0.07%	0.015%
89	13.170	1904	1905	1908	rBV	454	480	0.04%	0.008%
90	13.207	1908	1911	1913	rVB2	552	500	0.04%	0.009%
91	13.243	1914	1917	1920	rVB3	769	860	0.07%	0.015%
92	13.426	1944	1947	1950	rBV	446	671	0.06%	0.012%
93	13.499	1958	1959	1964	rBV2	518	882	0.07%	0.015%
94	13.688	1987	1990	1995	rVB3	666	1024	0.08%	0.018%
95	13.724	1995	1996	1999	rBV2	785	619	0.05%	0.011%
96	13.779	2003	2005	2008	rBV3	1049	1391	0.11%	0.024%
97	13.827	2009	2013	2015	rBV2	610	665	0.05%	0.012%
98	13.967	2034	2036	2039	rVB2	601	529	0.04%	0.009%
99	14.053	2049	2050	2053	rBV2	843	705	0.06%	0.012%
100	14.119	2058	2061	2063	rBV2	1155	1645	0.14%	0.029%

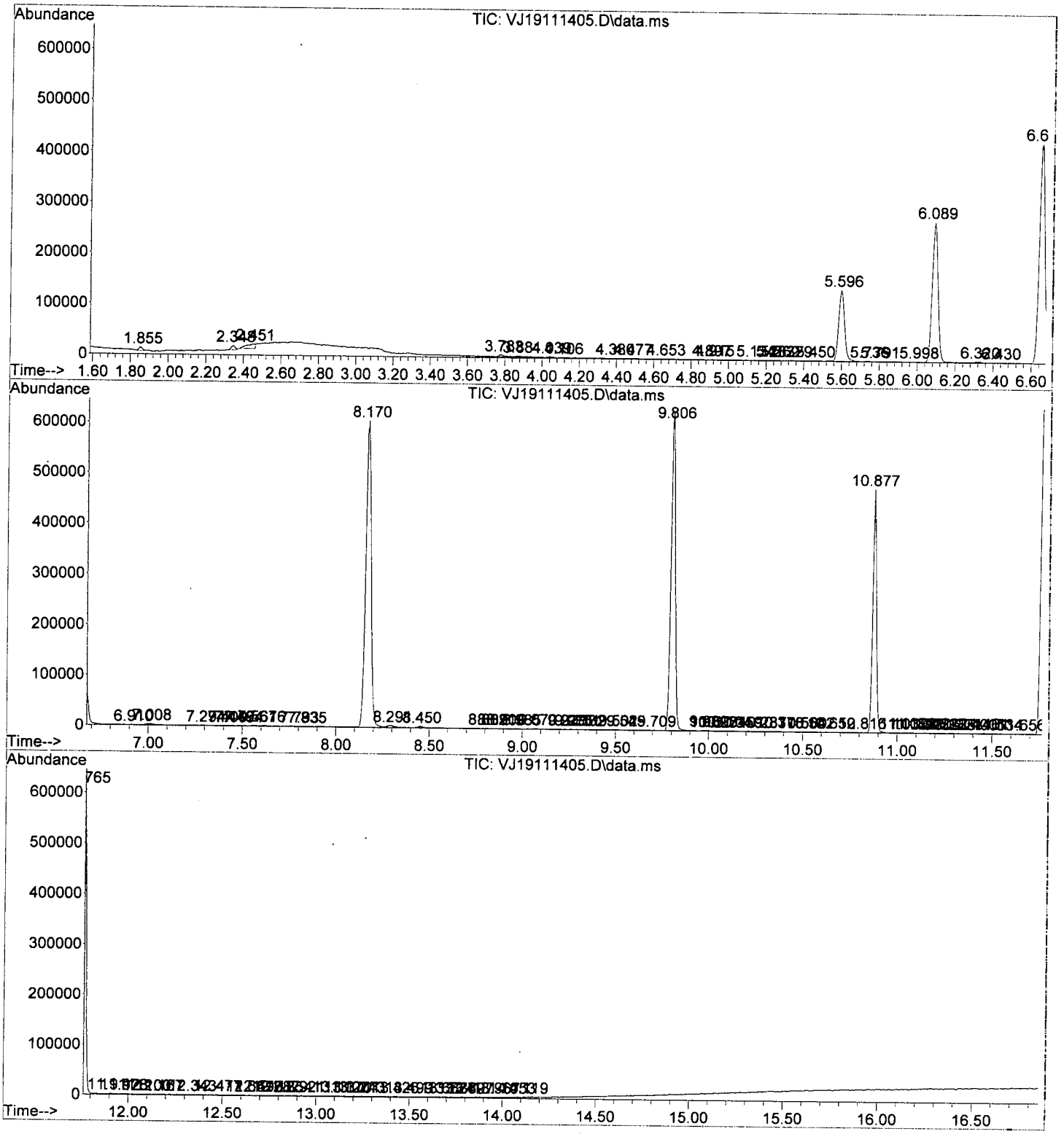
Sum of corrected areas: 5690403

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\2019-11\9K14020\TICS\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds

TIC Library : C:\Database\NIST11.L
TIC Integration Parameters: RTEINT.P



ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9K14020** Instrument: **VOA-GCMS10**

Date: **11/14/19 09:27** Calibration: **A9J2404**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14020-IBL1	Soil	QC	QC			A19G118	
2	9K14020-TUN1	Soil	QC	QC			A19G118	
3	9K14020-CCV1	Soil	QC	QC			A19G118	
4	9110788-BS1	Soil	QC	QC		9110788	A19G118	
5	9K14020-CCV2	Soil	QC	QC			A19G118	
6	9110788-BS2	Soil	QC	QC		9110788	A19G118	
7	9110788-BLK1	Soil	QC	QC		9110788	A19G118	
8	A9K0332-08	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
"	"	Soil	8015D-Mod Gasoline (C6-C10) by GC	(QC Source)		9110788	A19G118	
"	"	Soil	8260C BTEX	(QC Source)		9110788	A19G118	
9	9110788-DUP1	Soil	QC	QC		9110788	A19G118	
10	A9K0332-09	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
11	A9K0332-10	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
12	A9K0332-07	Soil	8260C Full List	Anchor QEA, LLC	11/25/19	9110788	A19G118	
13	9K14020-IBL2	Soil	QC	QC			A19G118	
14	A9K0234-01	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
15	A9K0234-04	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
16	A9K0234-05	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
17	A9K0234-06	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
18	A9K0234-07	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
19	A9K0234-08	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
20	A9K0234-09	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
21	A9K0234-10	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
22	A9K0234-11	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
23	A9K0234-03	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
24	A9K0234-02	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
25	A9K0234-12	Soil	8015D-Mod Gasoline (C6-C10) by GC		11/19/19	9110788	A19G118	
"	"	Soil	8260C BTEX	"	11/19/19	9110788	A19G118	
"	"	Soil	8260C Full List	(QC Source)		9110788	A19G118	
26	9110788-MS1	Soil	QC	QC		9110788	A19G118	
27	9K14020-IBL3	Soil	QC	QC			A19G118	
28	A9K0238-03	Soil	8260C Full List		11/15/19	9110788	A19G118	
29	9K14020-IBL4	Soil	QC	QC			A19G118	

Data Entered By: IMA 11/19/19

Data Reviewed By: 11/25/19

Comments:

TDCPA to 1/2 ppb ✓

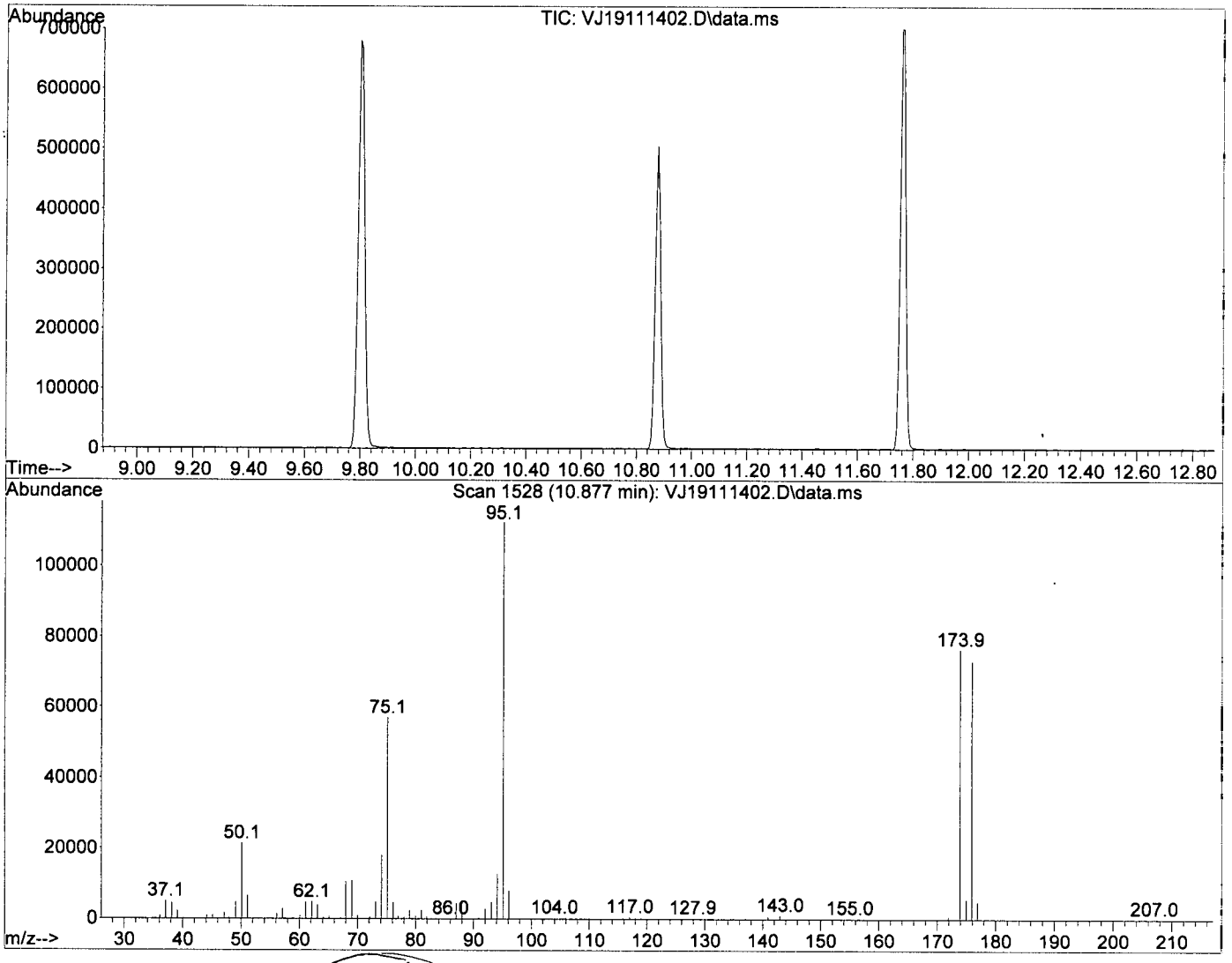
BFB

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111402.D
Acq On : 14 Nov 2019 10:14 am
Operator : IMA
Sample : 9K14020-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

IMA
11/14/19

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019



Spectrum Information: Scan 1528 APEX

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	146.7	112512	PASS
96	95	5	9	7.1	8013	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	68.2	76696	PASS
175	174	5	9	7.3	5615	PASS
176	174	95	105	95.6	73336	PASS
177	176	5	10	6.8	4951	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111402.D
Acq On : 14 Nov 2019 10:14 am
Operator : IMA
Sample : 9K14020-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 15 10:24:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

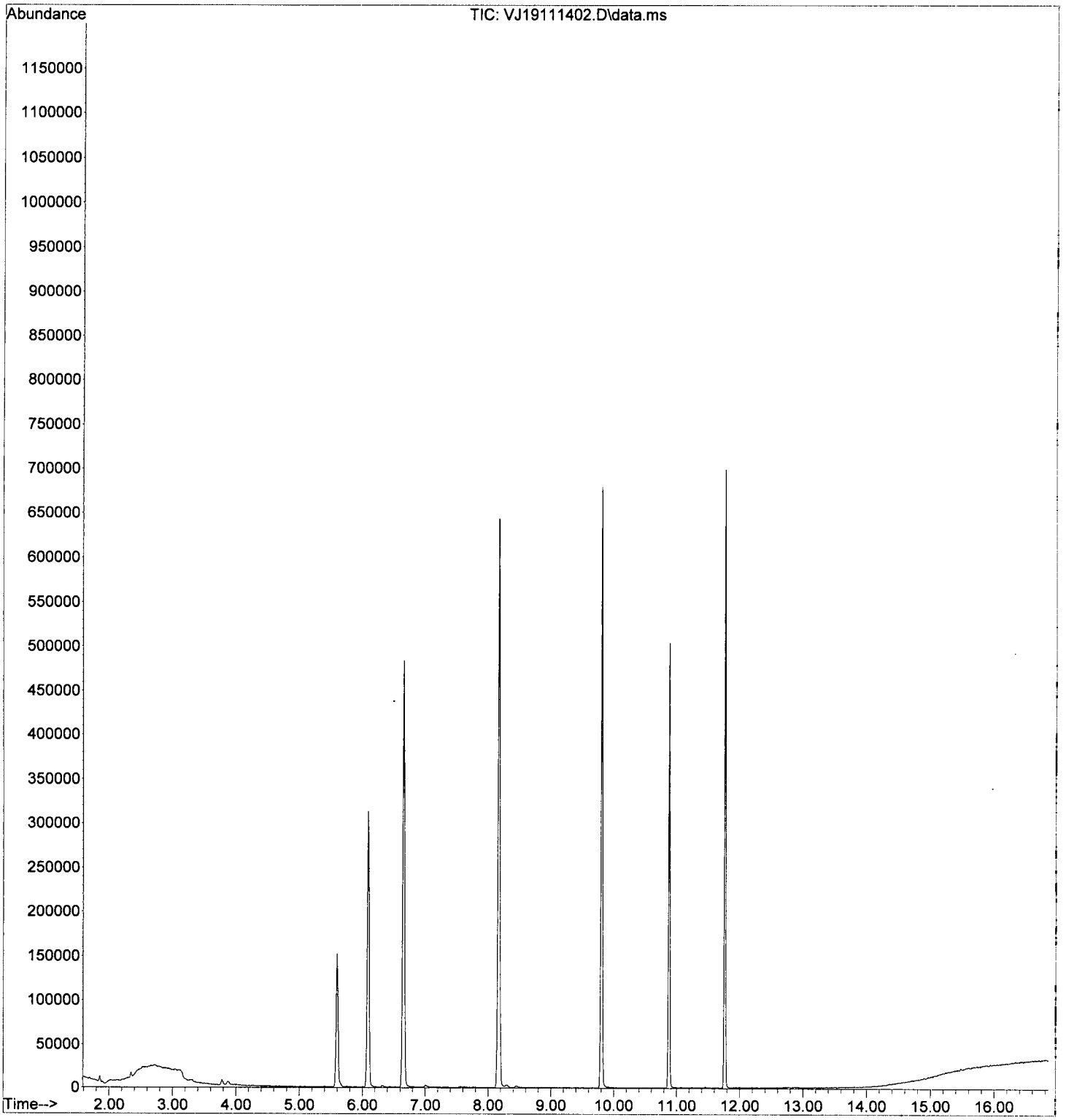
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	134931	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.800	117	358270	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	152218	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	105802	49.61	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	411731	49.60	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	504987	50.54	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	108597	49.41	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	1037	0.20	ug/L		84
5) Bromomethane	2.348	96	4287	0.13	ug/L		98
6) Chloroethane	2.469	64	57	1.33	ug/L	#	56
8) Ethanol	3.303	45	4352	Below Cal			86
14) Acetone	3.863	43	3447	1.67	ug/L		96
18) tert-Butanol (TBA)	4.240	59	710	0.67	ug/L	#	7
28) Tetrahydrofuran	5.590	42	354	0.13	ug/L	#	28
32) 2-Butanone (MEK)	5.730	43	1006	0.28	ug/L		52
36) iso-Butyl Alcohol	6.320	43	673	1.62	ug/L		95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111402.D
Acq On : 14 Nov 2019 10:14 am
Operator : IMA
Sample : 9K14020-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 15 10:24:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:25:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

IMA
11/15/19

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	141	0.00
2		Dichlorodifluoromethane	20.000	17.585	12.1	127	0.00
3	P	Chloromethane	20.000	17.091	14.5	122	0.00
4	C	Vinyl Chloride	20.000	17.199	14.0	119	-0.01
5		Bromomethane	20.000	23.821	-19.1	159	0.00
6		Chloroethane	20.000	24.056	OK -20.3#	203	0.00
7		Trichlorofluoromethane	20.000	19.113	4.4	136	0.01
8		Ethanol	1250.000	1194.431	4.4	129	0.04
9	C	1,1-Dichloroethene	20.000	18.507	7.5	130	0.00
10		Carbon Disulfide	20.000	17.560	12.2	134	0.00
11		Freon 113	20.000	18.042	9.8	125	0.00
12		Iodomethane	20.000	8.277	NR 58.6#	58	0.00
13		Methylene Chloride	20.000	19.409	3.0	131	0.00
14		Acetone	40.000	35.439	11.4	116	0.00
15		t-1,2-Dichloroethene	20.000	18.785	6.1	131	0.00
16		n-Hexane	20.000	19.258	3.7	136	0.00
17		Methyl-tert-butyl-ether	20.000	19.041	4.8	133	0.00
18		tert-Butanol (TBA)	1250.000	1168.369	6.5	119	0.07
19		Diisopropyl ether (DIPE)	5.000	4.954	0.9	134	0.00
20	P	1,1-Dichloroethane	20.000	19.987	0.1	136	0.00
21		Acrylonitrile	20.000	20.572	-2.9	130	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	4.648	7.0	127	0.00
23		c-1,2-Dichloroethene	20.000	18.538	7.3	129	0.00
24		2,2-Dichloropropane	20.000	20.606	-3.0	147	0.00
25		Bromochloromethane	20.000	18.957	5.2	128	0.00
26	C	Chloroform	20.000	19.172	4.1	130	0.00
27		Carbon Tetrachloride	20.000	20.444	-2.2	134	0.00
28		Tetrahydrofuran	20.000	16.265	18.7	118	0.00
29		1,1,1-Trichloroethane	20.000	19.569	2.2	131	0.00
30	S	Dibromofluoromethane (S)	50.000	49.687	0.6	140	0.00
31		1,1-Dichloropropene	20.000	18.578	7.1	128	0.00
32		2-Butanone (MEK)	40.000	33.939	15.2	119	0.00
33		Benzene	20.000	18.022	9.9	128	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.528	9.4	130	0.00
35		1,2-Dichloroethane (EDC)	20.000	19.310	3.5	130	0.00
36		iso-Butyl Alcohol	500.000	456.235	8.8	121	0.02
37	S	1,4-Difluorobenzene (S)	50.000	49.697	0.6	142	0.00
38		Trichloroethene (TCE)	20.000	19.643	1.8	134	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	4.758	4.8	125	0.00
40		Dibromomethane	20.000	19.321	3.4	130	0.00
41	C	1,2-Dichloropropane	20.000	19.058	4.7	132	0.00
42		Bromodichloromethane	20.000	20.529	-2.6	133	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	141	0.00
44		c-1,3-Dichloropropene	20.000	20.164	-0.8	133	0.00
45	S	Toluene-d8 (S)	50.000	50.042	-0.1	142	0.00
46	C	Toluene	20.000	18.116	9.4	127	0.00
47		Tetrachloroethene (PCE)	20.000	19.293	3.5	129	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	37.242	6.9	119	0.00
49		t-1,3-Dichloropropene	20.000	21.637	-8.2	137	0.00
50		1,1,2-Trichloroethane	20.000	19.481	2.6	128	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:25:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	20.109	-0.5	137	0.00
52		1,3-Dichloropropane	20.000	19.270	3.7	128	0.00
53		1,2-Dibromoethane (EDB)	20.000	19.582	2.1	126	0.00
54		2-Hexanone	40.000	35.124	12.2	114	0.00
55	P	Chlorobenzene	20.000	18.692	6.5	129	0.00
56	C	Ethylbenzene	20.000	19.255	3.7	127	0.00
57		1,1,1,2-Tetrachloroethane	20.000	20.201	-1.0	135	0.00
58		m,p-Xylenes (2)	40.000	39.744	0.6	128	0.00
59		o-Xylene	20.000	19.331	3.3	124	0.00
60		Styrene	20.000	17.460	12.7	127	0.00
61	P	Bromoform	20.000	17.896	10.5	131	0.00
62		Isopropylbenzene	20.000	19.856	0.7	125	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	135	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.857	0.3	136	0.00
65		Bromobenzene	20.000	18.953	5.2	125	0.00
66		n-Propylbenzene	20.000	19.570	2.1	126	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	17.517	12.4	112	0.00
68		2-Chlorotoluene	20.000	19.362	3.2	125	0.00
69		1,3,5-Trimethylbenzene	20.000	22.722	-13.6	137	0.00
70		1,2,3-Trichloropropane	20.000	18.872	5.6	121	0.00
71		t-1,4-Dichloro-2-butene	20.000	21.409	-7.0	135	0.00
72		4-Chlorotoluene	20.000	19.943	0.3	126	0.00
73		tert-Butylbenzene	20.000	19.647	1.8	123	0.00
74		1,2,4-Trimethylbenzene	20.000	23.150	-15.7	141	0.00
75		sec-Butylbenzene	20.000	20.439	-2.2	127	0.00
76		4-Isopropyltoluene	20.000	21.759	-8.8	133	0.00
77		1,3-Dichlorobenzene	20.000	19.071	4.6	123	0.00
78		1,4-Dichlorobenzene	20.000	18.223	8.9	125	0.00
79		n-Butylbenzene	20.000	21.673	-8.4	139	0.00
80		1,2-Dichlorobenzene	20.000	18.497	7.5	119	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	17.380	13.1	118	0.00
82		Hexachlorobutadiene	20.000	20.747	-3.7	133	0.00
83		1,2,4-Trichlorobenzene	20.000	18.316	8.4	117	0.00
84		Naphthalene	20.000	18.969	5.2	118	0.00
85		1,2,3-Trichlorobenzene	20.000	18.743	6.3	120	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	132852	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	356702	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	151124	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	104337	49.69	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	406171	49.70	ug/L		0.00
45) Toluene-d8 (S)	8.164	98	497793	50.04	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	108791	49.86	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	54066	17.58	ug/L		95
3) Chloromethane	1.892	50	89052	17.09	ug/L		100
4) Vinyl Chloride	1.983	62	69120	17.20	ug/L		96
5) Bromomethane	2.342	96	40525	23.82	ug/L		99
6) Chloroethane	2.476	64	12535	24.06	ug/L		91
7) Trichlorofluoromethane	2.610	101	17140	19.11	ug/L		99
8) Ethanol	~~3.358~~	~~45~~	~~145422~~	~~1093.18~~	~~ug/L~~		~~92~~ M.I.
9) 1,1-Dichloroethene	3.145	61	91479	18.51	ug/L		90
10) Carbon Disulfide	3.157	76	161915	17.56	ug/L		99
11) Freon 113	3.200	101	54185	18.04	ug/L		89
12) Iodomethane	3.291	142	8331	8.28	ug/L		89
13) Methylene Chloride	3.778	84	61072	19.41	ug/L		93
14) Acetone	~~3.869~~	~~43~~	~~54423~~	~~26.84~~	~~ug/L~~		~~100~~ M.I.
15) t-1,2-Dichloroethene	3.948	61	97070	18.78	ug/L		93
16) n-Hexane	4.039	86	15074	19.26	ug/L	#	63
17) Methyl-tert-butyl-ether	4.106	73	235363	19.04	ug/L		97
18) tert-Butanol (TBA)	~~4.264~~	~~59~~	~~267739~~	~~256.65~~	~~ug/L~~	#	~~93~~ M.I.
19) Diisopropyl ether (DIPE)	4.501	45	62865	4.95	ug/L		94
20) 1,1-Dichloroethane	4.581	63	108994	19.99	ug/L		100
21) Acrylonitrile	~~4.629~~	~~53~~	~~35025~~	~~15.26~~	~~ug/L~~		~~100~~ M.I.
22) Ethyl-tert-butyl ether...	4.867	59	53140	4.65	ug/L		95
23) c-1,2-Dichloroethene	5.128	61	94491	18.54	ug/L		91
24) 2,2-Dichloropropane	5.238	77	106373	20.61	ug/L		99
25) Bromochloromethane	5.329	49	58838	18.96	ug/L		83
26) Chloroform	5.414	83	111718	19.17	ug/L		99
27) Carbon Tetrachloride	5.554	117	78700	20.44	ug/L		95
28) Tetrahydrofuran	5.584	42	43847	16.27	ug/L		97
29) 1,1,1-Trichloroethane	5.621	97	104800	19.57	ug/L		98
31) 1,1-Dichloropropene	5.749	75	96719	18.58	ug/L		92
32) 2-Butanone (MEK)	~~5.730~~	~~43~~	~~88972~~	~~24.92~~	~~ug/L~~		~~95~~ M.I.
33) Benzene	5.998	78	307467	18.02	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	49924	4.53	ug/L		96
35) 1,2-Dichloroethane (EDC)	6.205	62	101467	19.31	ug/L		99
36) iso-Butyl Alcohol	6.314	43	186377	456.24	ug/L		98
38) Trichloroethene (TCE)	6.619	130	66586	19.64	ug/L		95
39) tert-Amyl ethyl ether ...	6.898	59	36438	4.76	ug/L		88
40) Dibromomethane	7.057	93	41370	19.32	ug/L	#	82
41) 1,2-Dichloropropane	7.166	63	80468	19.06	ug/L		97
42) Bromodichloromethane	7.245	83	84699	20.53	ug/L		97
44) c-1,3-Dichloropropene	7.951	75	107180	20.16	ug/L		97
46) Toluene	8.225	91	301994	18.12	ug/L		98
47) Tetrachloroethene (PCE)	8.675	166	59678	19.29	ug/L		88
48) 4-Methyl-2-Pentanone (...	8.669	43	192398	37.24	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

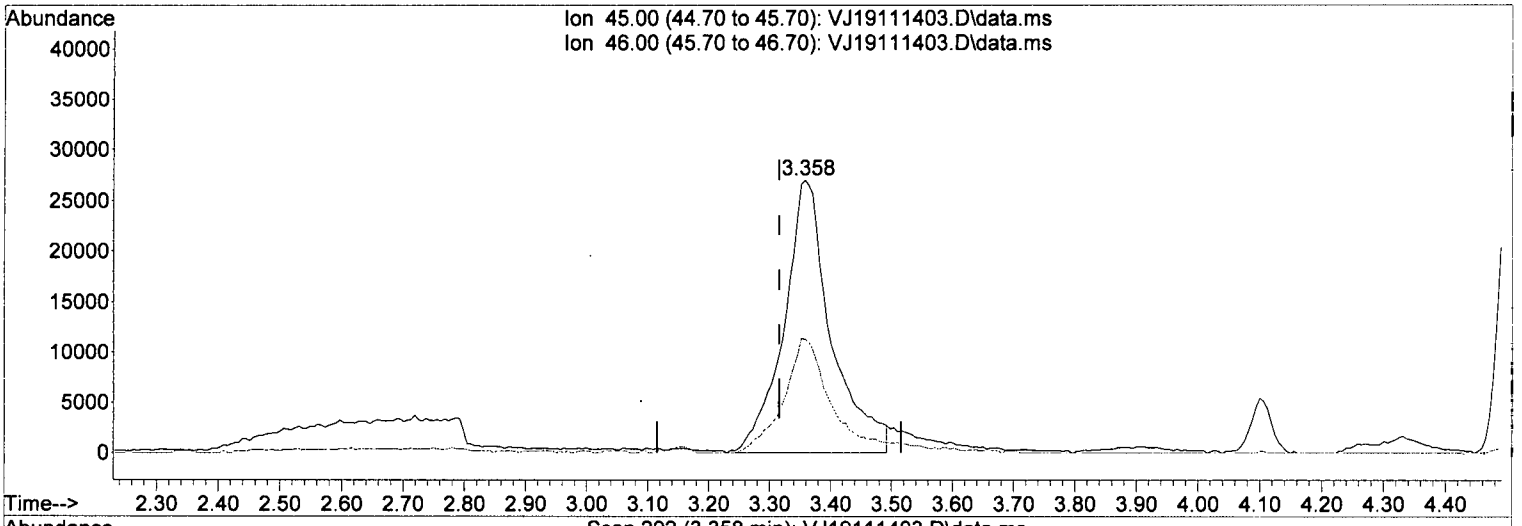
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	111523	21.64	ug/L		97
50) 1,1,2-Trichloroethane	8.876	97	65907	19.48	ug/L		95
51) Dibromochloromethane	9.064	129	54913	20.11	ug/L		96
52) 1,3-Dichloropropane	9.155	76	122472	19.27	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.295	107	63494	19.58	ug/L		99
54) 2-Hexanone	9.545	43	135033	35.12	ug/L		99
55) Chlorobenzene	9.819	112	177740	18.69	ug/L		94
56) Ethylbenzene	9.855	91	311928	19.26	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.885	131	59499	20.20	ug/L		98
58) m,p-Xylenes (2)	9.989	91	458393	39.74	ug/L		96
59) o-Xylene	10.372	91	212839	19.33	ug/L		94
60) Styrene	10.421	104	147664	17.46	ug/L		98
61) Bromoform	10.433	173	34379	17.90	ug/L		96
62) Isopropylbenzene	10.652	105	263419	19.86	ug/L		97
65) Bromobenzene	10.962	156	59267	18.95	ug/L	#	73
66) n-Propylbenzene	10.993	91	322576	19.57	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.047	83	83602	17.52	ug/L		95
68) 2-Chlorotoluene	11.114	126	56946	19.36	ug/L	#	79
69) 1,3,5-Trimethylbenzene	11.151	105	229245	22.72	ug/L		93
70) 1,2,3-Trichloropropane	11.151	110	28921	18.87	ug/L		97
71) t-1,4-Dichloro-2-butene	11.187	88	13163	21.41	ug/L	#	88
72) 4-Chlorotoluene	11.248	91	190440	19.94	ug/L		91
73) tert-Butylbenzene	11.406	91	117527	19.65	ug/L		92
74) 1,2,4-Trimethylbenzene	11.461	105	235914	23.15	ug/L		96
75) sec-Butylbenzene	11.546	105	263631	20.44	ug/L		96
76) 4-Isopropyltoluene	11.656	119	213934	21.76	ug/L		98
77) 1,3-Dichlorobenzene	11.704	146	107927	19.07	ug/L		94
78) 1,4-Dichlorobenzene	11.777	146	109633	18.22	ug/L		95
79) n-Butylbenzene	11.972	91	206609	21.67	ug/L		95
80) 1,2-Dichlorobenzene	12.094	146	95913	18.50	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.696	157	15709	17.38	ug/L	#	59
82) Hexachlorobutadiene	13.213	223	13605	20.75	ug/L		94
83) 1,2,4-Trichlorobenzene	13.238	180	57360	18.32	ug/L		96
84) Naphthalene	13.511	128	213162	18.97	ug/L		98
85) 1,2,3-Trichlorobenzene	13.676	180	57132	18.74	ug/L		96

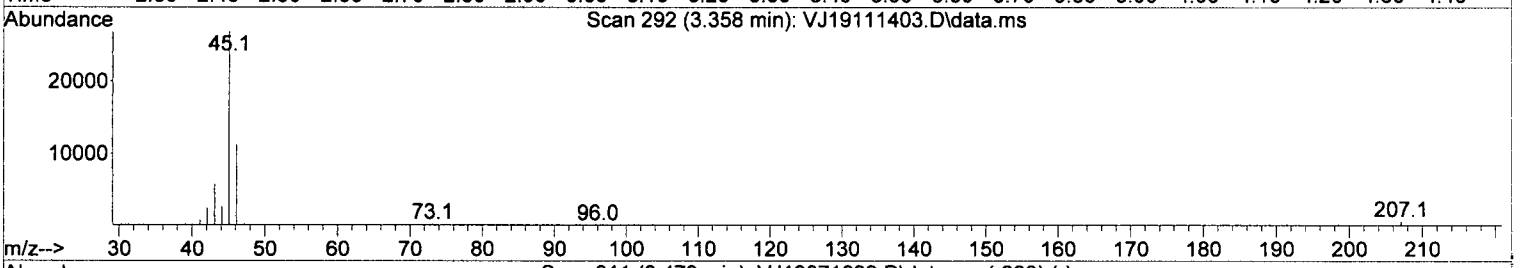
(#) = qualifier out of range (m) = manual integration (+) = signals summed

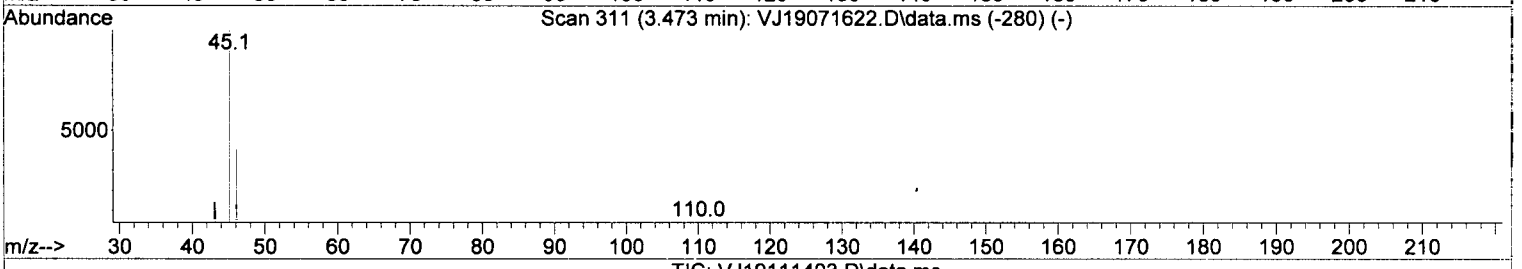
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(8) Ethanol

3.358min (+ 0.043) 1093.18 ug/L

response 145422

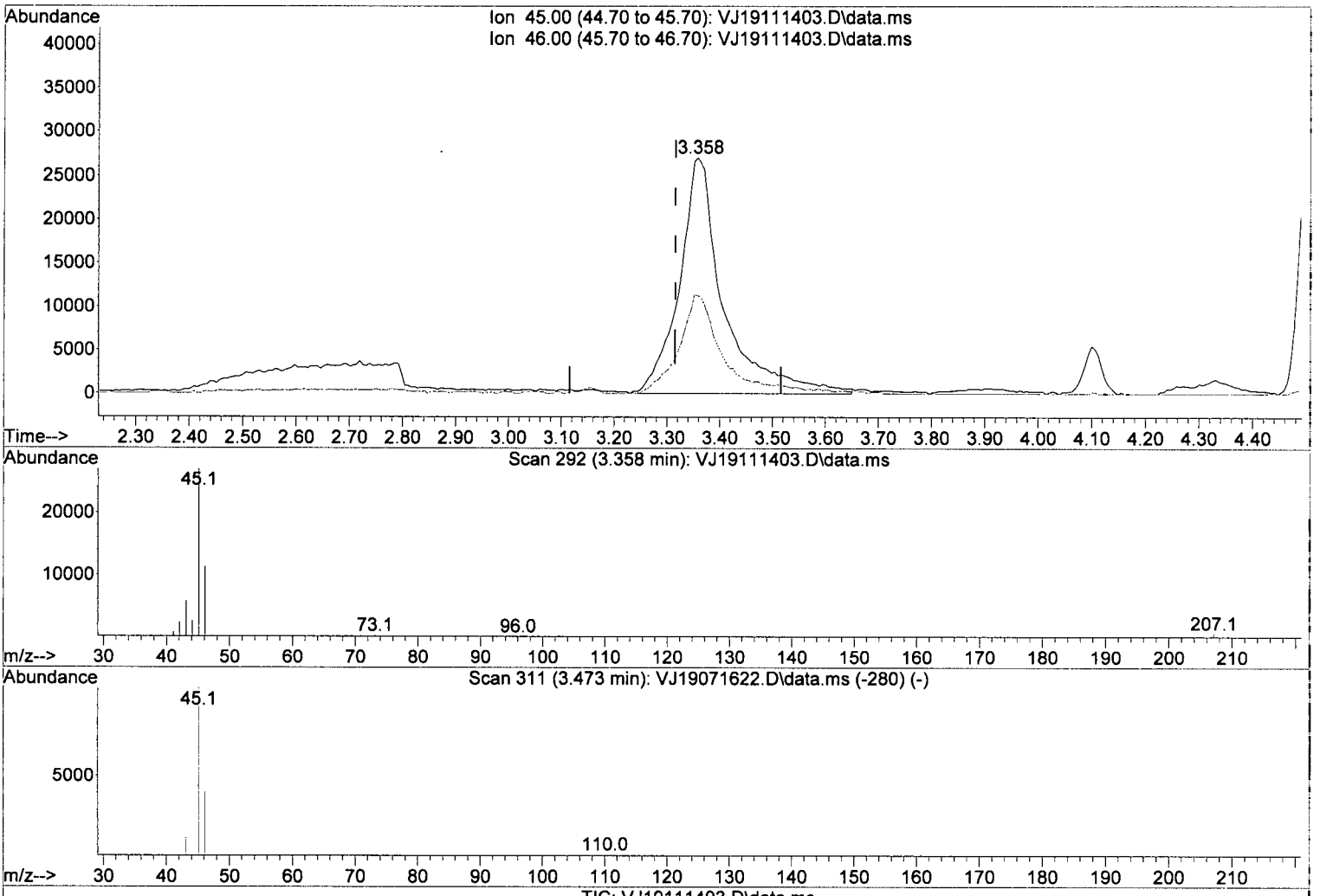
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.80
0.00	0.00	0.00
0.00	0.00	0.00

M.I.

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



TIC: VJ19111403.D\data.ms

(8) Ethanol

3.358min (+ 0.043) 1194.43 ug/L (m)

response 157460

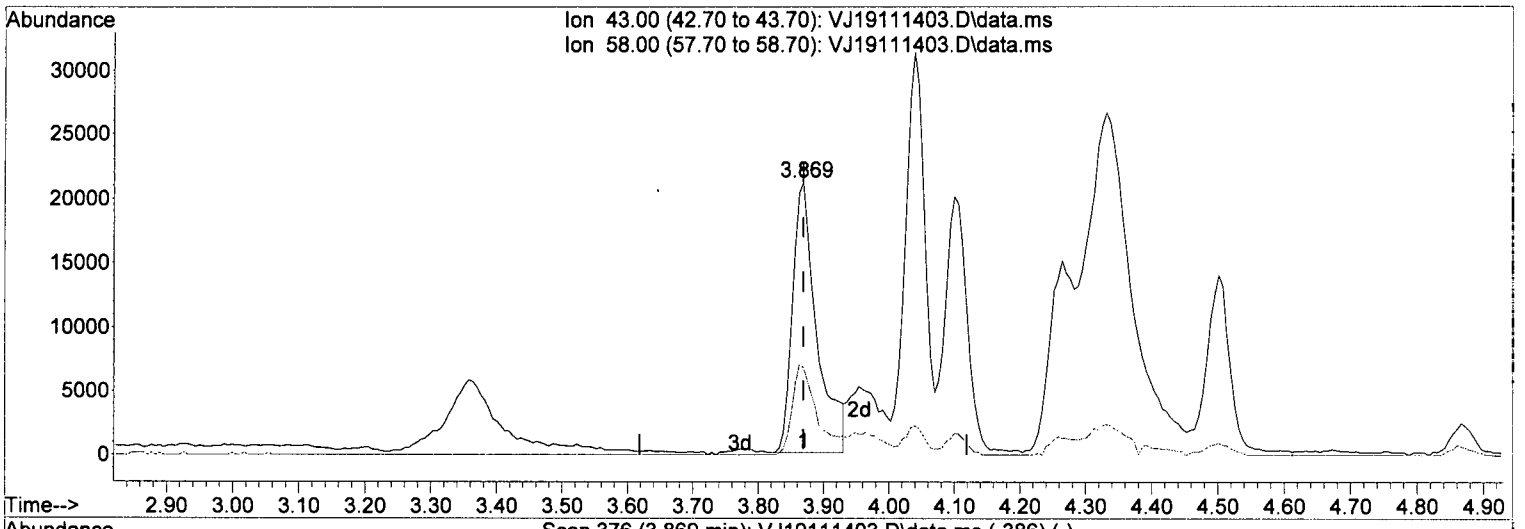
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	41.80
0.00	0.00	0.00
0.00	0.00	0.00

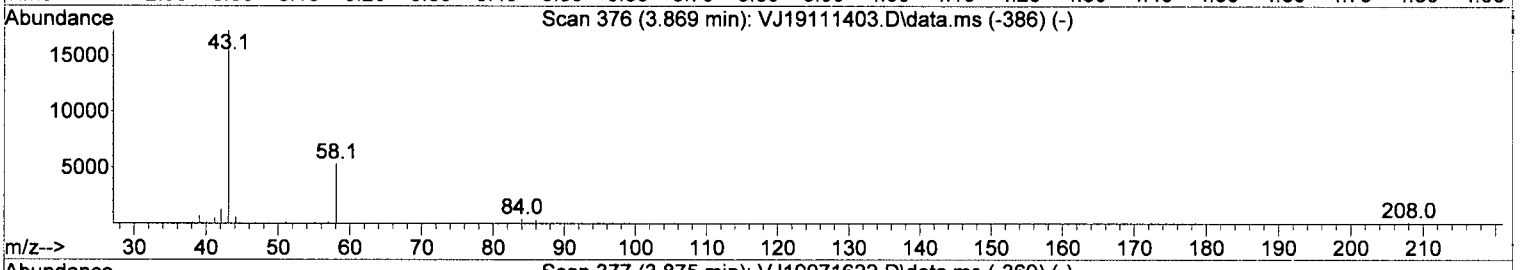
IMA
11/15/19

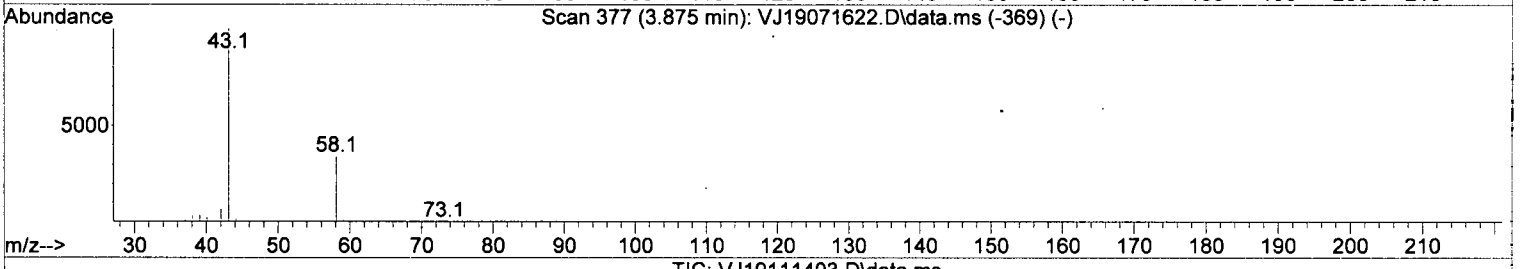
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(14) Acetone

3.869min (+ 0.001) 26.84 ug/L

response 54423

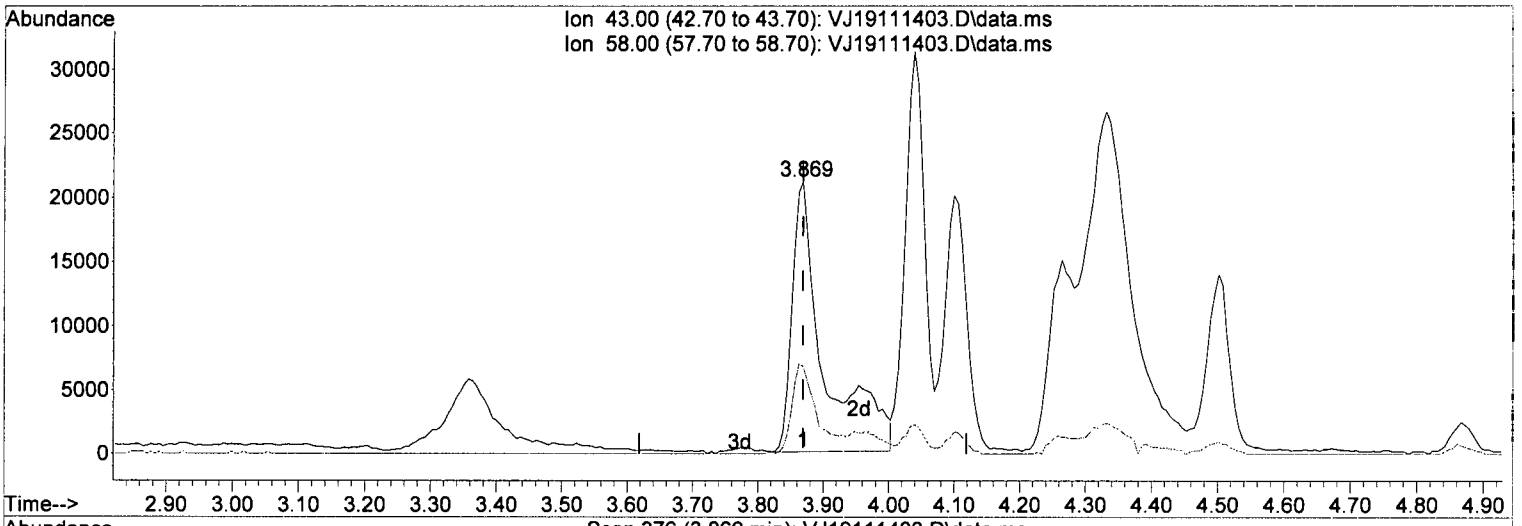
M.I.

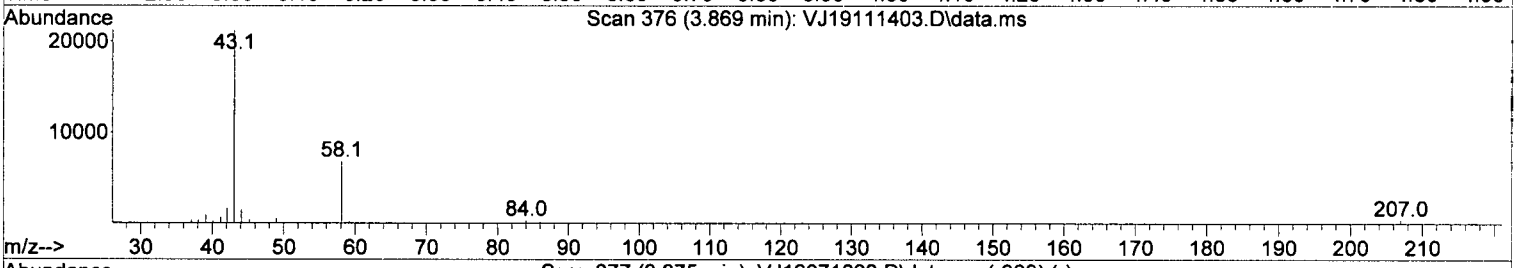
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.44
0.00	0.00	0.00
0.00	0.00	0.00

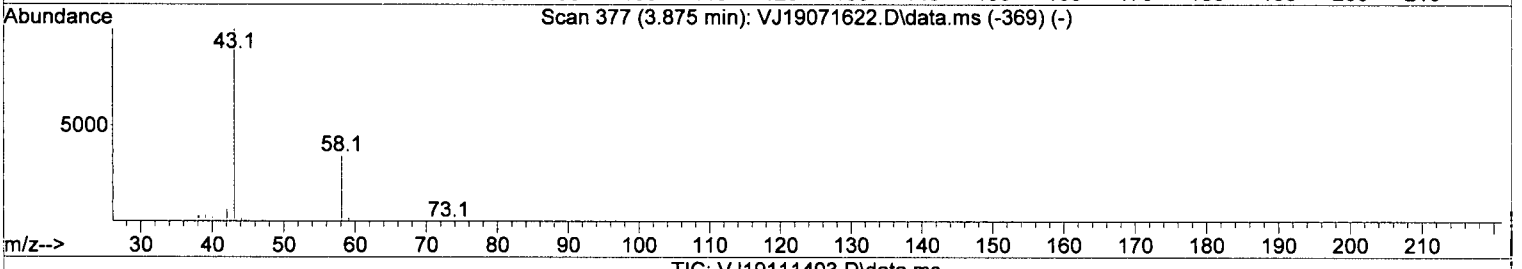
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(14) Acetone

3.869min (+ 0.001) 35.44 ug/L (m)

response 71849

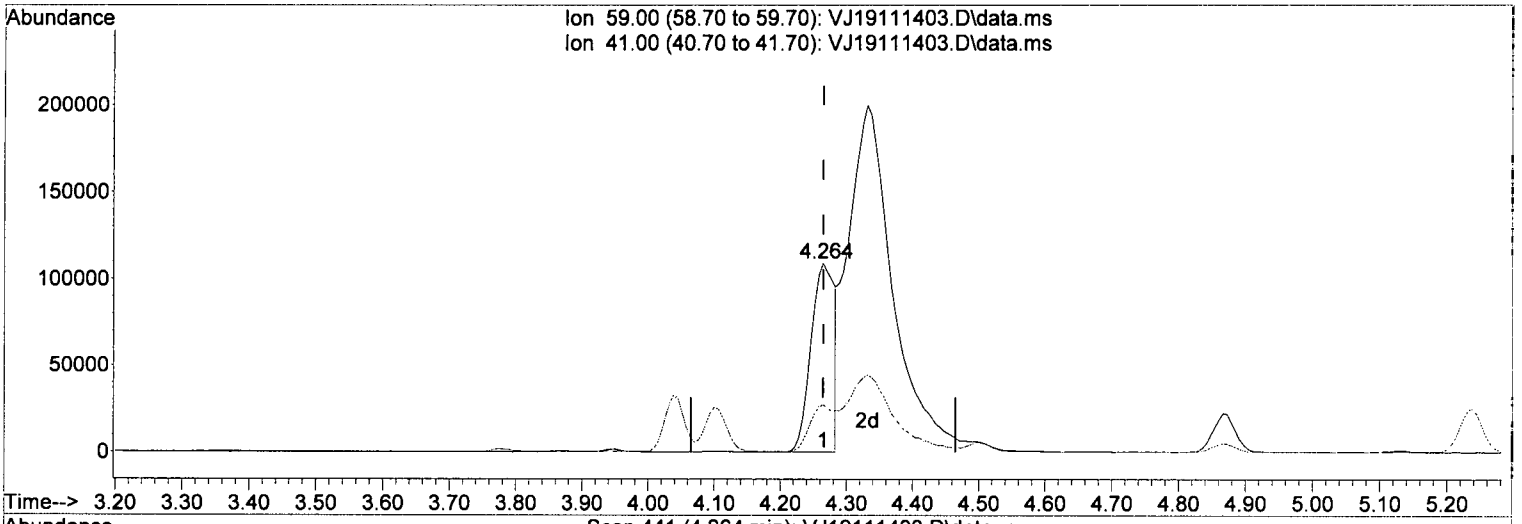
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.19
0.00	0.00	0.00
0.00	0.00	0.00

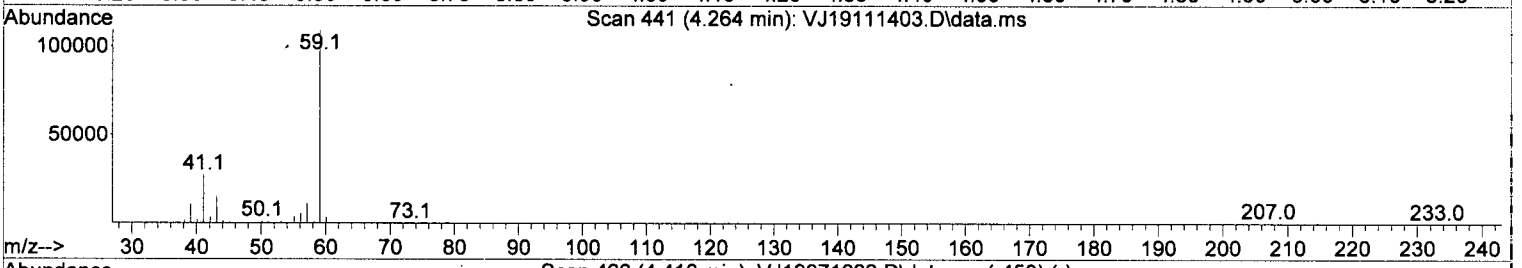
IMA
11/15/19

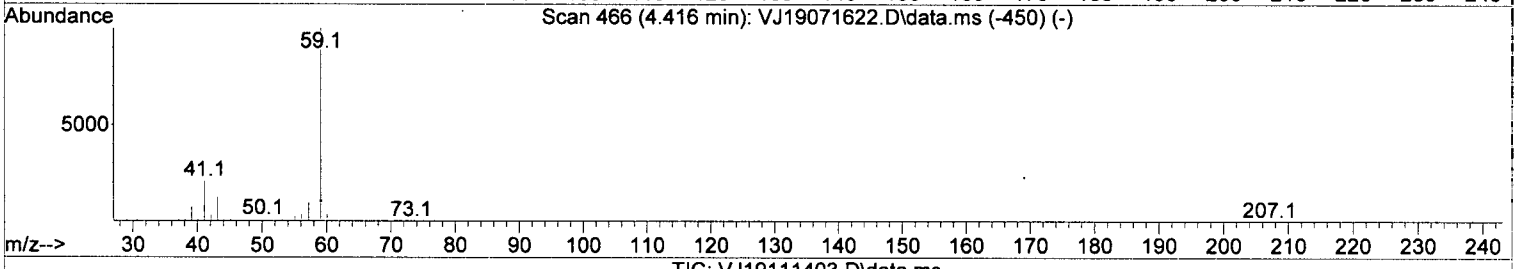
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(18) tert-Butanol (TBA)

4.264min (+ 0.000) 256.65 ug/L

response 267739

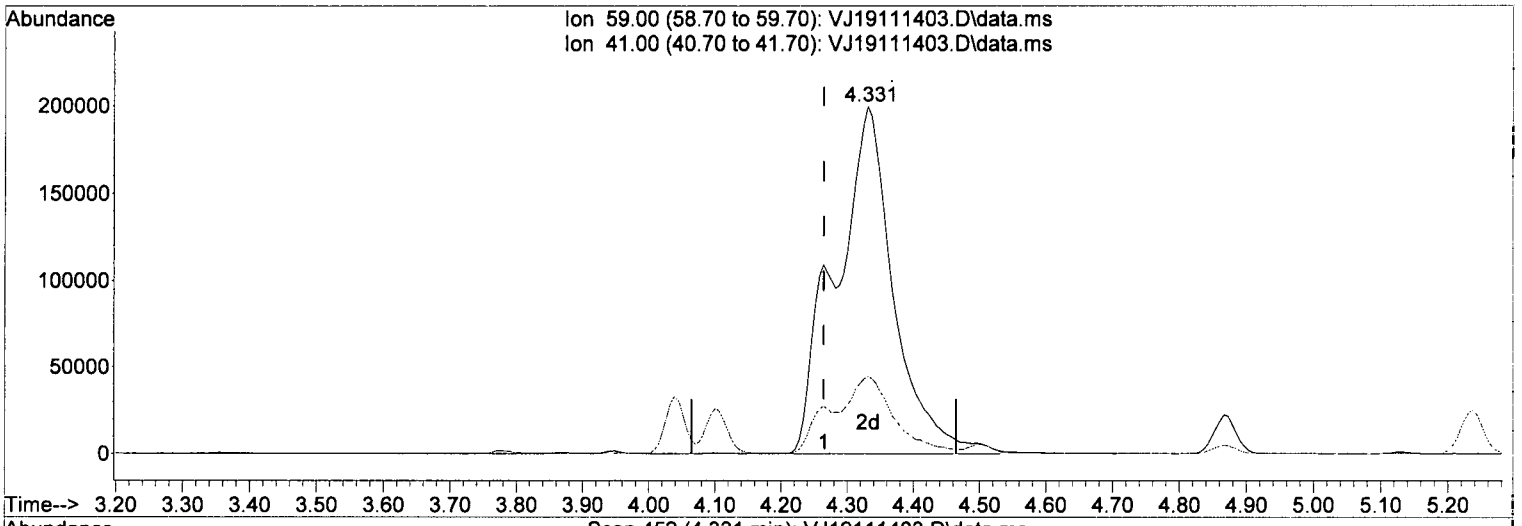
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	25.02#
0.00	0.00	0.00
0.00	0.00	0.00

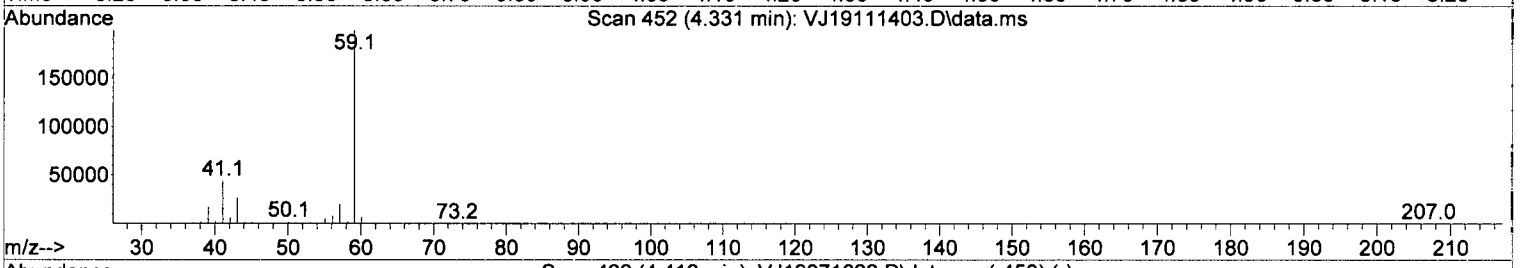
M.I.

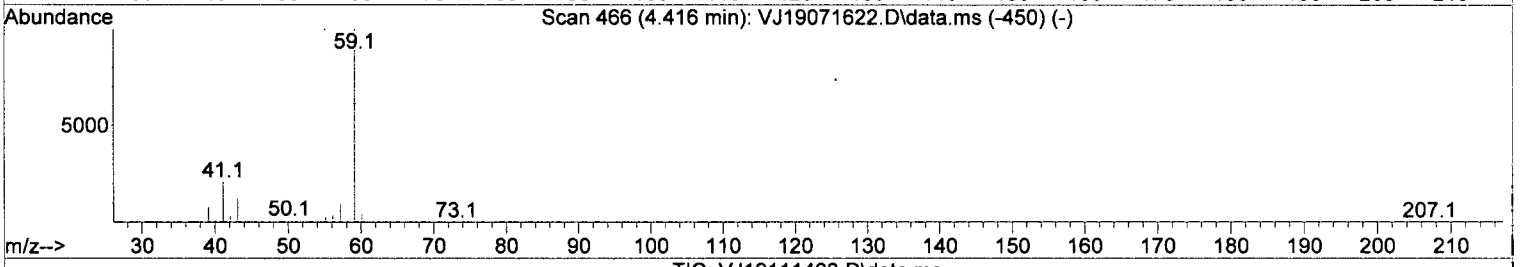
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(18) tert-Butanol (TBA)

4.331min (+ 0.067) 1168.37 ug/L m

response 1218837

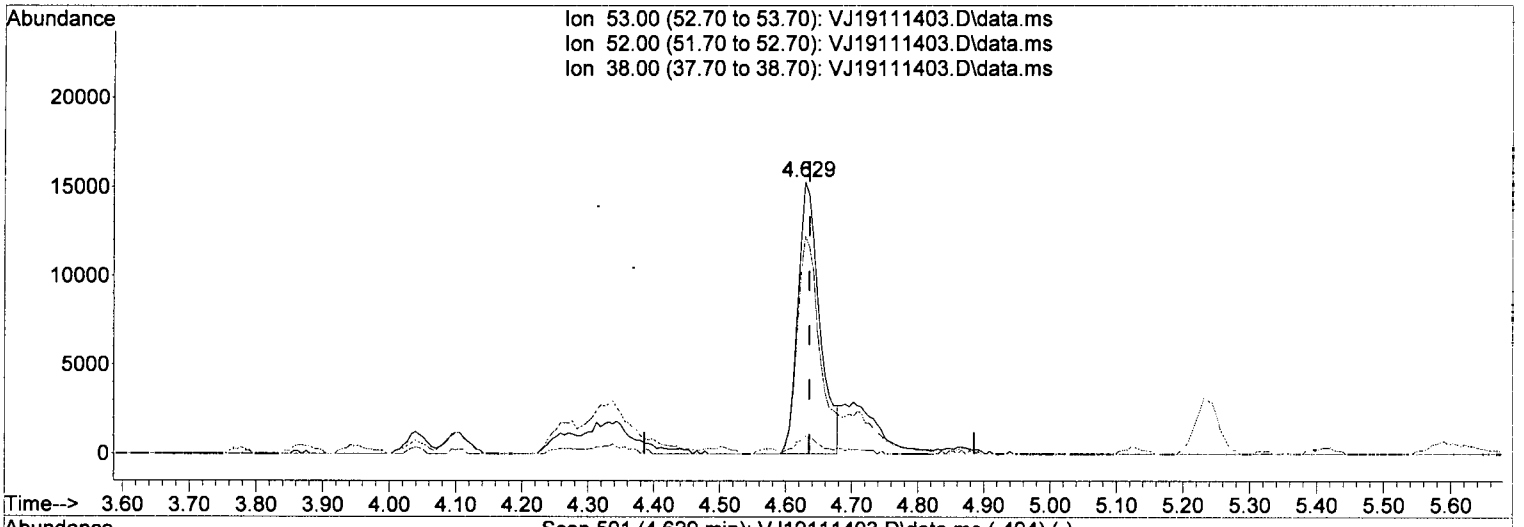
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.26#
0.00	0.00	0.00
0.00	0.00	0.00

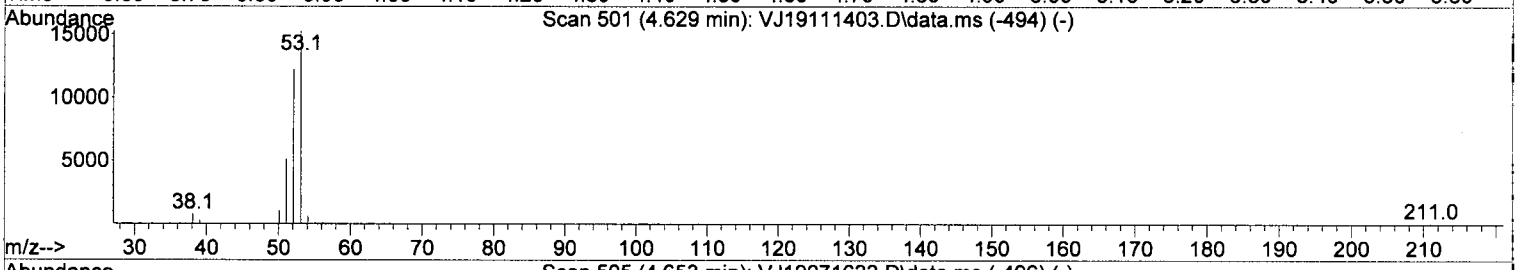
IMA
11/15/19

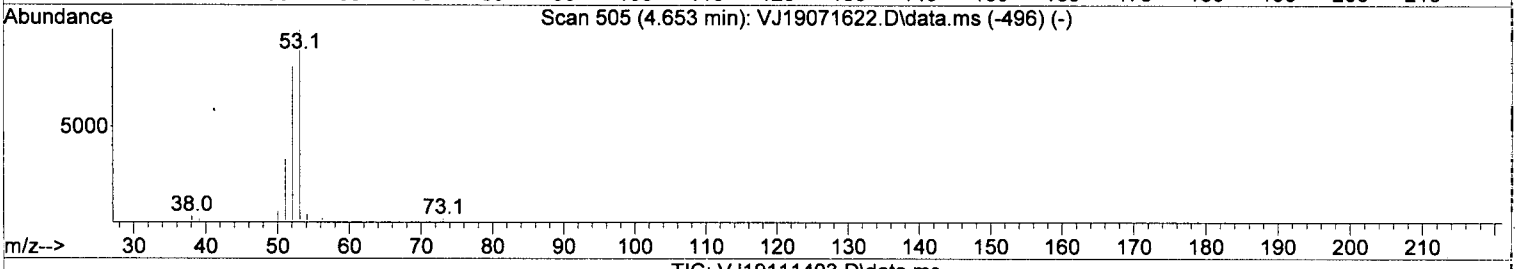
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 15.26 ug/L

response 35025

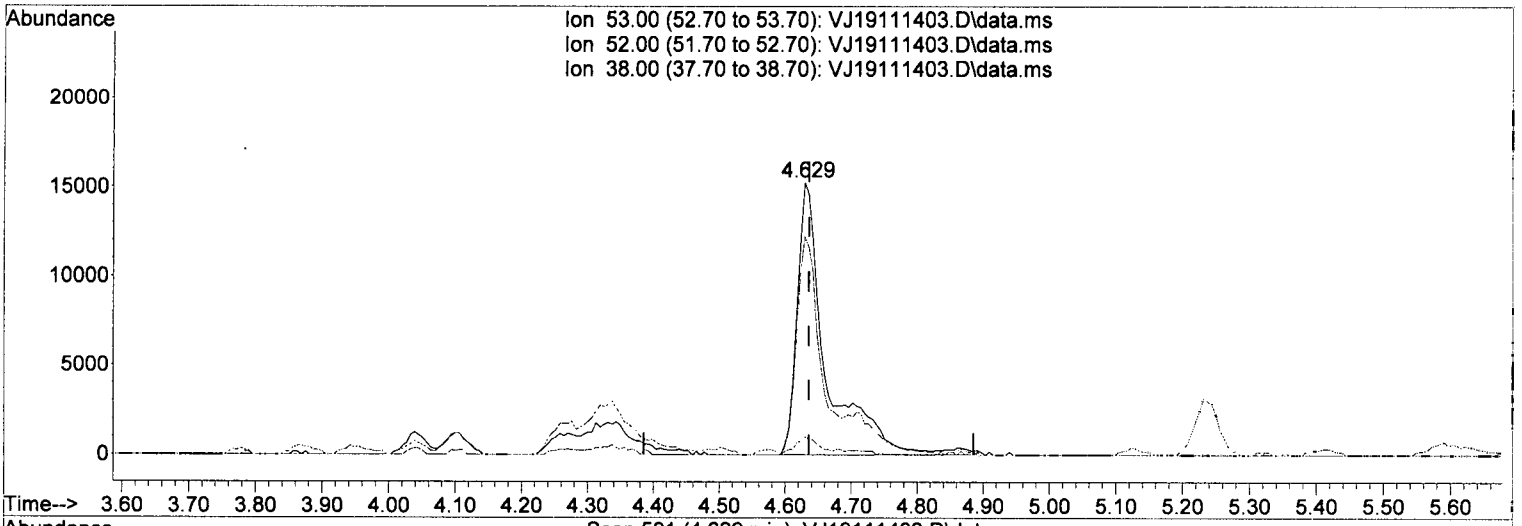
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.01
38.00	5.50	5.23
0.00	0.00	0.00

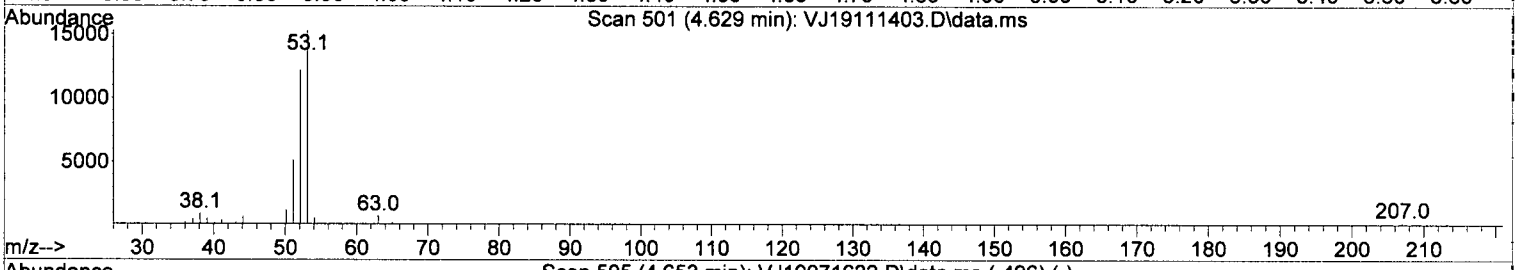
M.I.

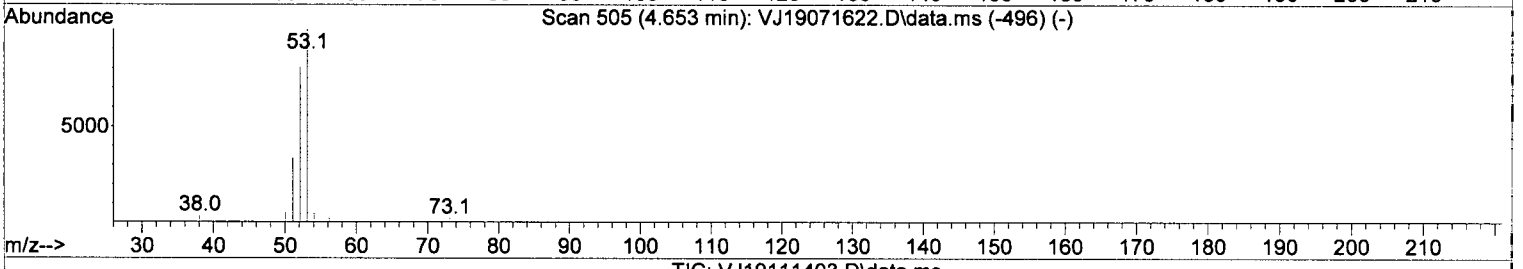
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 20.57 ug/L (m)

response 47213

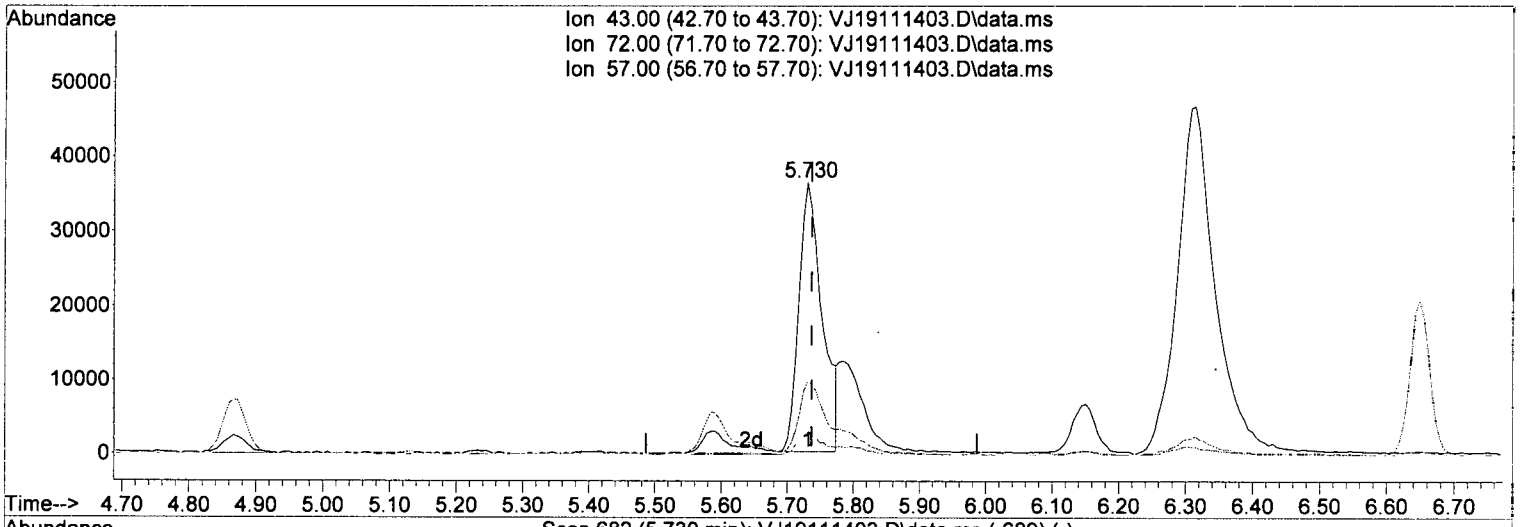
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.01
38.00	5.50	6.52
0.00	0.00	0.00

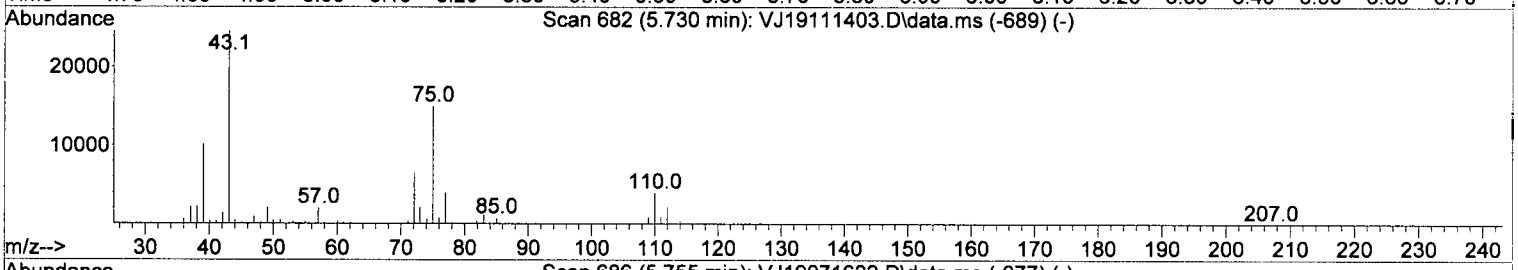
IMA
11/15/19

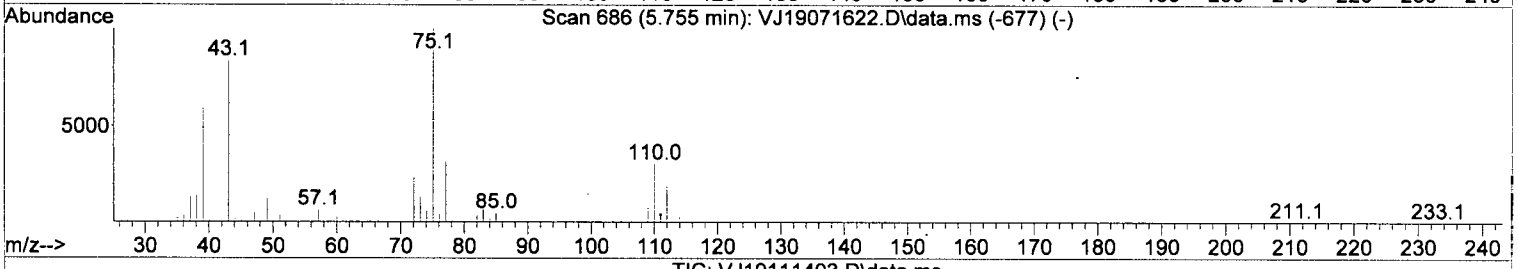
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 24.92 ug/L

response 88972

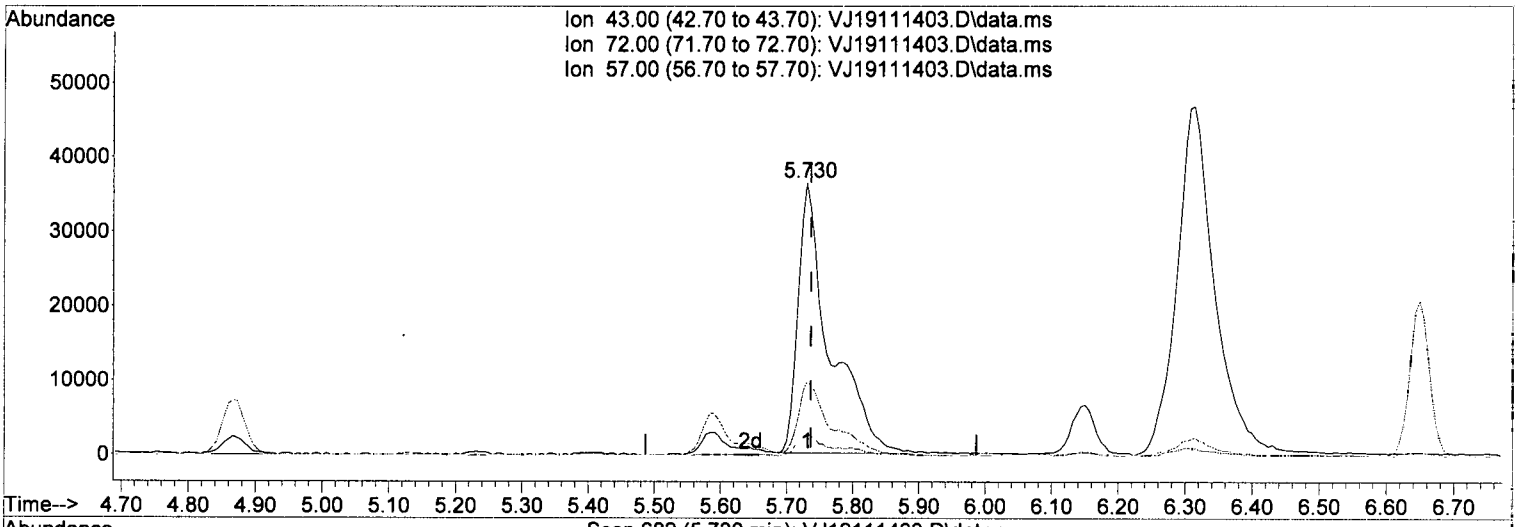
M.I.

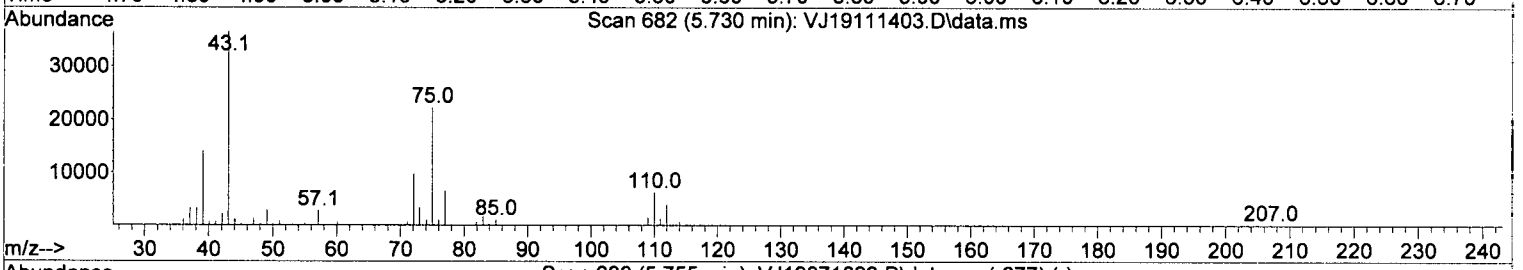
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.33
57.00	7.20	8.01
0.00	0.00	0.00

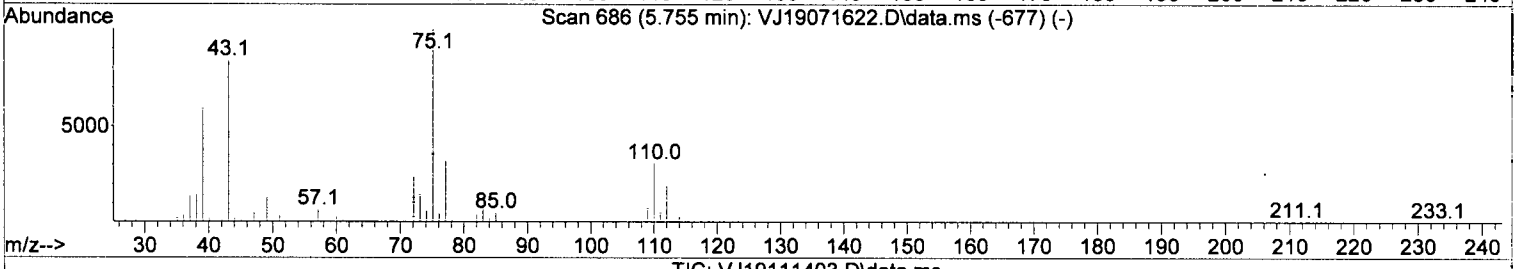
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111403.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 33.94 ug/L (m)

IMA
11/15/19

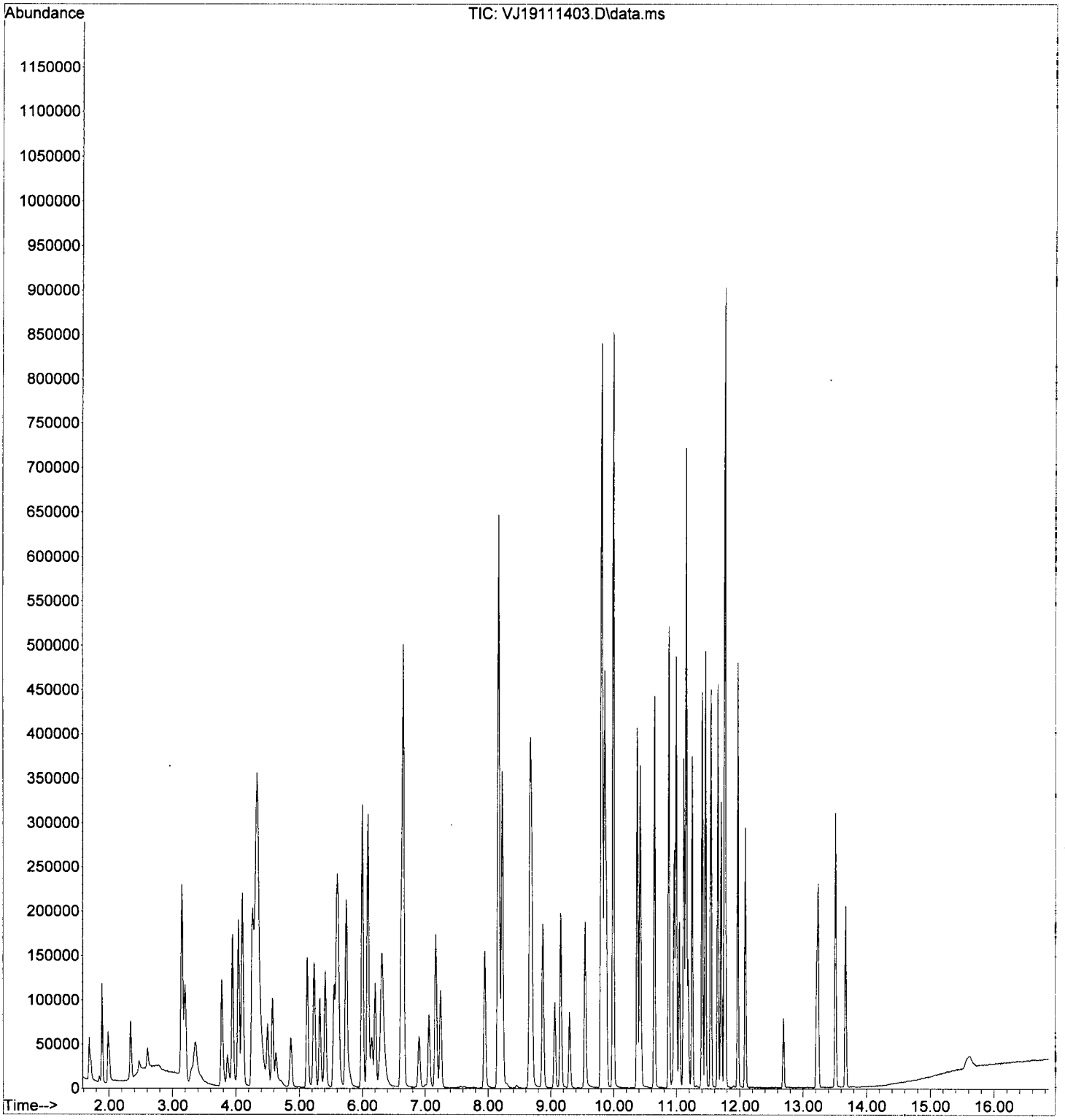
response 121194

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.81
57.00	7.20	7.94
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111403.D
Acq On : 14 Nov 2019 10:41 am
Operator : IMA
Sample : 9110788-BS1
Misc : 50X 5g/5mLx1000uL/50mL VOC+MeOH A19K081
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 15 10:24:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111404.D
Acq On : 14 Nov 2019 11:08 am
Operator : IMA
Sample : 9110788-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:26:21 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
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	132	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	50.625	-1.3	132	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	48.601	2.8	126	0.00
4	H	NWTPH-Gx (TPH)	500.000	493.009	1.4	134	0.00
5	H	TPHg (C5-C9)	500.000	499.052	0.2	133	0.00
6	H	TPHg (C6-C10)	500.000	505.163	-1.0	133	0.00
7	H	CA-LUFT (C5-C12)	500.000	495.026	1.0	133	0.00
8		Benzene (NR)	-1.000	0.000	0.0	137	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	134	0.00
10		Toluene (NR)	-1.000	0.000	0.0	130	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	133	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	130	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	126	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111404.D
Acq On : 14 Nov 2019 11:08 am
Operator : IMA
Sample : 9110788-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:26:21 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

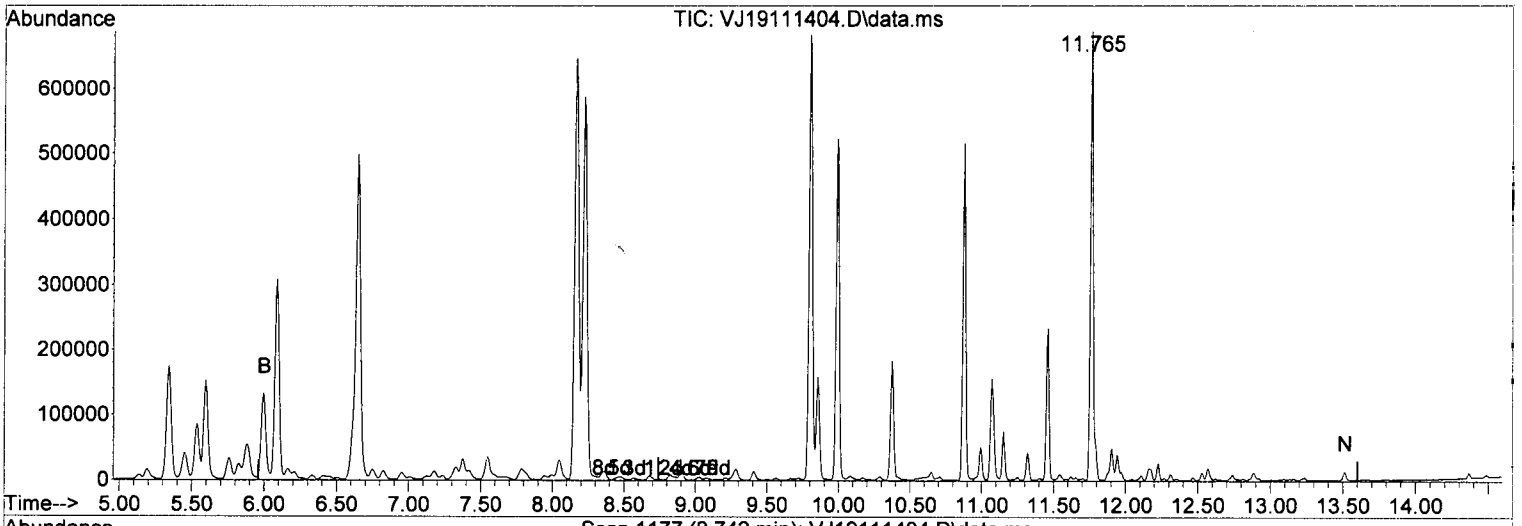
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	6.089	168	210115	50.00 ug/L	# 0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.649	114	404716	50.63 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	104668	48.60 ug/L	0.00
9) Toluene-d8 (NR)	8.164	98	501614	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	352896	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	226604	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5178684m	493.01 ug/L	
5) TPHg (C5-C9)	9.239	TIC	7233073m	499.05 ug/L	
6) TPHg (C6-C10)	9.239	TIC	6205546m	505.16 ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	8438859m	495.03 ug/L	

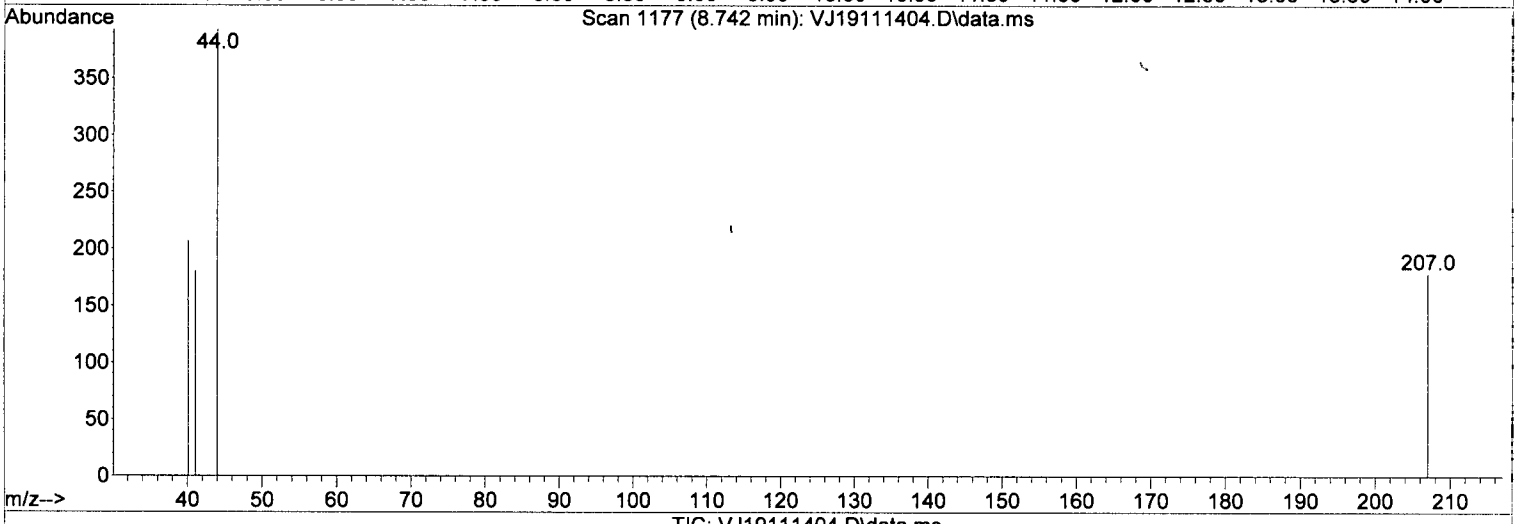
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111404.D
Acq On : 14 Nov 2019 11:08 am
Operator : IMA
Sample : 9110788-BS2
Misc : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 15 10:26:21 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19111404.D\data.ms

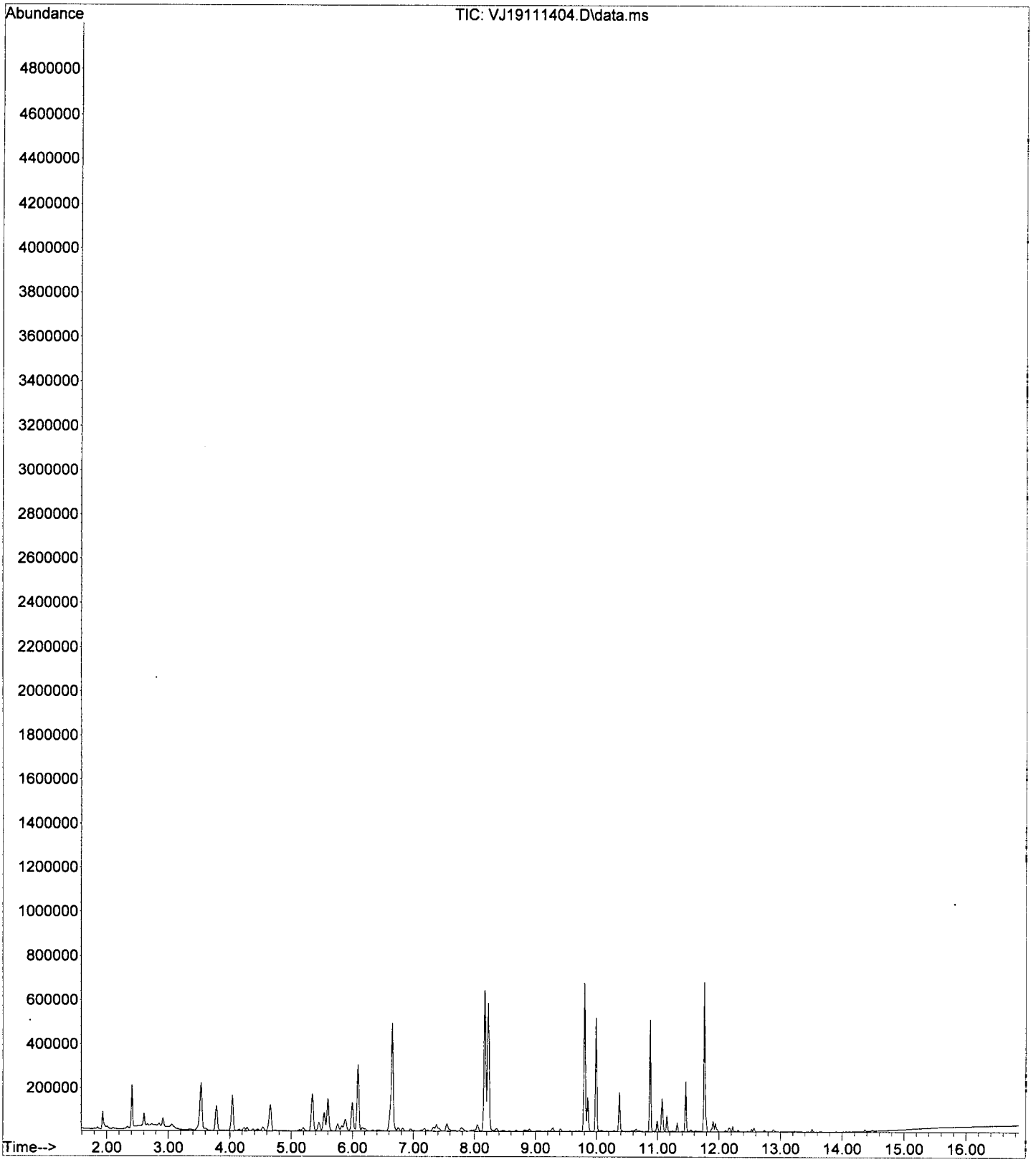
(4) NWTPH-Gx (TPH) (H)

8.739min (0.000) 493.01 ug/L m

response 5178684

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\2019-11\9K14020\VJ19111404.D
Operator : IMA
Acquired : 14 Nov 2019 11:08 am using AcqMethod VJ1907RUN.M
Instrument : VOA-GCMS10
Sample Name: 9110788-BS2
Misc Info : 50X 5g/5mLx1000uL/50mL GX+MeOH A19K086
Vial Number: 4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:27:18 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	187145	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	364136	51.14	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	97804	50.99	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	452924	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	325895	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	217051	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	107092m	14.96	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	384698m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	371469m	10.07	ug/L	<MDL
7) CA-LUFT (C5-C12)	9.239	TIC	435445m	Below Cal		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 15 10:27:26 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

IMA
11/15/19

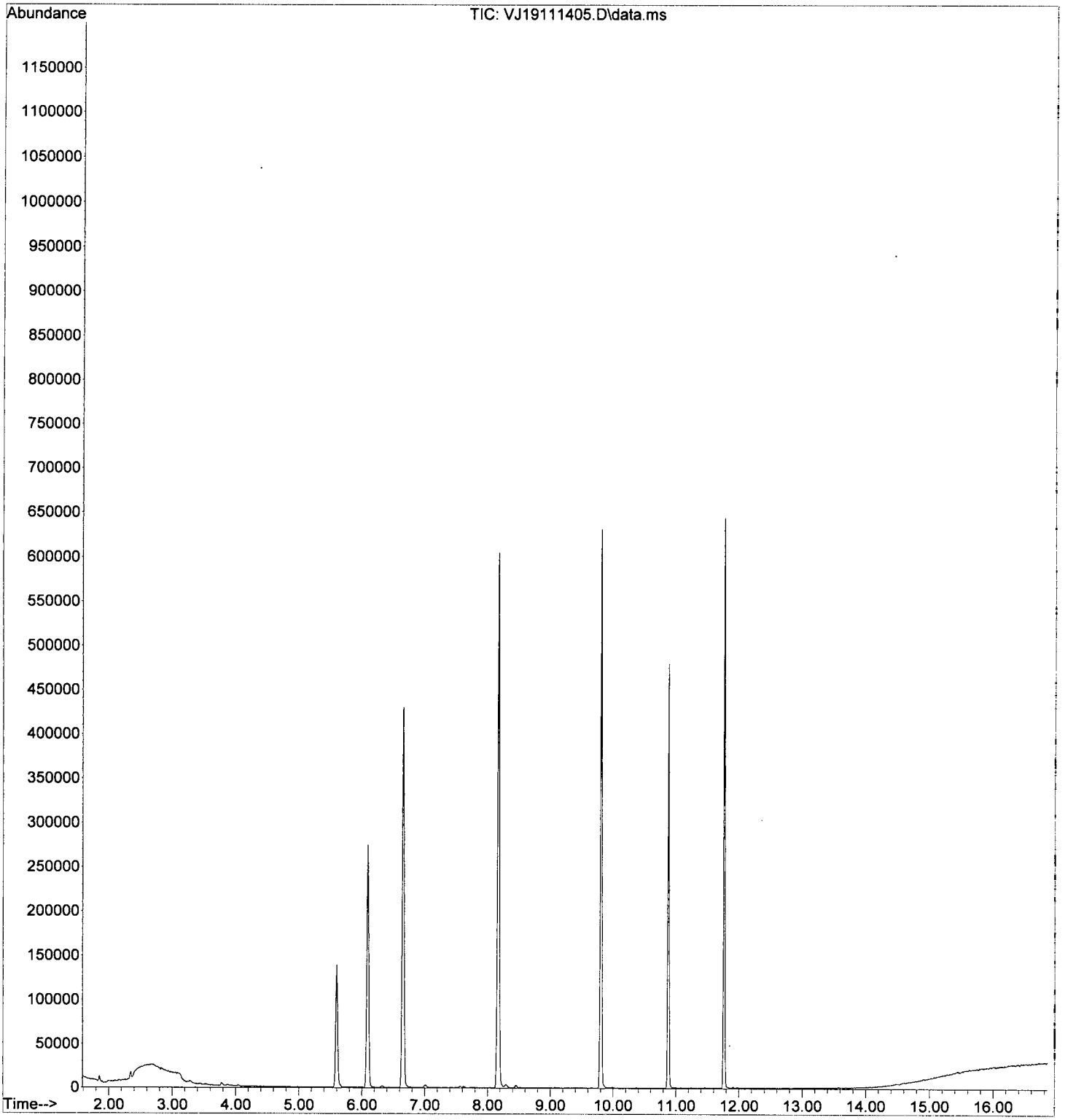
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	120512	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	325895	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	138933	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	96776	50.81	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	363936	49.09	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	451859	49.72	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	97804	48.75	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	1584	0.34	ug/L	<MDL	90
5) Bromomethane	2.348	96	4811	0.84	ug/L		90
6) Chloroethane	2.457	64	175	1.58	ug/L	#	47
8) Ethanol	3.279	45	3667	Below Cal			84
12) Iodomethane	3.297	142	424	0.46	ug/L	#	47
13) Methylene Chloride	3.783	84	1588	Below Cal			86
14) Acetone	3.875	43	2506	1.36	ug/L		95
18) tert-Butanol (TBA)	4.252	59	182	0.19	ug/L	#	1
28) Tetrahydrofuran	5.602	42	466	0.19	ug/L	#	50
32) 2-Butanone (MEK)	5.748	43	686	0.21	ug/L		52
36) iso-Butyl Alcohol	6.326	43	607	1.64	ug/L	#	62

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111405.D
Acq On : 14 Nov 2019 11:34 am
Operator : IMA
Sample : 9110788-BLK1
Misc : 50X 7.5g/5mLx1000uL/50mL DI+MeOH
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 15 10:27:26 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111406.D
Acq On : 14 Nov 2019 12:01 pm
Operator : IMA
Sample : 9110788-RTCHECK
Misc : 50X 5g/5mLx1000uL/50mL VPH+MeOH A19J423
ALS Vial : 6 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:32:36 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

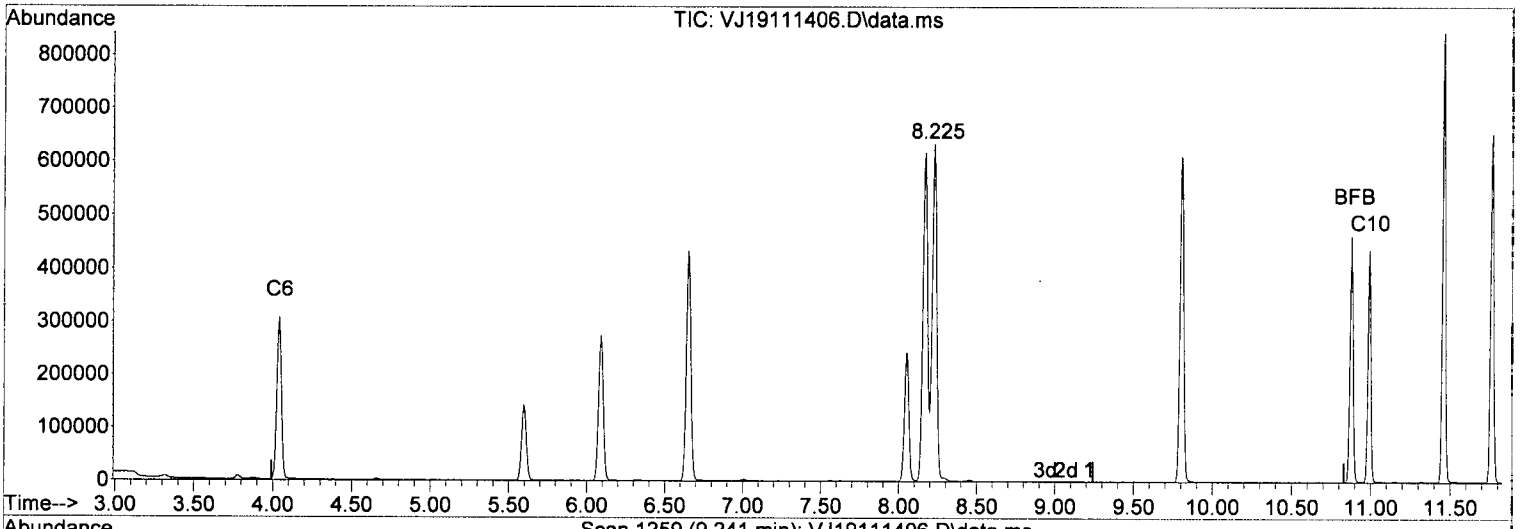
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	180365	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	358999	52.31	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	94380	51.05	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	477047	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	323666	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	214686	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	5196968m	574.92	ug/L	
5) TPHg (C5-C9)	9.239	TIC	3417319m	257.57	ug/L	
6) TPHg (C6-C10)	9.239	TIC	2756755m	249.64	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	5981527m	403.51	ug/L	

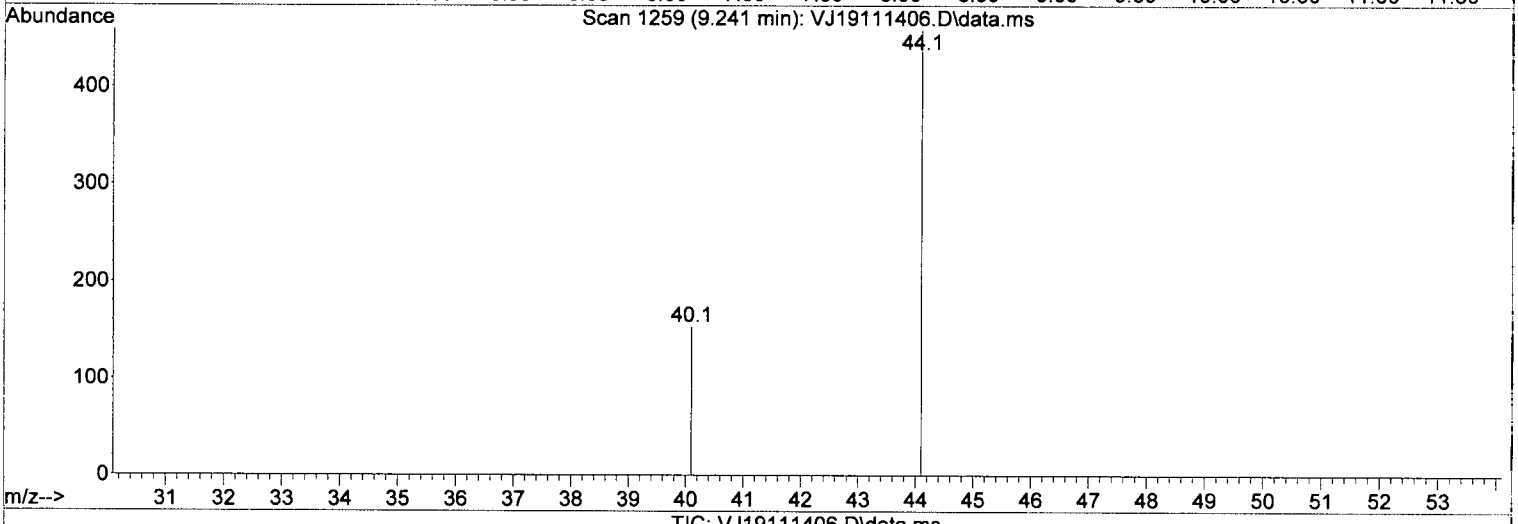
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111406.D
Acq On : 14 Nov 2019 12:01 pm
Operator : IMA
Sample : 9110788-RTCHECK
Misc : 50X 5g/5mLx1000uL/50mL VPH+MeOH A19J423
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 15 10:32:36 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19111406.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 249.64 ug/L m

response 2756755

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.22#
0.00	0.00	1.02#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111406.D
Acq On : 14 Nov 2019 12:01 pm
Operator : IMA
Sample : 9110788-RTCHECK
Misc : 50X 5g/5mLx1000uL/50mL VPH+MeOH A19J423
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 15 10:27:55 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

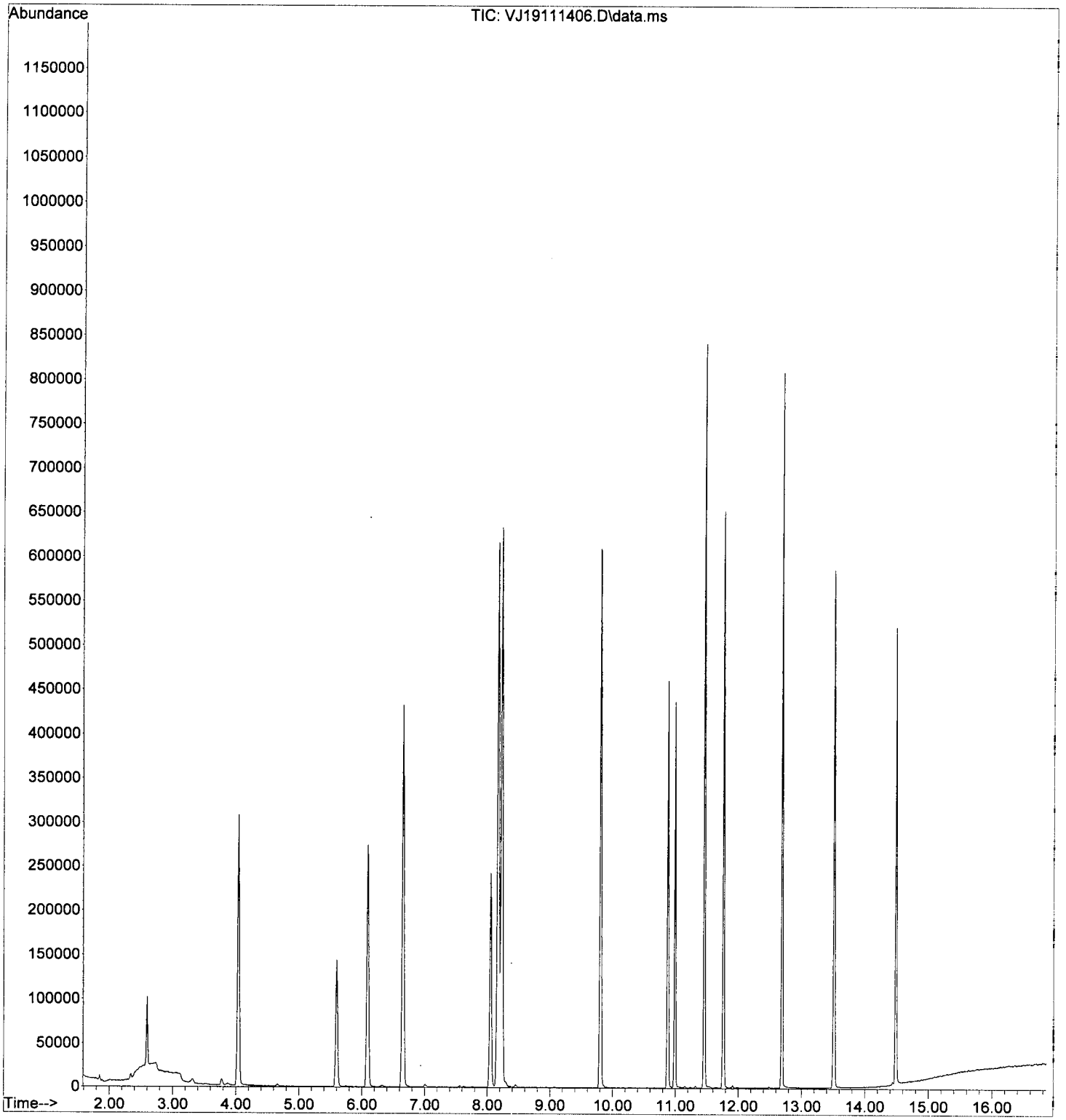
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	118666	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	323666	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	137602	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	97558	52.01	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	358999	49.18	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	477047	52.85	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	94380	47.50	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1246	0.27	ug/L		87
5) Bromomethane	2.342	96	4055	0.34	ug/L		93
6) Chloroethane	2.476	64	189	1.61	ug/L	#	1
8) Ethanol	3.315	45	8541	Below Cal			94
12) Iodomethane	3.291	142	340	0.38	ug/L	#	47
13) Methylene Chloride	3.777	84	1695	Below Cal			84
14) Acetone	3.875	43	2831	1.56	ug/L		87
16) n-Hexane	4.039	86	23941	34.24	ug/L	#	60
28) Tetrahydrofuran	5.596	42	338	0.14	ug/L	#	34
32) 2-Butanone (MEK)	5.736	43	1094	0.34	ug/L		52
36) iso-Butyl Alcohol	6.320	43	744	2.04	ug/L	#	61
46) Toluene	8.225	91	534604	35.34	ug/L		99
67) 1,1,2,2-Tetrachloroethane	10.986	83	2340	0.54	ug/L	#	1
69) 1,3,5-Trimethylbenzene	11.151	105	1072	0.12	ug/L		95
73) tert-Butylbenzene	11.461	91	39663	7.28	ug/L	#	59
74) 1,2,4-Trimethylbenzene	11.461	105	371498	40.04	ug/L		96
75) sec-Butylbenzene	11.461	105	371498	31.63	ug/L		68
84) Naphthalene	13.511	128	382851	37.42	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111406.D
Acq On : 14 Nov 2019 12:01 pm
Operator : IMA
Sample : 9110788-RTCHECK
Misc : 50X 5g/5mLx1000uL/50mL VPH+MeOH A19J423
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 15 10:27:55 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111407.D
Acq On : 14 Nov 2019 12:28 pm
Operator : IMA
Sample : A9K0322-08
Misc : 50X 5g/5mLx1000uL/50mL 8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 11:43:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	172190	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	343178	52.38	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	93737	53.11	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	432239	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	310552	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	207780	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	182079m	24.67	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	459723m	2.33	ug/L	
6) TPHg (C6-C10)	9.239	TIC	416682m	17.92	ug/L	<MDL
7) CA-LUFT (C5-C12)	9.239	TIC	524686m	7.56	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111407.D
Acq On : 14 Nov 2019 12:28 pm
Operator : IMA
Sample : A9K0322-08
Misc : 50X 5g/5mLx1000uL/50mL 8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:27:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

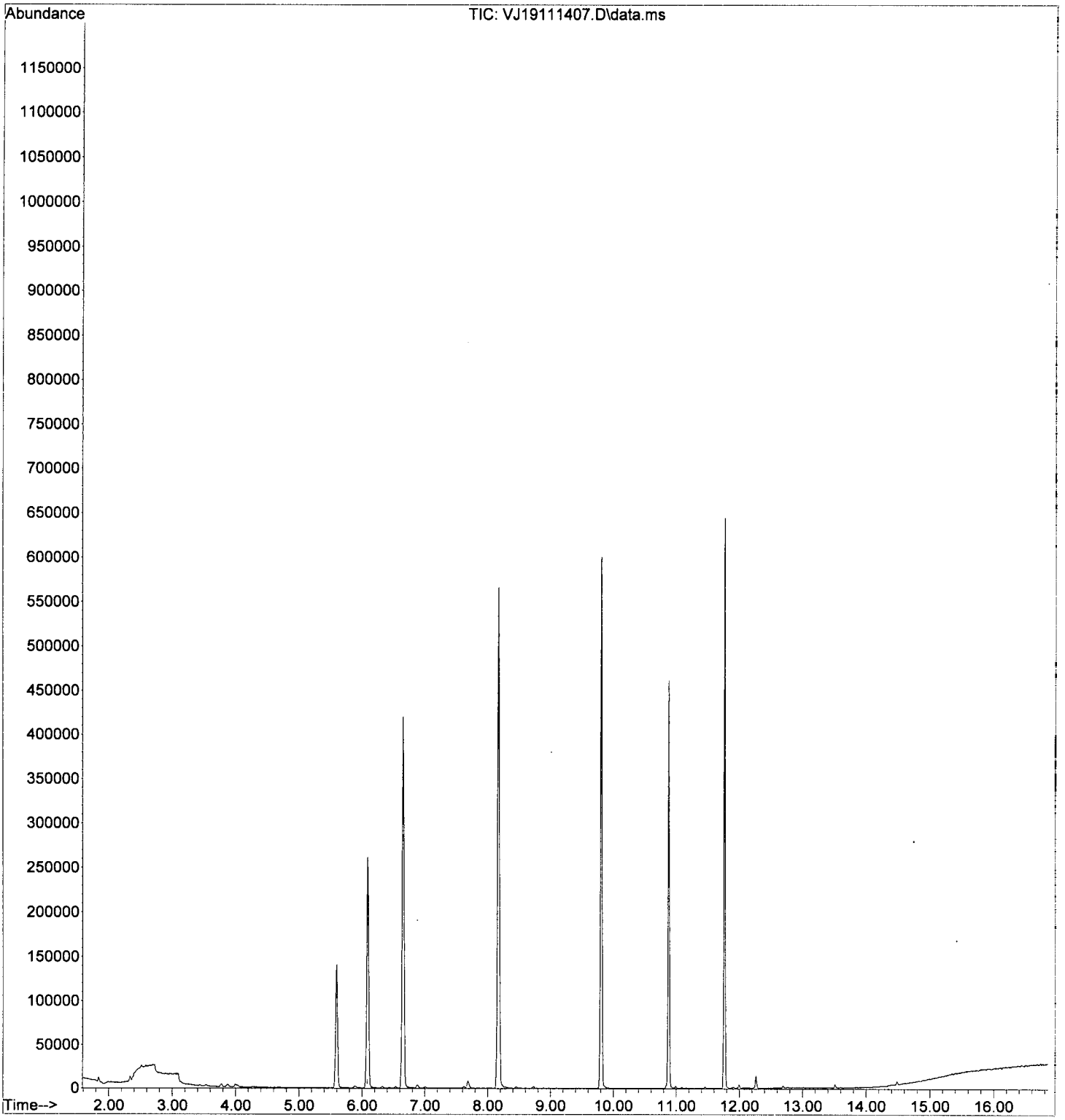
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	114620	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	310552	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	132086	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	95527	52.73	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	342591	48.59	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	431741	49.85	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	93737	49.15	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1056	0.23	ug/L	<MDL	89
5) Bromomethane	2.336	96	3158	Below Cal			94
6) Chloroethane	2.463	64	408	2.09	ug/L	#	52
8) Ethanol	3.297	45	1114	Below Cal		#	29
12) Iodomethane	3.279	142	118	0.14	ug/L	#	47
13) Methylene Chloride	3.777	84	1402	Below Cal			93
14) Acetone	3.875	43	3408	1.95	ug/L		91
18) tert-Butanol (TBA)	4.288	59	996	1.11	ug/L	#	17
28) Tetrahydrofuran	5.590	42	196	0.08	ug/L	#	58
36) iso-Butyl Alcohol	6.314	43	680	1.93	ug/L	#	64
39) tert-Amyl ethyl ether ...	6.874	59	646	0.10	ug/L	#	61
46) Toluene	8.225	91	1245	0.09	ug/L		92
74) 1,2,4-Trimethylbenzene	11.461	105	1125	0.13	ug/L		86
75) sec-Butylbenzene	11.461	105	1125	0.10	ug/L		69
84) Naphthalene	13.511	128	3071	0.31	ug/L		95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111407.D
Acq On : 14 Nov 2019 12:28 pm
Operator : IMA
Sample : A9K0322-08
Misc : 50X 5g/5mLx1000uL/50mL 8260 (QC)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 15 10:27:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111408.D
Acq On : 14 Nov 2019 12:55 pm
Operator : IMA
Sample : 3110788-DUP1
Misc : 50X 5g/5mLx1000uL/50mL (A9K0322-08)
ALS Vial : 8 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 11:44:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	165984	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.649	114	331344	52.47	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.877	174	89102	52.37	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	421073	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	302872	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	199565	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	128626m	19.02	ug/L	<MDL
5) TPHg (C5-C9)	9.239	TIC	414836m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	392380m	16.91	ug/L	<MDL
7) CA-LUFT (C5-C12)	9.239	TIC	443787m	2.62	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111408.D
Acq On : 14 Nov 2019 12:55 pm
Operator : IMA
Sample : 3110788-DUP1
Misc : 50X 5g/5mLx1000uL/50mL (A9K0322-08)
ALS Vial : 8 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:28:01 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	111574	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	302872	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	126354	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	95222	53.99	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	331136	48.24	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	420879	49.83	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	89102	48.84	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.885	50	1137	0.26	ug/L		68
5) Bromomethane	2.336	96	3599	0.17	ug/L		98
6) Chloroethane	2.475	64	127	1.50	ug/L	#	40
8) Ethanol	3.297	45	969	Below Cal		#	29
12) Iodomethane	3.285	142	68	0.08	ug/L	#	47
13) Methylene Chloride	3.771	84	1294	Below Cal			87
14) Acetone	3.863	43	3537	2.08	ug/L		75
18) tert-Butanol (TBA)	4.270	59	1165	1.33	ug/L	#	26
28) Tetrahydrofuran	5.609	42	250	0.11	ug/L	#	30
32) 2-Butanone (MEK)	5.755	43	245	0.08	ug/L		52
36) iso-Butyl Alcohol	6.326	43	613	1.79	ug/L	#	65
39) tert-Amyl ethyl ether ...	6.880	59	715	0.11	ug/L	#	72
84) Naphthalene	13.511	128	990	0.11	ug/L		79

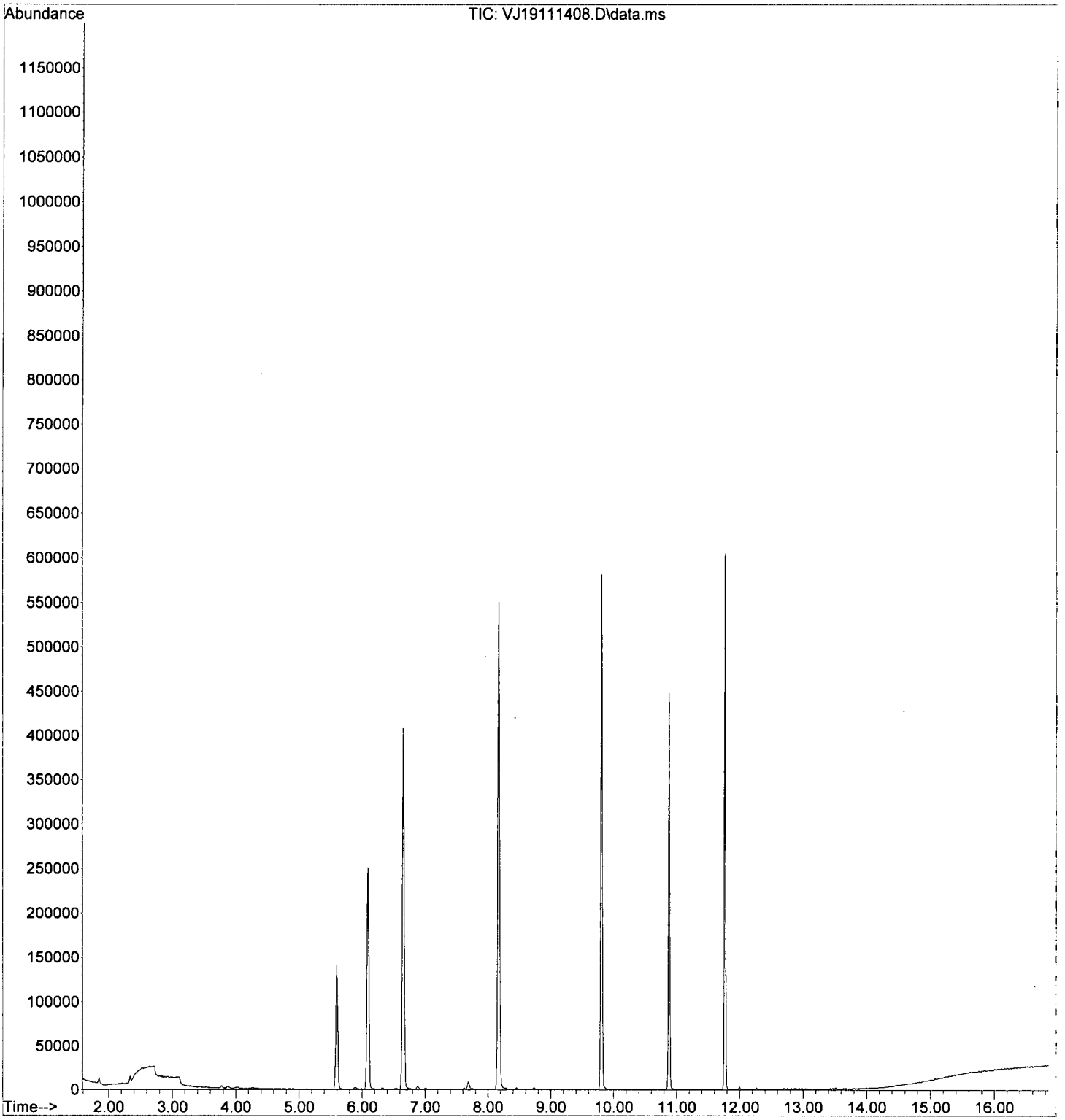
CMDL

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111408.D
Acq On : 14 Nov 2019 12:55 pm
Operator : IMA
Sample : 3110788-DUP1
Misc : 50X 5g/5mLx1000uL/50mL (A9K0322-08)
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 15 10:28:01 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111409.D
Acq On : 14 Nov 2019 1:22 pm
Operator : IMA
Sample : A9K0322-09
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 9 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:28:04 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

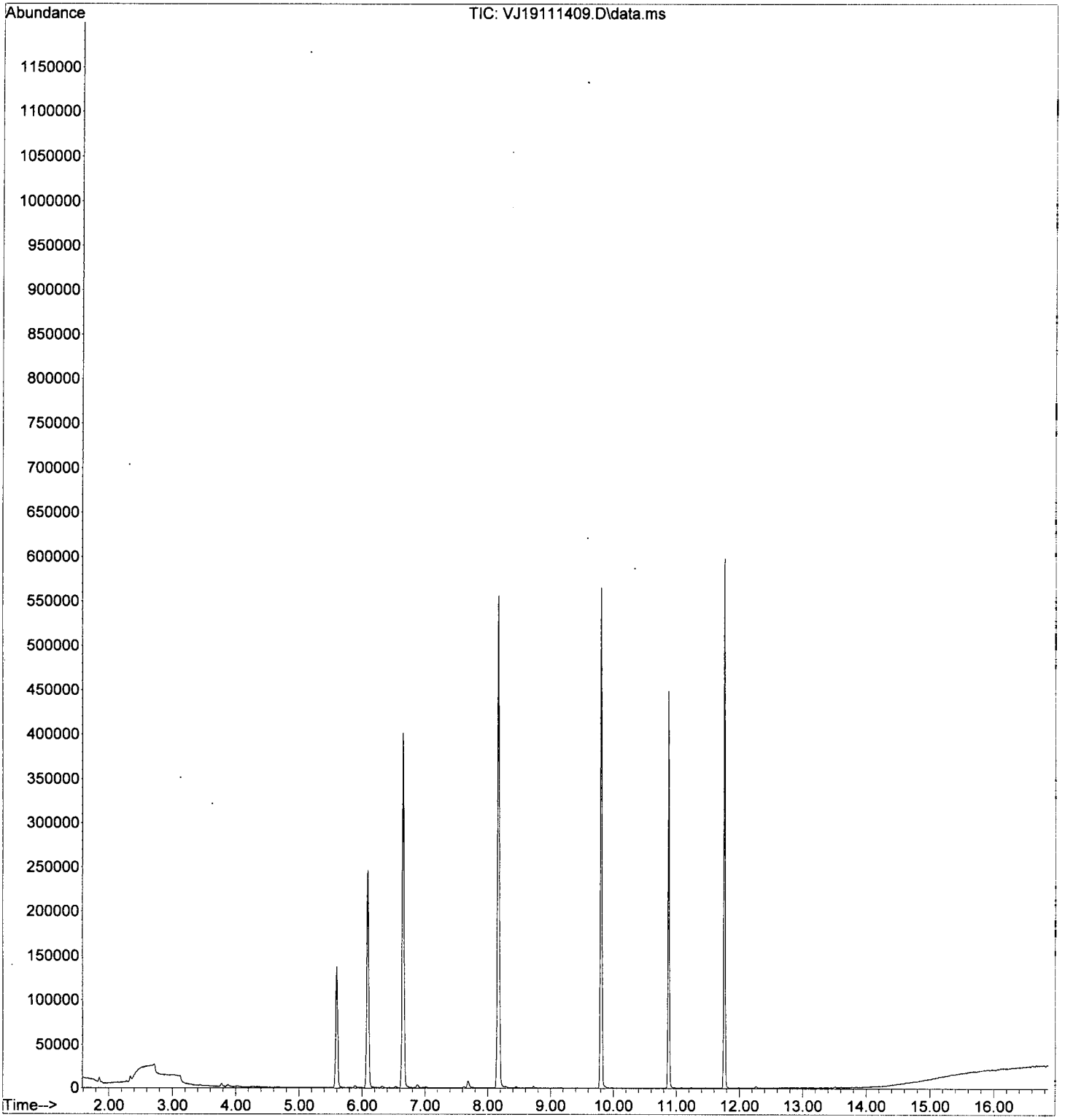
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	109599	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	296077	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	125496	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	93623	54.04	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.649	114	327075	48.51	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	416047	50.39	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	88845	49.03	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	946	0.22	ug/L	<MDL	92
5) Bromomethane	2.342	96	3197	Below Cal			90
6) Chloroethane	2.476	64	261	1.80	ug/L	#	44
8) Ethanol	3.339	45	62	Below Cal		#	29
13) Methylene Chloride	3.777	84	1585	Below Cal			83
14) Acetone	3.881	43	2474	1.48	ug/L		99
18) tert-Butanol (TBA)	4.258	59	872	1.01	ug/L	#	38
28) Tetrahydrofuran	5.596	42	264	0.12	ug/L	#	30
36) iso-Butyl Alcohol	6.314	43	644	1.91	ug/L		83
39) tert-Amyl ethyl ether ...	6.880	59	621	0.10	ug/L	#	64
84) Naphthalene	13.511	128	1566	0.17	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111409.D
Acq On : 14 Nov 2019 1:22 pm
Operator : IMA
Sample : A9K0322-09
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 15 10:28:04 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111410.D
Acq On : 14 Nov 2019 1:49 pm
Operator : IMA
Sample : A9K0322-10
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 10 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:28:07 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

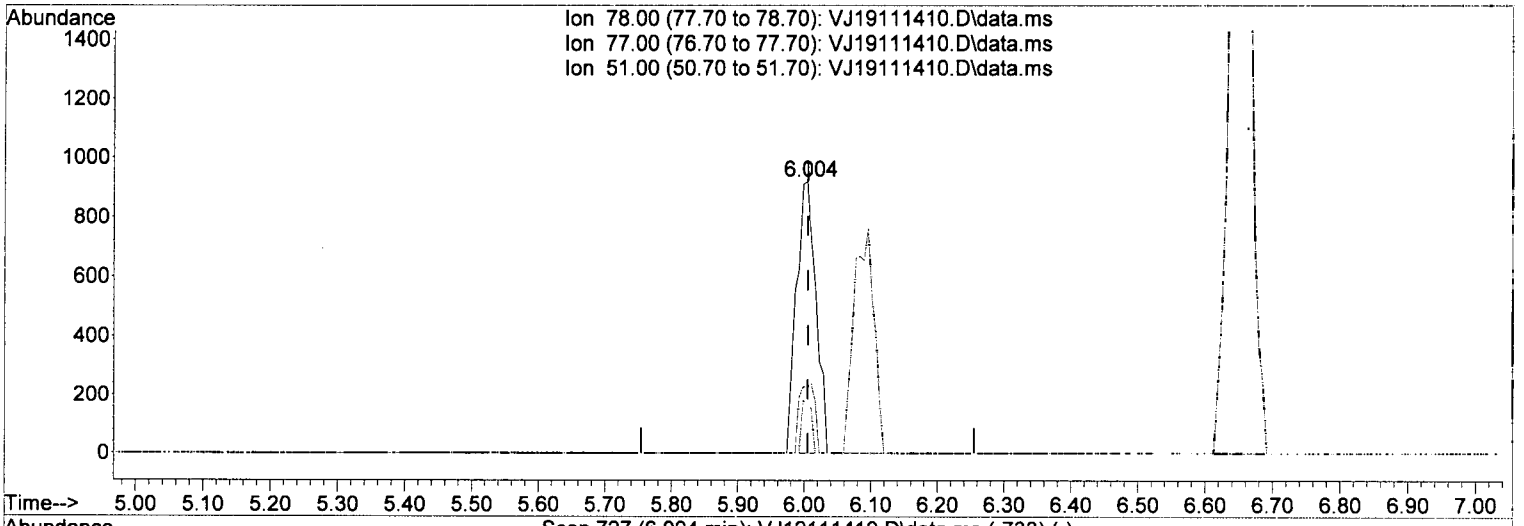
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	103565	50.00	ug/L	#	0.00
43) Chlorobenzene-d5 (I)	9.806	117	274558	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	115552	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	91017	55.60	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	301773	47.36	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	386999	50.54	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	82435	49.41	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.891	50	972	0.24	ug/L	<MDL	92
5) Bromomethane	2.342	96	3009	Below Cal			98
6) Chloroethane	2.463	64	126	1.52	ug/L	#	1
8) Ethanol	3.297	45	896	Below Cal		#	29
13) Methylene Chloride	3.783	84	1359	Below Cal			97
14) Acetone	3.887	43	3288	2.08	ug/L		99
18) tert-Butanol (TBA)	4.282	59	860	1.06	ug/L	#	15
33) Benzene	6.004	78	1874	0.14	ug/L		98
36) iso-Butyl Alcohol	6.320	43	563	1.77	ug/L	<MDL	72
39) tert-Amyl ethyl ether ...	6.880	59	596	0.10	ug/L	#	71
58) m,p-Xylenes (2)	9.995	91	776	0.09	ug/L		77
59) o-Xylene	10.366	91	1256	0.15	ug/L		78
62) Isopropylbenzene	10.652	105	1296	0.13	ug/L		87
69) 1,3,5-Trimethylbenzene	11.151	105	1146	0.15	ug/L		91
72) 4-Chlorotoluene	11.315	91	959	0.13	ug/L	#	40
74) 1,2,4-Trimethylbenzene	11.455	105	1514	0.19	ug/L		80
75) sec-Butylbenzene	11.540	105	794	0.08	ug/L	#	42
79) n-Butylbenzene	11.978	91	1030	0.14	ug/L		71
84) Naphthalene	13.511	128	8976	1.04	ug/L		86

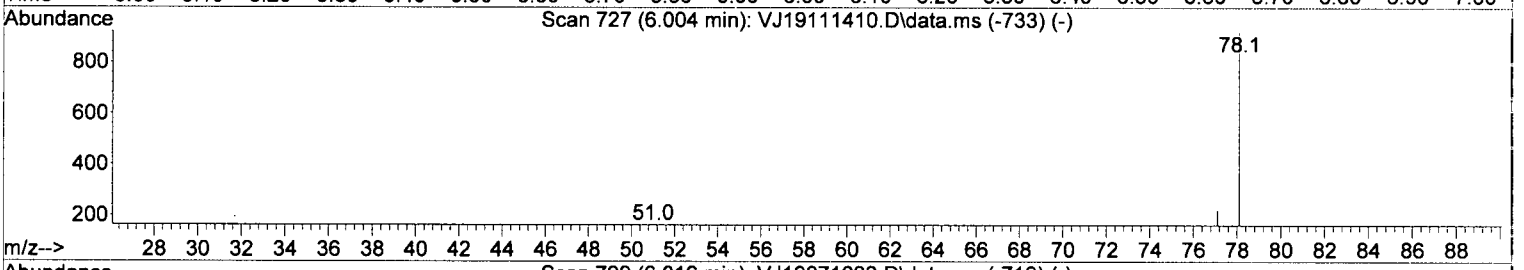
(#) = qualifier out of range (m) = manual integration (+) = signals summed

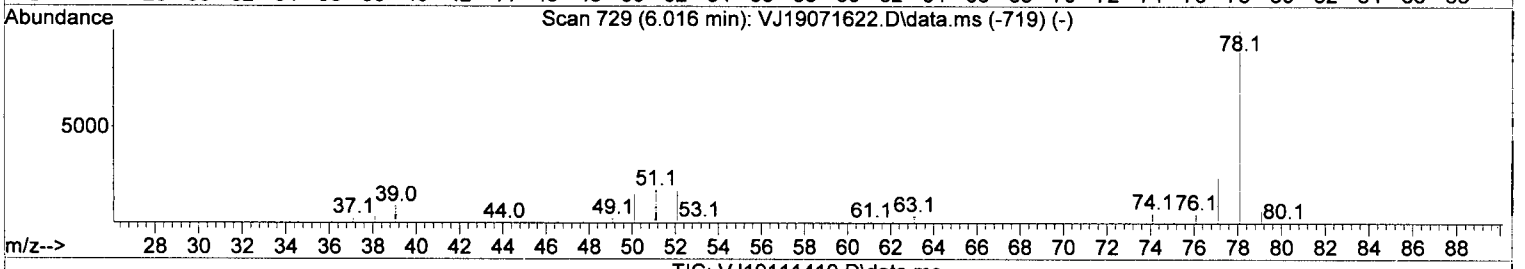
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111410.D
Acq On : 14 Nov 2019 1:49 pm
Operator : IMA
Sample : A9K0322-10
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 15 10:28:07 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111410.D\data.ms

(33) Benzene

6.004min (-0.000) 0.14 ug/L

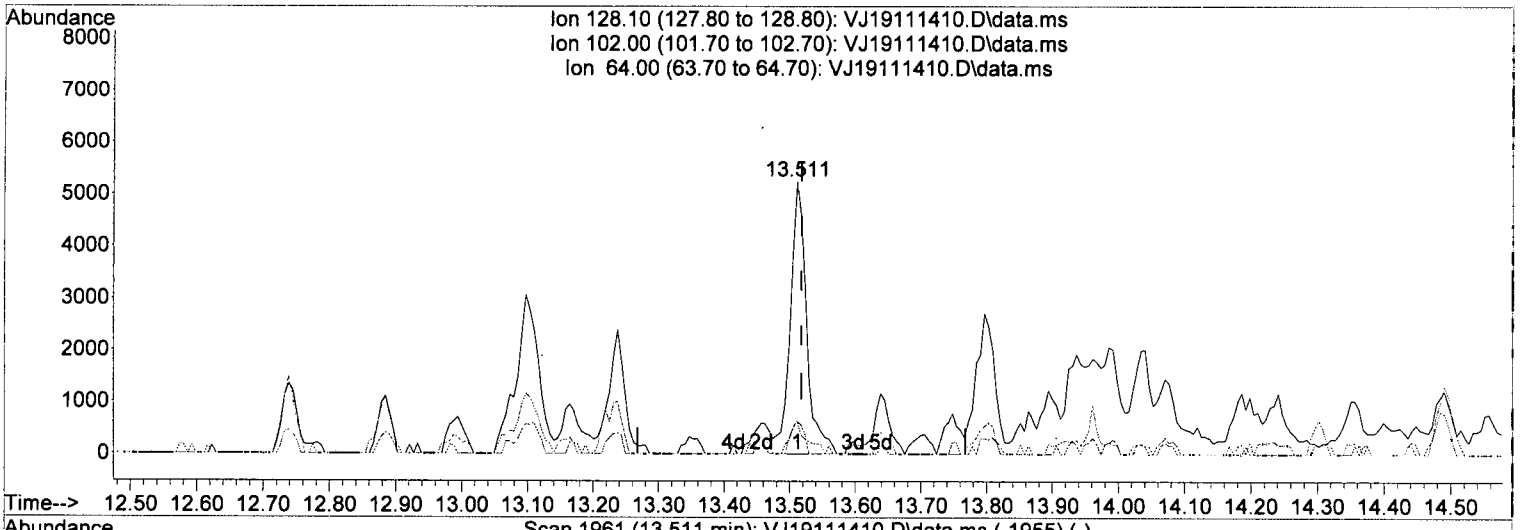
response 1874

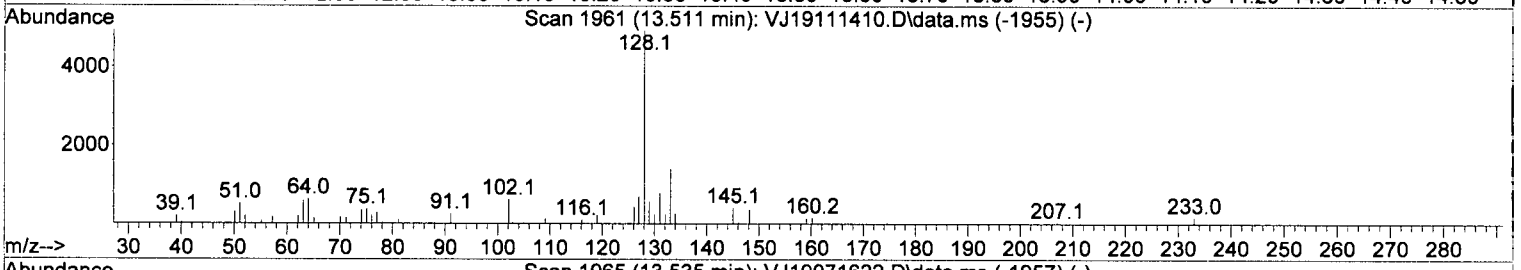
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	24.21
51.00	16.20	17.92
0.00	0.00	0.00

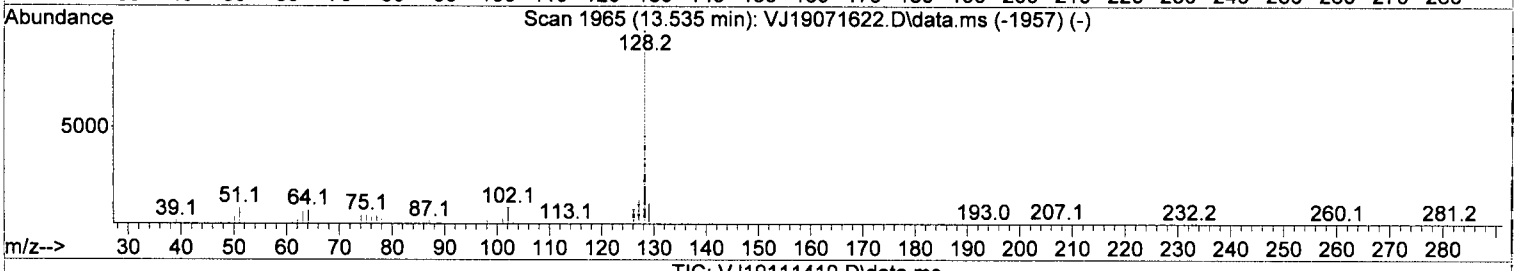
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111410.D
Acq On : 14 Nov 2019 1:49 pm
Operator : IMA
Sample : A9K0322-10
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 15 10:28:07 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111410.D\data.ms

(84) Naphthalene

13.511min (-0.006) 1.04 ug/L

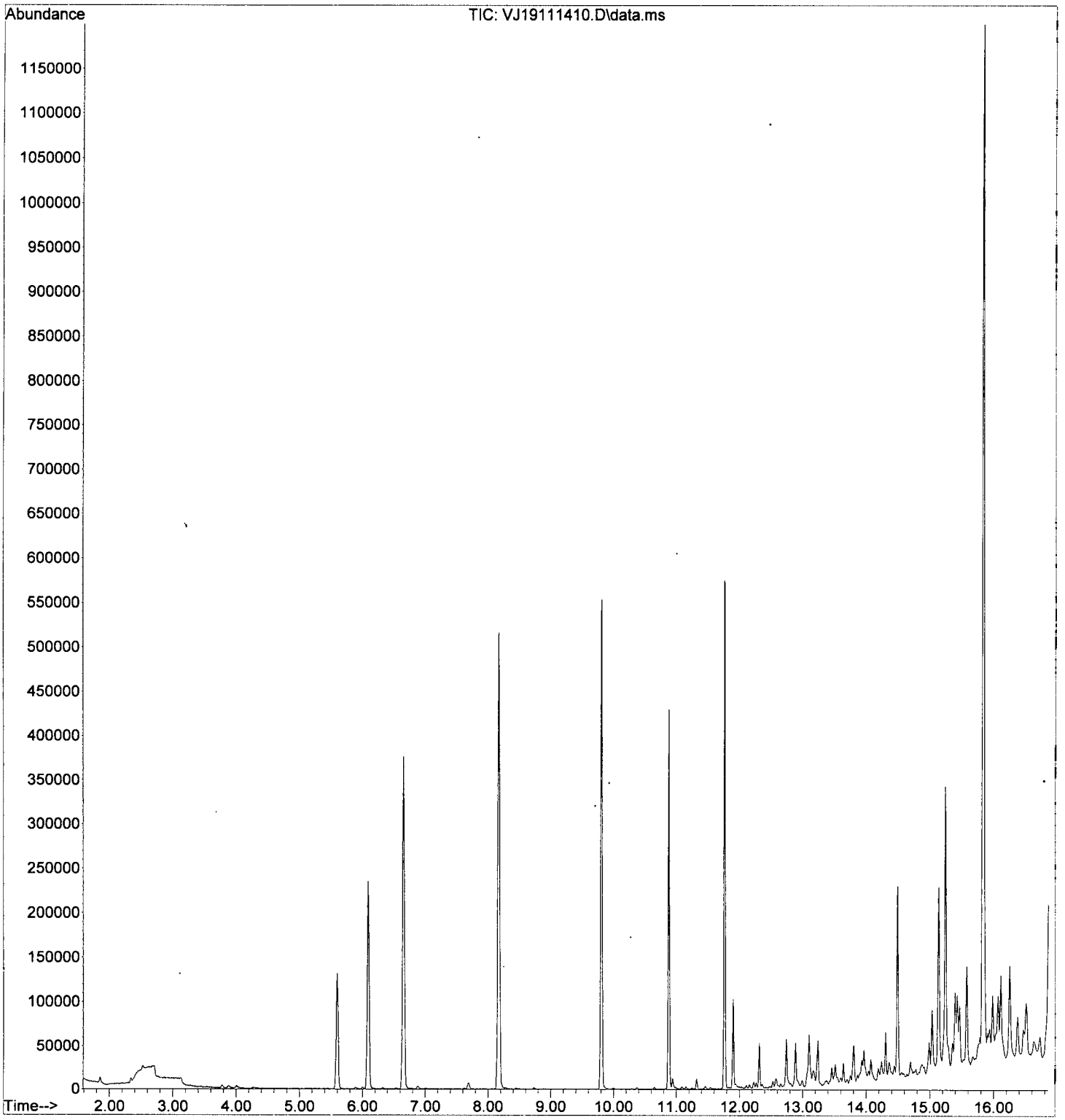
response 8976

Ion	Exp%	Act%
128.10	100.00	100.00
102.00	7.90	11.86
64.00	6.30	12.12
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111410.D
Acq On : 14 Nov 2019 1:49 pm
Operator : IMA
Sample : A9K0322-10
Misc : 50X 5g/5mLx1000uL/50mL 8260
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 15 10:28:07 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

IMA
11/15/19

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

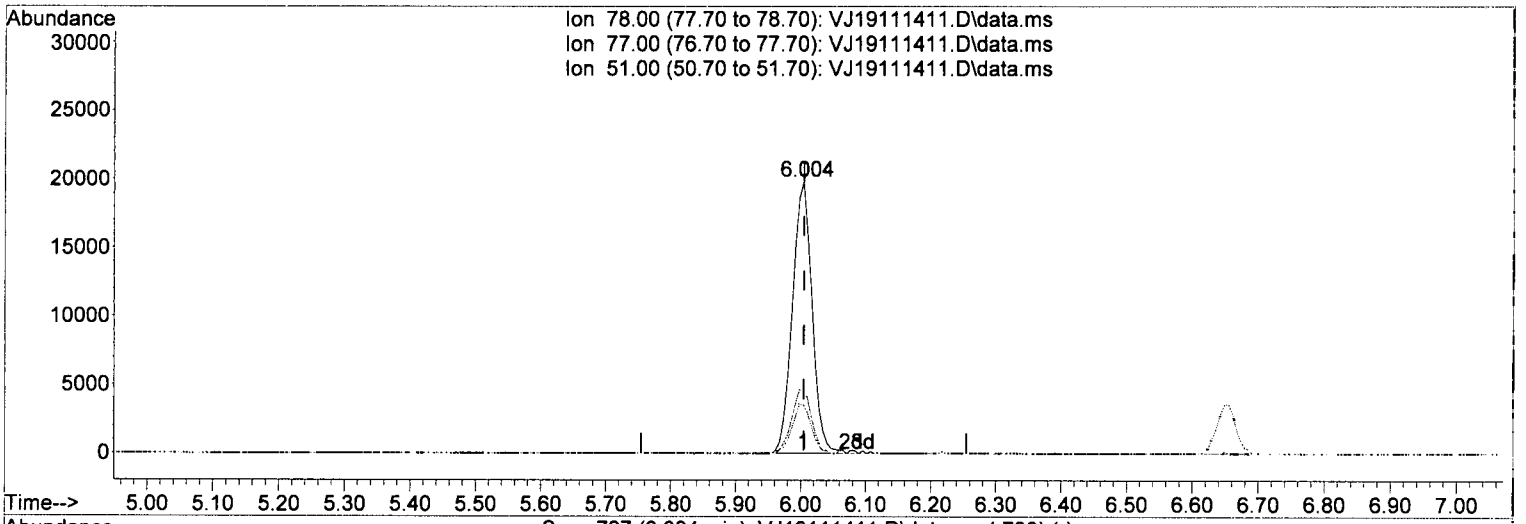
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	113971	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	311668	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	132461	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.596	111	91850	50.99 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	335564	47.86 ug/L		0.00
45) Toluene-d8 (S)	8.170	98	427012	49.13 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.877	174	95133	49.74 ug/L		0.00
Target Compounds						Qvalue
3) Chloromethane	1.898	50	1001	0.22 ug/L		87
6) Chloroethane	2.463	64	201	1.65 ug/L	#	33
8) Ethanol	3.309	45	8125	Below Cal		91
13) Methylene Chloride	3.777	84	1402	Below Cal		85
14) Acetone	3.875	43	2506	1.44 ug/L		90
28) Tetrahydrofuran	5.603	42	373	0.16 ug/L	#	67
32) 2-Butanone (MEK)	5.749	43	887	0.29 ug/L		52
33) Benzene	6.004	78	41536	2.84 ug/L		97
36) iso-Butyl Alcohol	6.327	43	779	2.22 ug/L		66
46) Toluene	8.225	91	11962	0.82 ug/L		93
56) Ethylbenzene	9.855	91	40290	2.85 ug/L		99
58) m,p-Xylenes (2)	9.995	91	40267	4.00 ug/L		94
59) o-Xylene	10.372	91	16182	1.68 ug/L		92
60) Styrene	10.427	104	231	0.20 ug/L	#	46
62) Isopropylbenzene	10.646	105	4322	0.37 ug/L		95
66) n-Propylbenzene	10.999	91	1379	0.10 ug/L		84
69) 1,3,5-Trimethylbenzene	11.151	105	7104	0.80 ug/L		99
73) tert-Butylbenzene	11.400	91	750	0.14 ug/L	#	54
74) 1,2,4-Trimethylbenzene	11.461	105	16808	1.88 ug/L		94
75) sec-Butylbenzene	11.546	105	13041	1.15 ug/L		94
76) 4-Isopropyltoluene	11.650	119	898	0.10 ug/L		54
84) Naphthalene	13.511	128	5864450	595.41 ug/L		96 RR2
85) 1,2,3-Trichlorobenzene	13.724	180	2647	0.99 ug/L	#	26

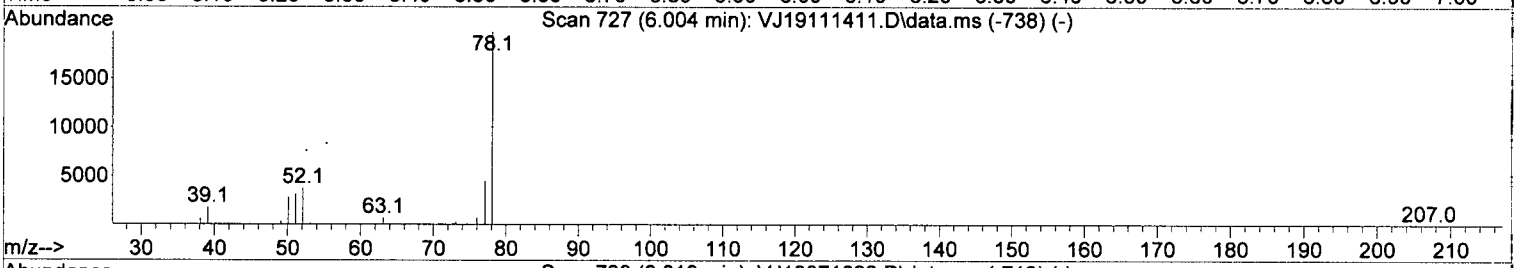
(#) = qualifier out of range (m) = manual integration (+) = signals summed

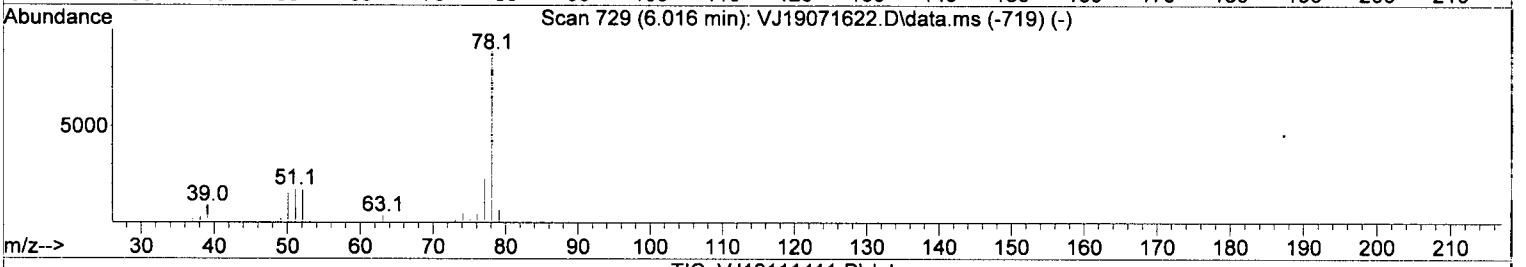
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(33) Benzene

6.004min (-0.000) 2.84 ug/L

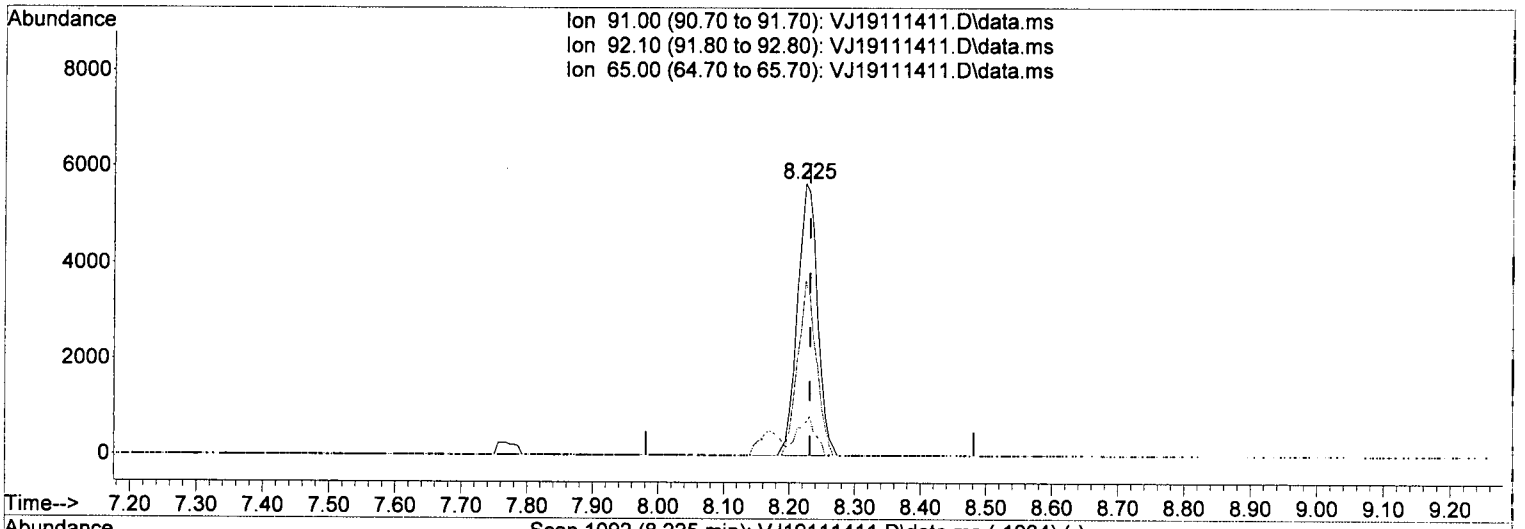
response 41536

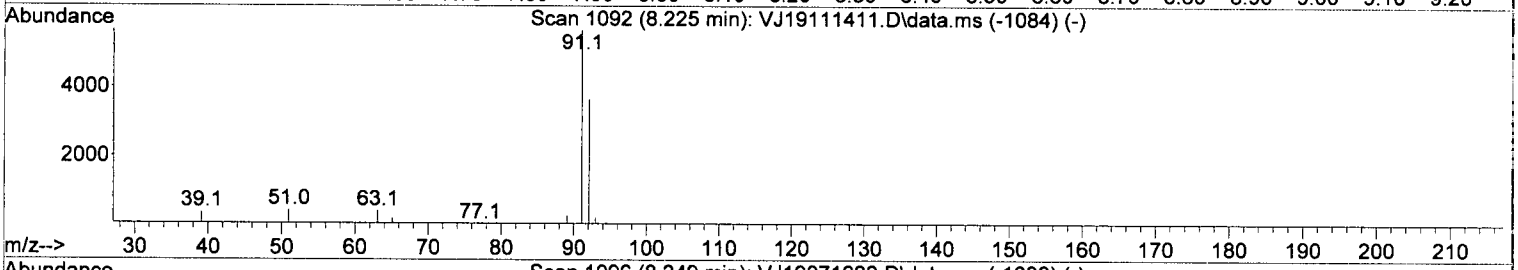
Ion	Exp%	Act%
78.00	100.00	100.00
77.00	23.60	22.73
51.00	16.20	17.96
0.00	0.00	0.00

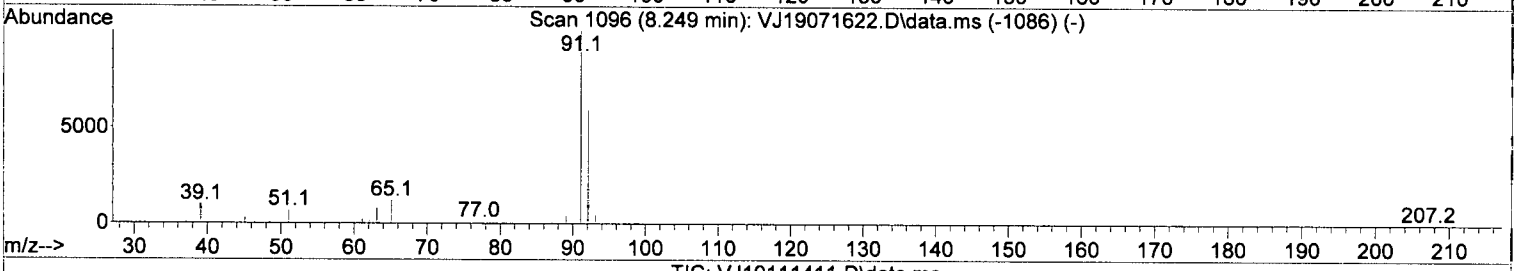
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(46) Toluene (C)

8.225min (-0.006) 0.82 ug/L

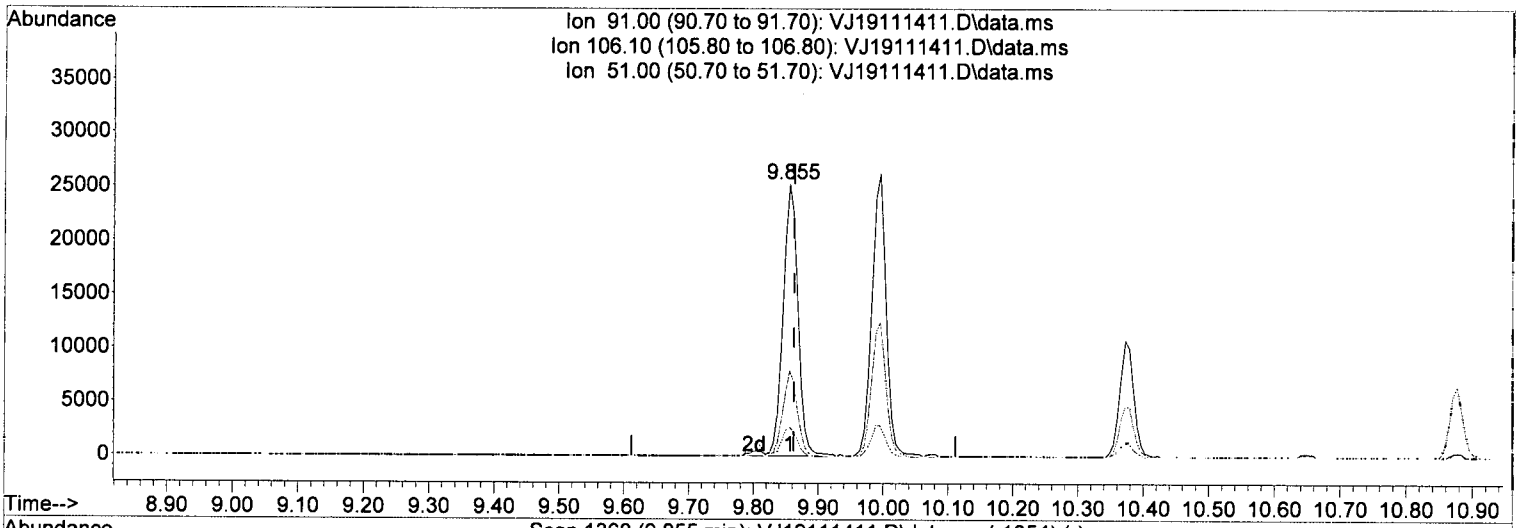
response 11962

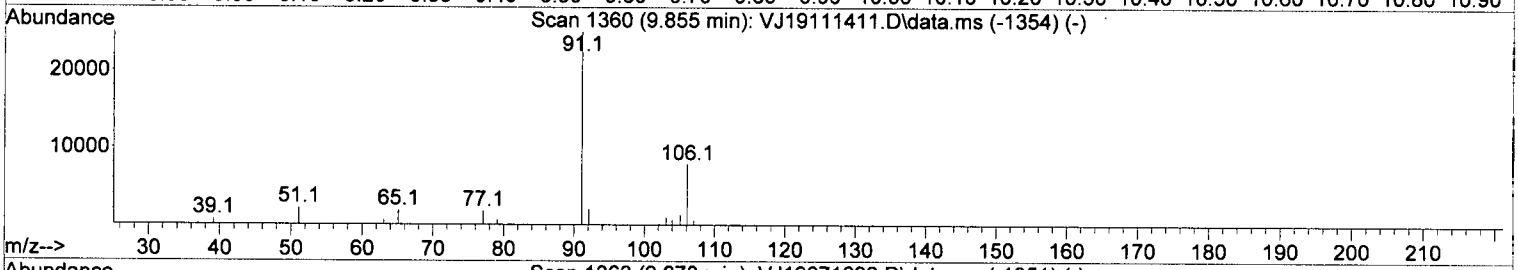
Ion	Exp%	Act%
91.00	100.00	100.00
92.10	58.30	64.52
65.00	11.00	12.00
0.00	0.00	0.00

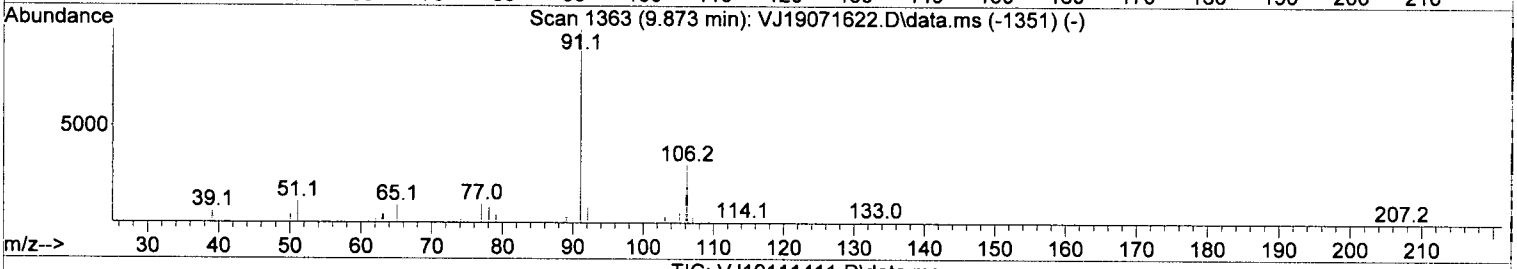
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(56) Ethylbenzene (C)

9.855min (-0.006) 2.85 ug/L

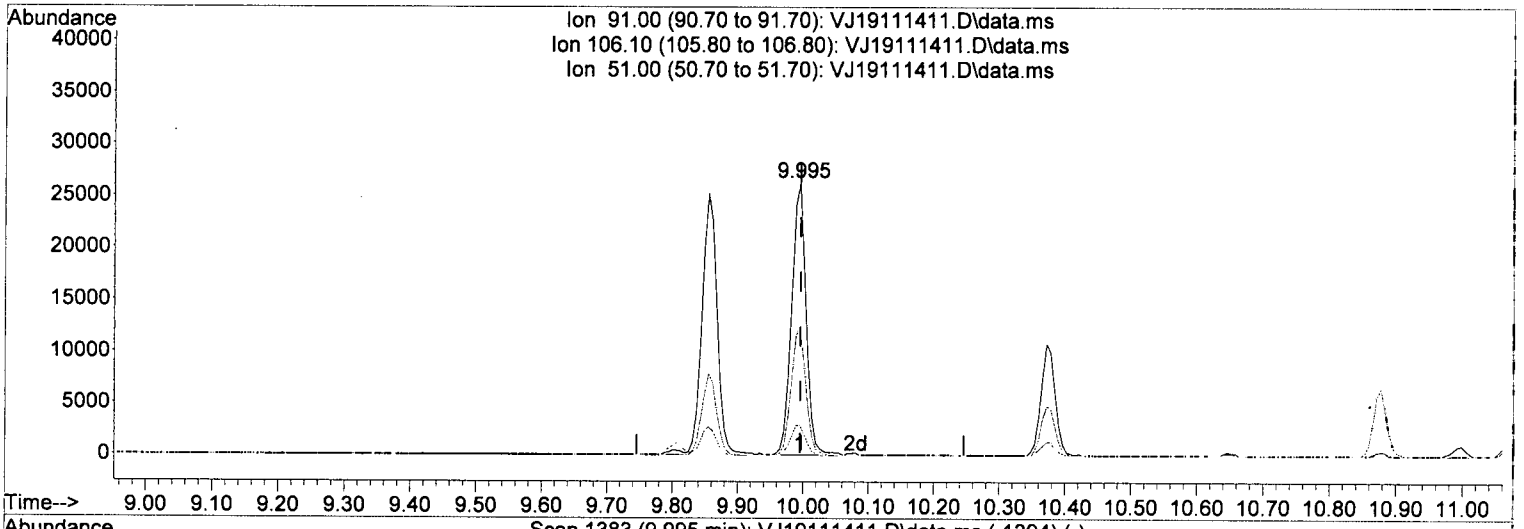
response 40290

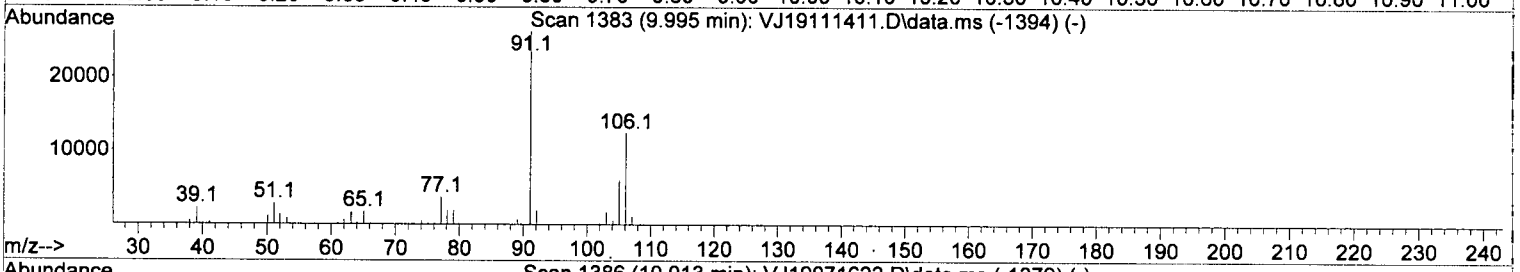
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	31.80	31.27
51.00	9.80	10.82
0.00	0.00	0.00

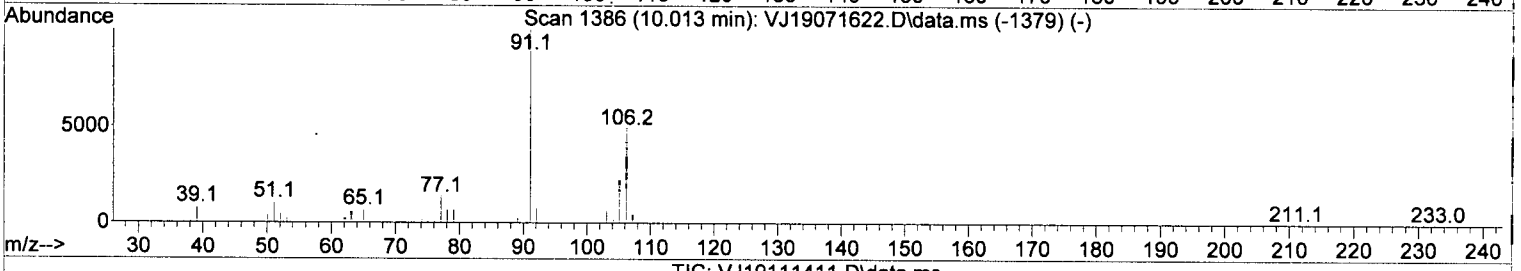
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(58) m,p-Xylenes (2)

9.995min (-0.000) 4.00 ug/L

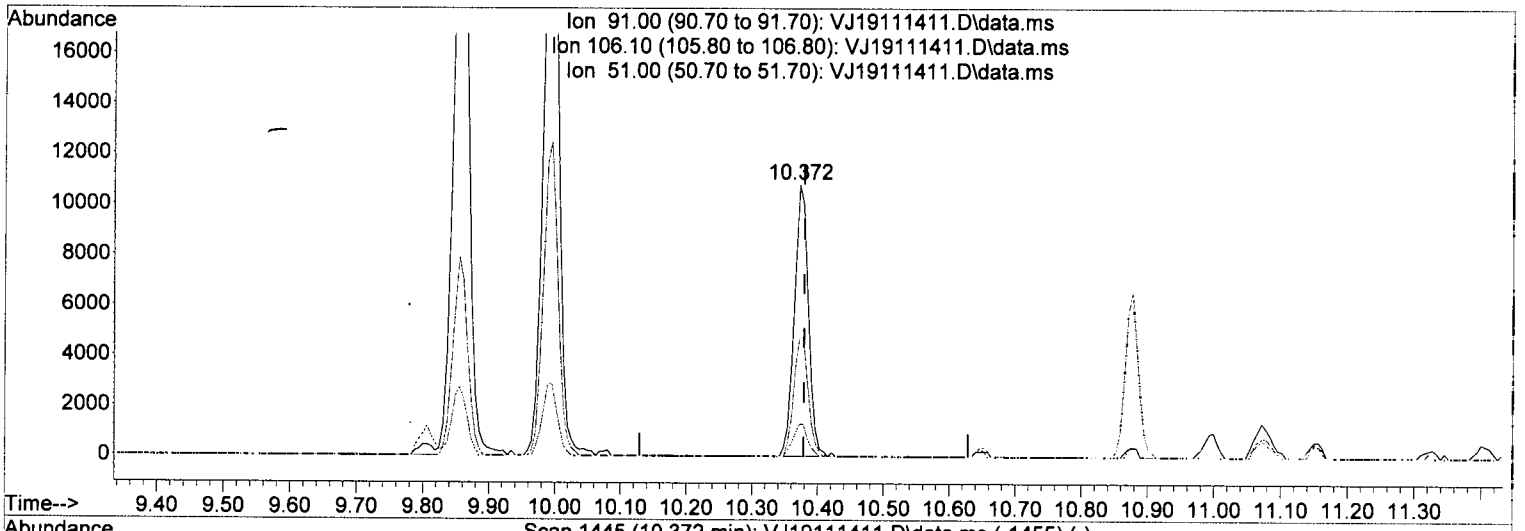
response 40267

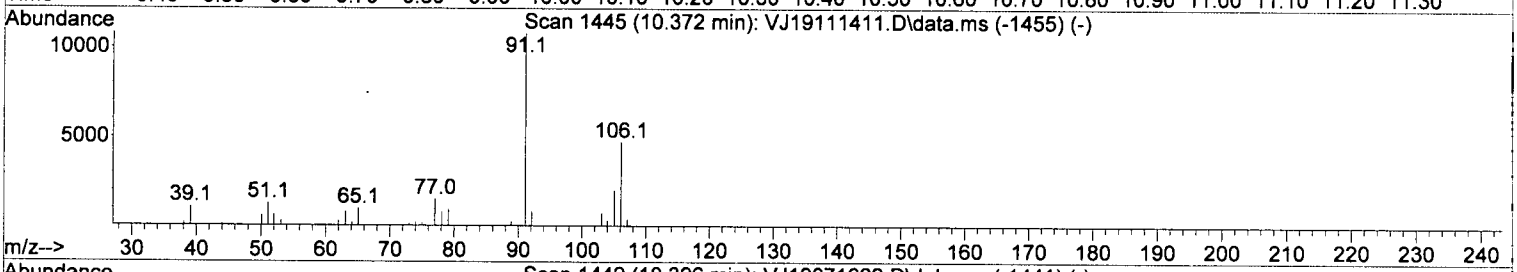
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	51.80	47.44
51.00	9.80	11.02
0.00	0.00	0.00

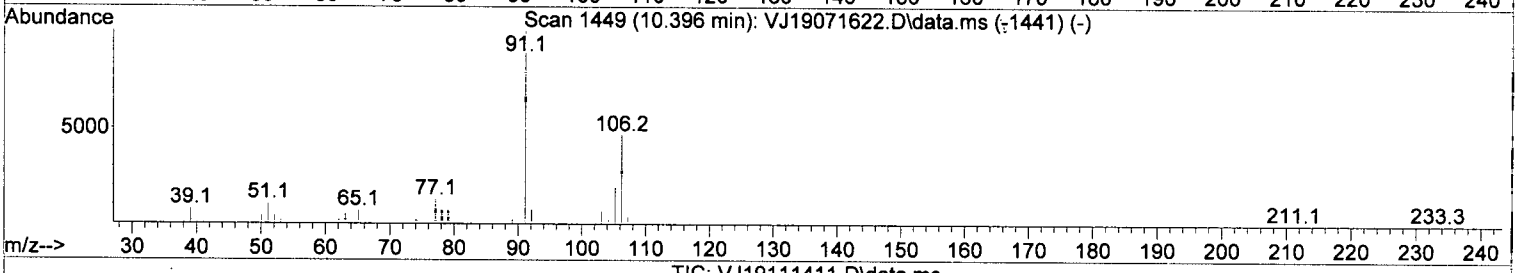
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(59) o-Xylene

10.372min (-0.006) 1.68 ug/L

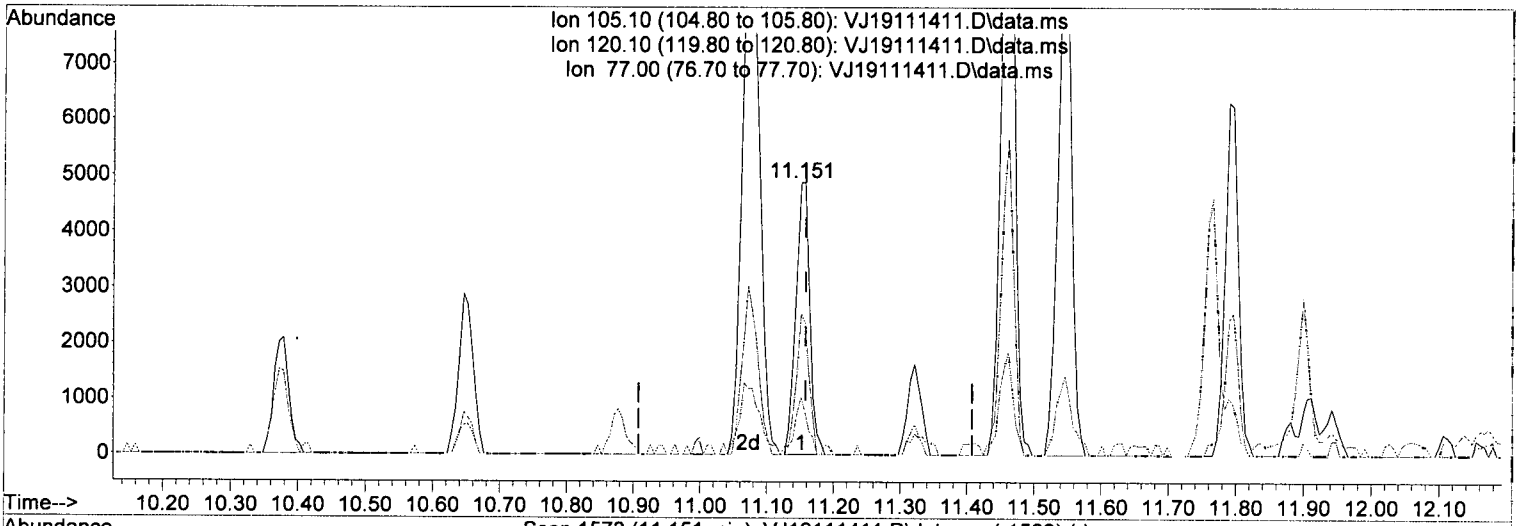
response 16182

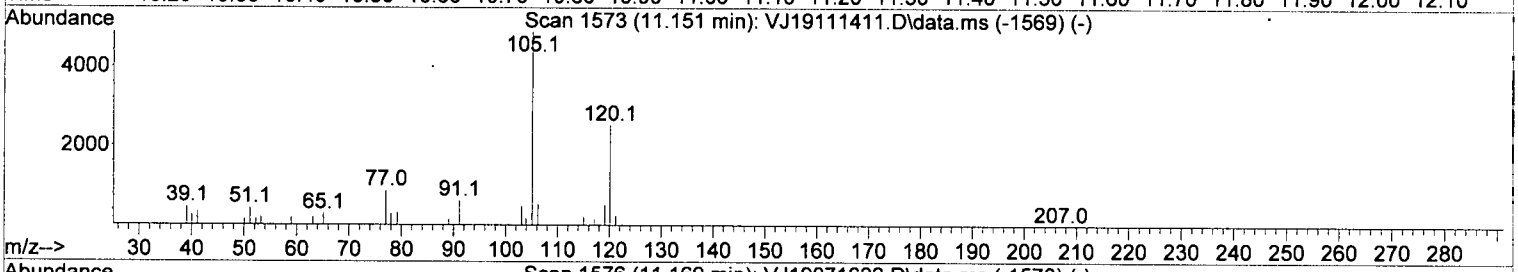
Ion	Exp%	Act%
91.00	100.00	100.00
106.10	49.80	43.87
51.00	9.70	11.91
0.00	0.00	0.00

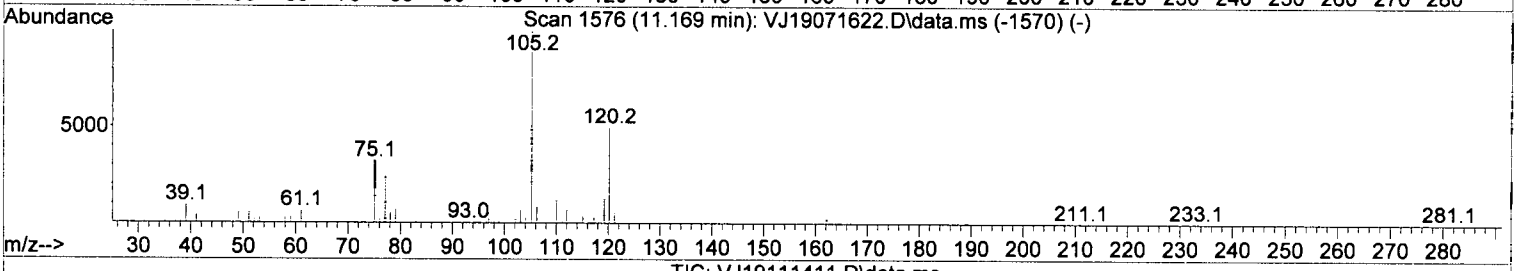
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(69) 1,3,5-Trimethylbenzene

11.151min (-0.006) 0.80 ug/L

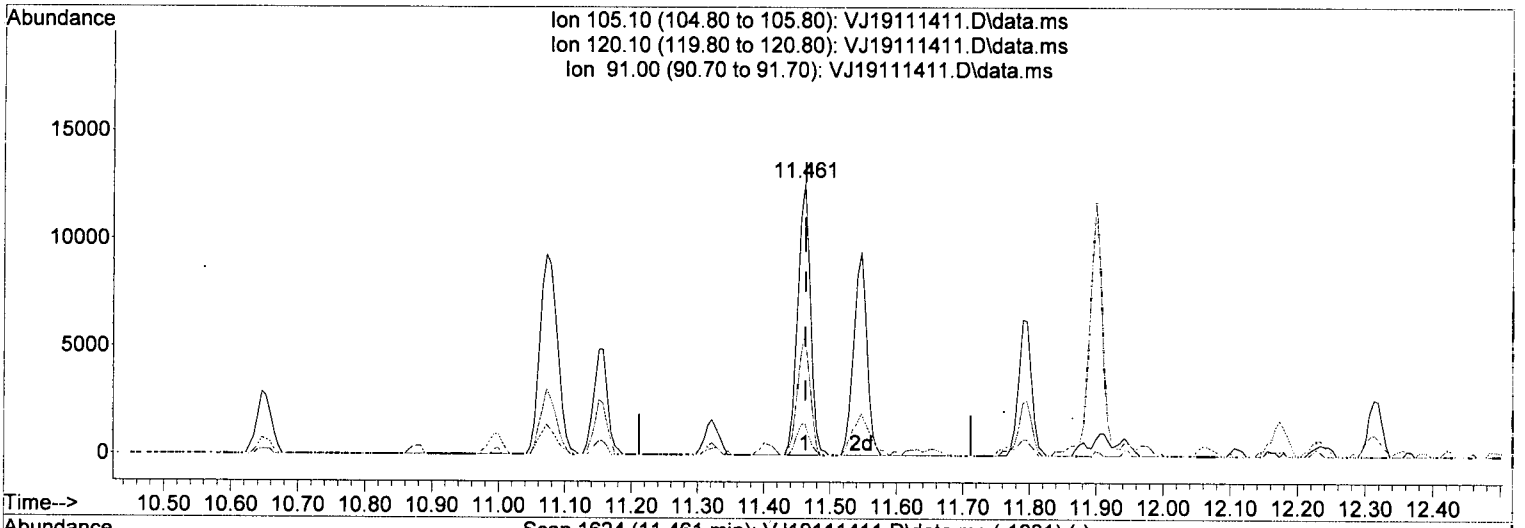
response 7104

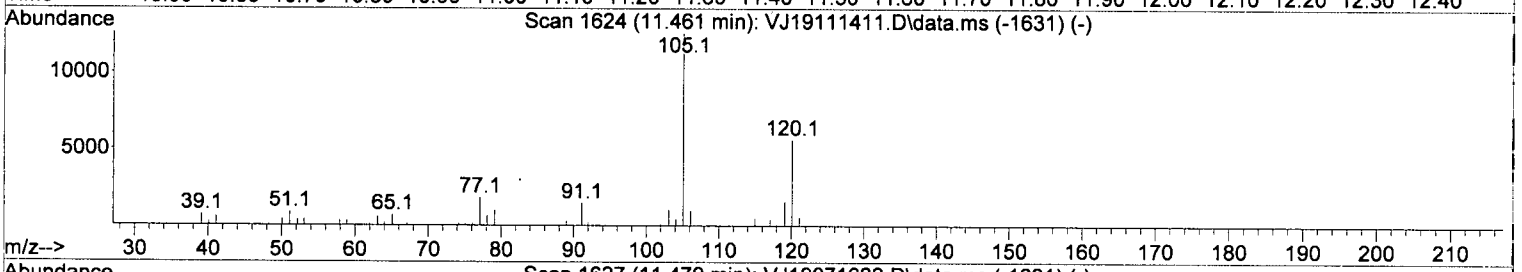
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	52.80	52.10
77.00	19.20	18.07
0.00	0.00	0.00

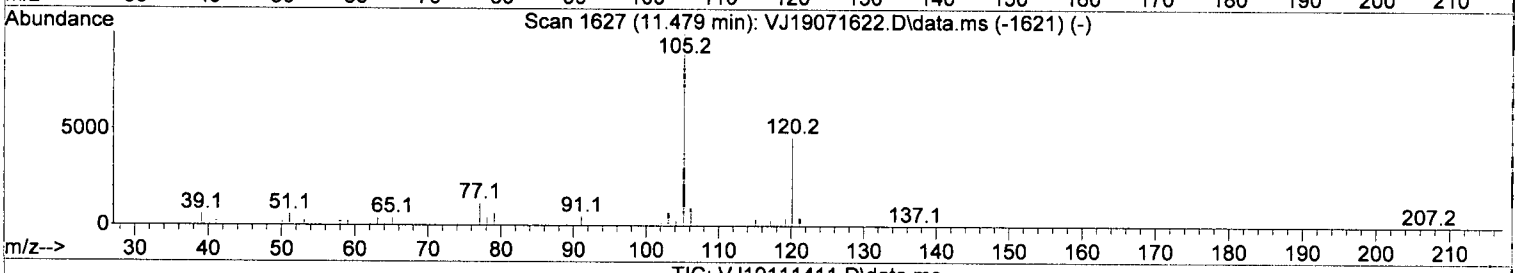
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(74) 1,2,4-Trimethylbenzene

11.461min (-0.000) 1.88 ug/L

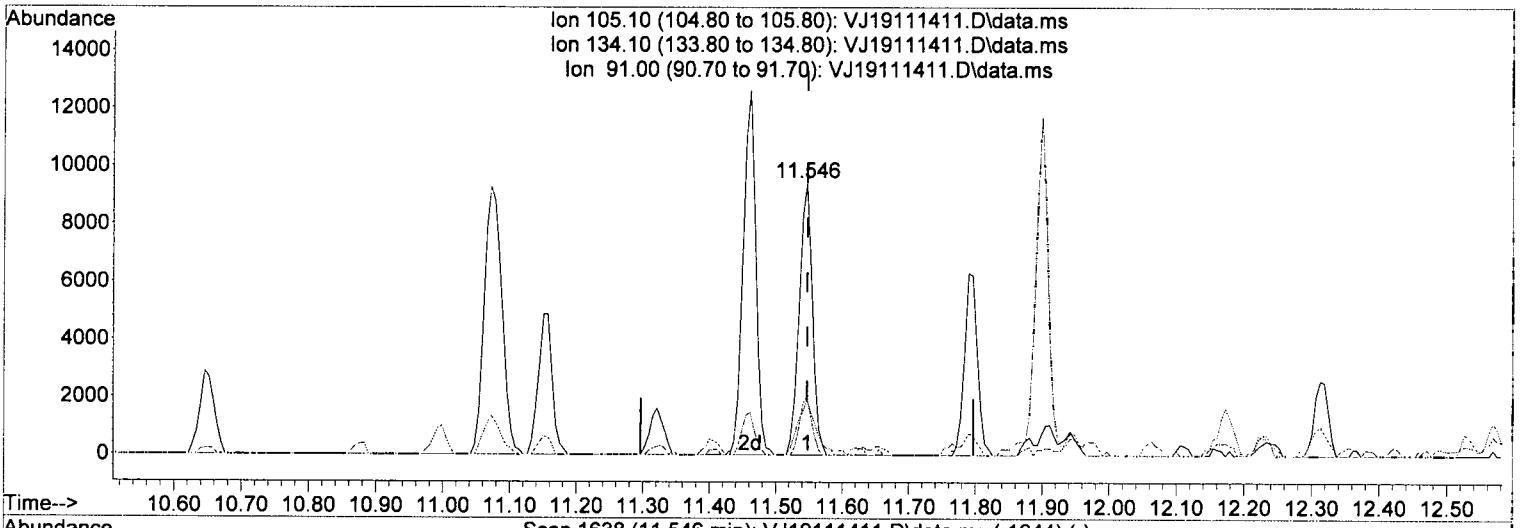
response 16808

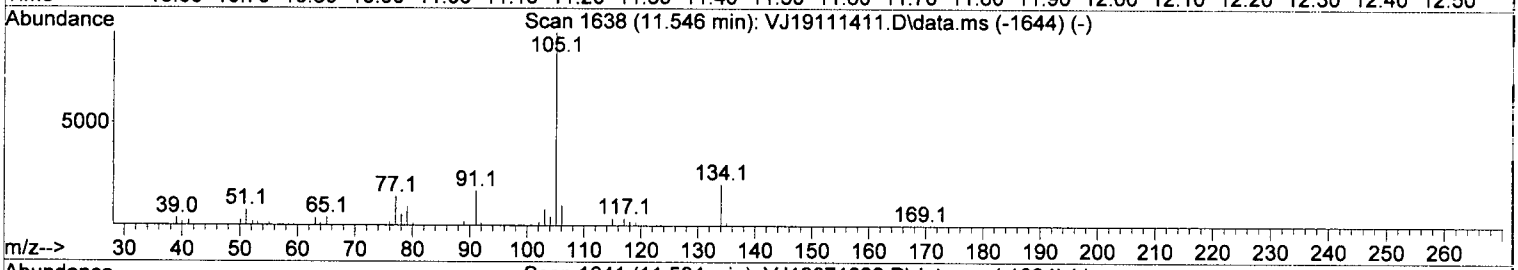
Ion	Exp%	Act%
105.10	100.00	100.00
120.10	48.60	44.79
91.00	9.80	11.81
0.00	0.00	0.00

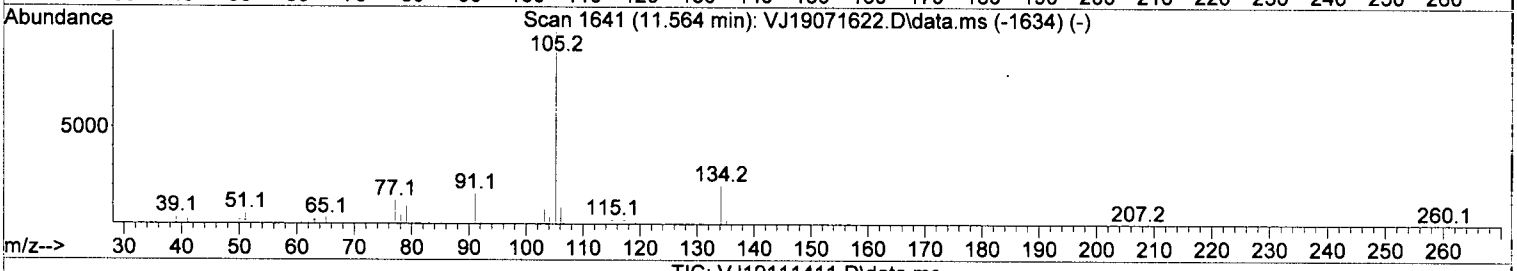
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19111411.D\data.ms

(75) sec-Butylbenzene

11.546min (-0.000) 1.15 ug/L

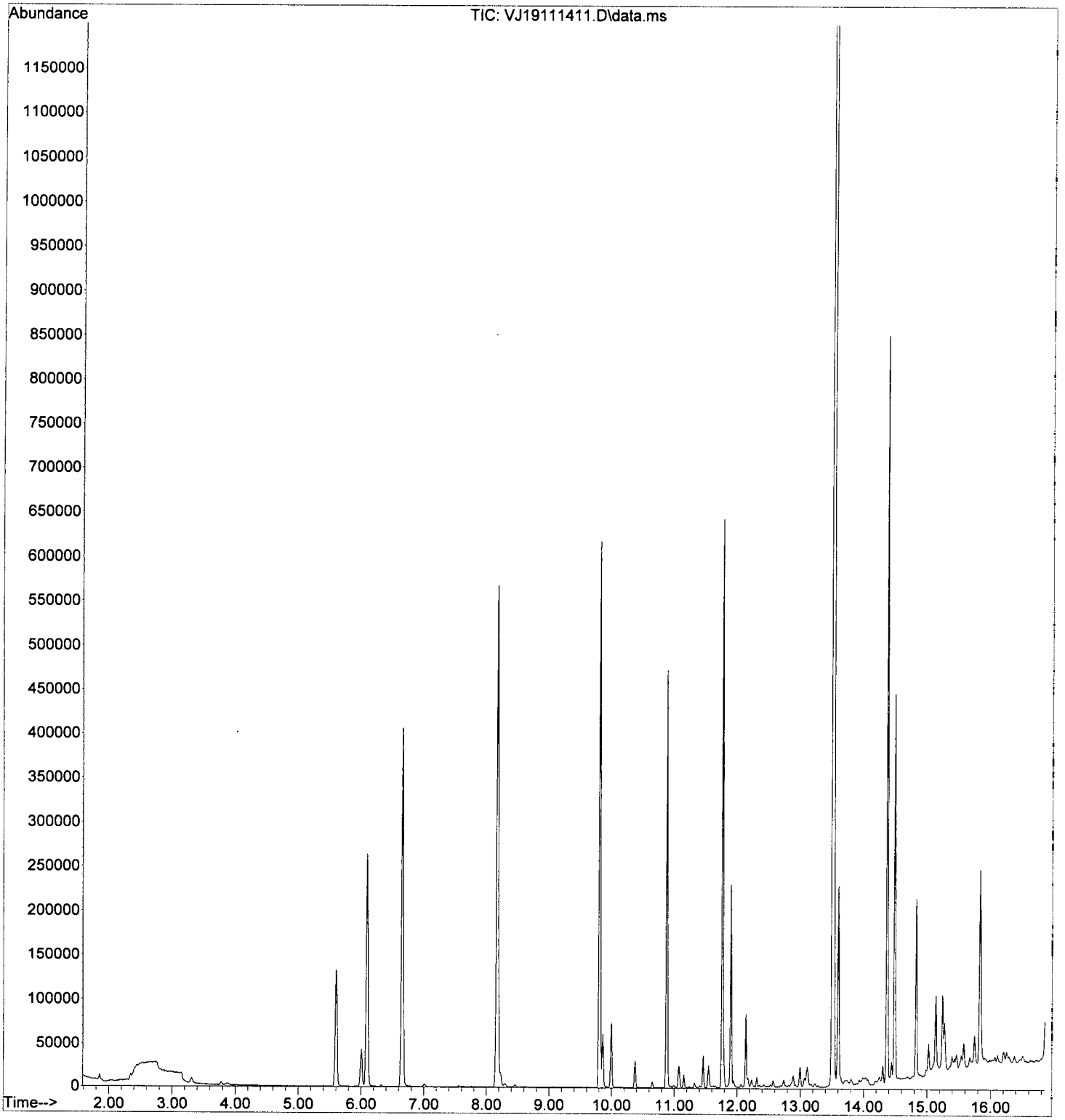
response 13041

Ion	Exp%	Act%
105.10	100.00	100.00
134.10	21.70	21.66
91.00	14.90	20.49
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K14020\
Data File : VJ19111411.D
Acq On : 14 Nov 2019 2:16 pm
Operator : IMA
Sample : A9K0322-07@10000
Misc : 10000X 5g/5mLx5uL/50mL 8260
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 15 10:28:10 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



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

Volatile Organic Compounds by EPA 1311/8260C
Calibration Data

Sequence 9J23072 (Cal ID A9J2404) VOA-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	9J23072	Instrument:	VOA-GCMS10
Date:	10/23/19 18:38	Calibration:	A9J2404

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J23072-IBL1	Soil	QC	QC			A19G118	
2	9J23072-TUN1	Soil	QC	QC			A19G118	
3	9J23072-ICB1	Soil	QC	QC			A19G118	
4	9J23072-CAL1	Soil	QC	QC			A19G118	A19J339
5	9J23072-CAL2	Soil	QC	QC			A19G118	A19J340
6	9J23072-CAL3	Soil	QC	QC			A19G118	A19J341
7	9J23072-CAL4	Soil	QC	QC			A19G118	A19J342
8	9J23072-CAL5	Soil	QC	QC			A19G118	A19J343
9	9J23072-CAL6	Soil	QC	QC			A19G118	A19J344
10	9J23072-CAL7	Soil	QC	QC			A19G118	A19J345
11	9J23072-CAL8	Soil	QC	QC			A19G118	A19J346
12	9J23072-CAL9	Soil	QC	QC			A19G118	A19J347
13	9J23072-IBL2	Soil	QC	QC			A19G118	
14	9J23072-CALA	Soil	QC	QC			A19G118	A19J348
15	9J23072-IBL3	Soil	QC	QC			A19G118	
16	9J23072-CALB	Soil	QC	QC			A19G118	A19J349
17	9J23072-IBL4	Soil	QC	QC			A19G118	
18	9J23072-IBL5	Soil	QC	QC			A19G118	
19	9J23072-ICV1	Soil	QC	QC			A19G118	A19J131
20	9J23072-ICV2	Soil	QC	QC			A19G118	A19E195
21	9J23072-IBL6	Soil	QC	QC			A19G118	
22	9J23072-TUN2	Soil	QC	QC			A19G118	
23	9J23072-IBL7	Soil	QC	QC			A19G118	
24	9J23072-ICB2	Soil	QC	QC			A19G118	
25	9J23072-CALC	Soil	QC	QC			A19G118	A19J269
26	9J23072-CALD	Soil	QC	QC			A19G118	A19J270
27	9J23072-CALE	Soil	QC	QC			A19G118	A19J271
28	9J23072-CALF	Soil	QC	QC			A19G118	A19J272
29	9J23072-CALG	Soil	QC	QC			A19G118	A19J273
30	9J23072-CALH	Soil	QC	QC			A19G118	A19J274
31	9J23072-CALI	Soil	QC	QC			A19G118	A19J275
32	9J23072-CALJ	Soil	QC	QC			A19G118	A19J276
33	9J23072-IBL8	Soil	QC	QC			A19G118	
34	9J23072-IBL9	Soil	QC	QC			A19G118	
35	9J23072-ICV3	Soil	QC	QC			A19G118	A19G350

Data Entered By: 10/24/19

Data Reviewed By: 10/24/19

Comments: Iodomethane EOS

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	0	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102323.D
2	2	0	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102324.D
3	3	0	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102325.D
4	4	1	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102326.D
5	5	2	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102327.D
6	6	5	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102328.D
7	7	10	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102329.D
8	8	20	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102330.D
9	9	50	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102331.D
10	10	100	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102333.D
11	1a	200	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102335.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Oct 24 08:55 2019	Oct 24 08:19 2019	23 Oct 2019 10:18 pm
2	2	Oct 24 08:55 2019	Oct 24 08:22 2019	23 Oct 2019 10:45 pm
3	3	Oct 24 08:55 2019	Oct 24 08:24 2019	23 Oct 2019 11:12 pm
4	4	Oct 24 08:55 2019	Oct 24 08:25 2019	23 Oct 2019 11:38 pm
5	5	Oct 24 08:55 2019	Oct 24 08:27 2019	24 Oct 2019 12:05 am
6	6	Oct 24 08:55 2019	Oct 24 08:29 2019	24 Oct 2019 12:32 am
7	7	Oct 24 08:55 2019	Oct 24 08:31 2019	24 Oct 2019 12:59 am
8	8	Oct 24 08:55 2019	Oct 24 08:33 2019	24 Oct 2019 1:26 am
9	9	Oct 24 08:55 2019	Oct 24 08:42 2019	24 Oct 2019 1:53 am
10	10	Oct 24 08:55 2019	Oct 24 08:51 2019	24 Oct 2019 2:46 am
11	1a	Oct 24 08:55 2019	Oct 24 08:54 2019	24 Oct 2019 3:40 am

VJ191024S.M Thu Oct 24 09:44:02 2019

A9J2404

Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019
Response Via : Initial Calibration

Calibration Files
1 =VJ19102323.D 2 =VJ19102324.D 3 =VJ19102325.D 4 =VJ19102326.D 5 =VJ19102327.D 6 =VJ19102328.D
7 =VJ19102329.D 8 =VJ19102330.D 9 =VJ19102331.D 10 =VJ19102333.D 1a =VJ19102335.D

		Compound	1	2	3	4	5	6	7	8	9	10	1a	Avg		%RSD
1)	I	Pentafluorobenzene...	ISTD													
2)		Dichlorodifluo...				1.102	1.175	1.126	1.116	1.135	1.254	1.178	1.171	1.157		4.20
3)	P	Chloromethane					2.359	2.024	1.892	1.940	1.916	1.806	1.789	1.961		9.83
4)	C	Vinyl Chloride			1.488	1.644	1.648	1.477	1.463	1.538	1.483	1.428	1.444	1.513		5.40
5)		Bromomethane	1.476	0.837	0.453	0.250	0.137	0.095	0.076	0.068	0.060	0.056	0.059	0.324	E1	139.32
6)		Chloroethane					0.147	0.140	0.140	0.164	0.216	0.214	0.211	0.176		20.51
7)		Trichlorofluor...				0.279	0.330	0.344	0.356	0.336	0.368	0.352	0.336	0.338		7.88
8)		Ethanol				0.106	0.081	0.058	0.050	0.052	0.046	0.041		0.062		37.93
9)	C	1,1-Dichloroet...			2.025	1.927	1.952	1.828	1.836	1.871	1.729	1.802	1.773	1.860		5.03
10)		Carbon Disulfide	4.823	3.939	3.347	3.250	3.390	3.078	3.114	3.206	3.192	3.402	3.431	3.470		14.56
11)		Freon 113			1.020	1.166	1.217	1.119	1.140	1.148	1.081	1.141	1.140	1.130		4.85
12)		Iodomethane					0.411	0.324	0.331	0.381	0.448			0.379		13.91
13)		Methylene Chlo...	1.126	0.625	0.364	0.205	0.164	0.131	0.122	0.124	0.113	0.114	0.112	0.291	E1	109.50
14)		Acetone						0.846	0.770	0.820	0.718	0.701	0.723	0.763		7.78
15)		t-1,2-Dichloro...		1.876	1.991	2.014	2.086	1.969	1.960	1.963	1.822	1.894	1.872	1.945		4.05
16)		n-Hexane				0.241	0.300	0.282	0.303	0.295	0.299	0.316	0.320	0.295		8.37
17)		Methyl-tert-bu...				4.762	4.808	4.602	4.432	4.700	4.469	4.642	4.802	4.652		3.10
18)		tert-Butanol (...			0.384	0.378	0.410	0.370	0.381	0.436	0.403	0.377		0.393		5.68
19)		Diisopropyl et...			4.795	4.870	4.832	4.621	4.683	4.975	4.866	4.564		4.776		2.93
20)	P	1,1-Dichloroet...		1.892	1.955	2.173	2.237	2.134	2.067	2.135	1.976	1.987	1.967	2.052		5.51
21)		Acrylonitrile			0.548	0.869	0.922	0.890	0.885	0.968	0.892	0.889	0.910	0.864		14.09
22)		Ethyl-tert-but...				4.506	4.401	4.129	4.224	4.434	4.321	4.103		4.303		3.61
23)		c-1,2-Dichloro...			2.010	1.993	2.018	1.897	1.884	1.949	1.807	1.866	1.843	1.918		4.01
24)		2,2-Dichloropr...		2.000	2.199	1.997	2.031	1.873	1.888	1.917	1.805	1.869	1.849	1.943		5.98
25)		Bromochloromet...			1.082	1.253	1.262	1.176	1.160	1.220	1.113	1.134	1.112	1.168		5.55
26)	C	Chloroform		1.944	2.034	2.275	2.367	2.242	2.254	2.290	2.160	2.201	2.163	2.193		5.73
27)		Carbon Tetrach...		0.964	1.252	1.477	1.511	1.449	1.477	1.565	1.509	1.612	1.671	1.449		14.03
28)		Tetrahydrofuran				1.298	1.149	0.966	0.925	0.987	0.906	0.928	0.958	1.015		13.52
29)		1,1,1-Trichlor...		1.803	1.789	1.984	2.167	2.025	2.020	2.125	1.990	2.124	2.130	2.016		6.58
30)	S	Dibromofluorom...	0.774	0.782	0.789	0.789	0.771	0.779	0.791	0.790	0.810	0.800	0.816	0.790		1.79
31)		1,1-Dichloropr...			1.863	1.950	2.038	1.889	1.926	2.004	1.899	2.027	2.037	1.959		3.52
32)		2-Butanone (MEK)				1.621	1.439	1.273	1.246	1.348	1.249	1.268	1.307	1.344		9.59
33)		Benzene	7.293	6.724	6.328	6.338	6.677	6.286	6.268	6.398	5.960	6.183	6.174	6.421		5.63
34)		tert-Amyl meth...				4.666	4.529	4.116	3.928	4.070	3.921	3.816		4.150		7.81
35)		1,2-Dichloroet...		1.863	1.813	2.037	2.151	1.992	1.990	2.070	1.931	1.974	1.955	1.978		4.93
36)		iso-Butyl Alcohol				0.135	0.157	0.137	0.142	0.164	0.157	0.165	0.172	0.154		9.10
37)	S	1,4-Difluorobe...	3.054	3.112	3.060	3.077	3.052	3.067	3.061	3.038	3.083	3.081	3.151	3.076		1.03
38)		Trichloroethen...		1.001	1.266	1.292	1.348	1.294	1.281	1.325	1.255	1.331	1.365	1.276		8.06
39)		tert-Amyl ethy...			2.124	2.682	3.174	2.894	2.921	3.107	3.130	3.026		2.882		11.98
40)		Dibromomethane			0.758	0.779	0.845	0.810	0.803	0.843	0.798	0.814	0.803	0.806		3.43

Method Path : C:\msdchem\1\methods\
Method File : VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds

41)	C	1,2-Dichloropr...			1.577	1.560	1.645	1.575	1.584	1.621	1.530	1.594	1.615	1.589	2.17
42)		Bromodichlorom...		1.148	1.346	1.407	1.529	1.505	1.535	1.691	1.672	1.820	1.875	1.553	14.23
43)		Chlorobenzene-d5 (I)	----------	ISTD	----------										
44)		c-1,3-Dichloro...		0.568	0.665	0.668	0.740	0.729	0.742	0.798	0.801	0.865	0.876	0.745	12.78
45)	S	Toluene-d8 (S)	1.398	1.385	1.395	1.399	1.410	1.392	1.399	1.384	1.399	1.397	1.379	1.394	0.64
46)	C	Toluene	2.571	2.423	2.356	2.326	2.441	2.246	2.279	2.349	2.194	2.282	2.237	2.337	4.66
47)		Tetrachloroeth...		0.333	0.398	0.431	0.458	0.440	0.448	0.459	0.433	0.468	0.468	0.434	9.46
48)		4-Methyl-2-Pen...			0.726	0.588	0.676	0.662	0.705	0.798	0.775	0.807	0.781	0.724	10.15
49)		t-1,3-Dichloro...		0.552	0.688	0.618	0.695	0.697	0.750	0.808	0.787	0.817	0.813	0.722	12.37
50)		1,1,2-Trichlor...		0.397	0.461	0.460	0.513	0.491	0.488	0.510	0.472	0.480	0.469	0.474	6.91
51)		Dibromochlorom...				0.304	0.356	0.352	0.364	0.397	0.404	0.436	0.450	0.383	12.61
52)		1,3-Dichloropr...		0.810	0.849	0.878	0.980	0.905	0.904	0.943	0.878	0.890	0.871	0.891	5.29
53)		1,2-Dibromoeth...		0.406	0.390	0.412	0.462	0.453	0.465	0.497	0.481	0.492	0.487	0.454	8.56
54)		2-Hexanone					0.465	0.442	0.490	0.585	0.574	0.612	0.606	0.539	13.20
55)	P	Chlorobenzene	1.321	1.354	1.368	1.311	1.445	1.325	1.325	1.363	1.254	1.318	1.277	1.333	3.80
56)	C	Ethylbenzene	2.101	2.084	2.174	2.152	2.319	2.255	2.332	2.430	2.319	2.433	2.379	2.271	5.56
57)		1,1,1,2-Tetrac...			0.352	0.377	0.399	0.405	0.410	0.436	0.430	0.455	0.451	0.413	8.29
58)		m,p-Xylenes (2)	1.456	1.462	1.402	1.457	1.582	1.601	1.693	1.777	1.715	1.833	1.807	1.617	9.72
59)		o-Xylene	1.375	1.371	1.299	1.424	1.516	1.495	1.585	1.704	1.673	1.790	1.746	1.543	10.87
60)		Styrene		0.850	0.776	0.770	0.855	0.913	1.022	1.148	1.215	1.362	1.362	1.027	22.43
61)	P	Bromoform			0.152	0.177	0.204	0.206	0.226	0.261	0.277	0.308	0.308	0.235	23.91
62)		Isopropylbenzene	1.515	1.608	1.582	1.678	1.796	1.801	1.958	2.093	2.072	2.214	2.139	1.860	13.31
63)	I	1,4-Dichlorobenzen...	----------	ISTD	----------										
64)	S	4-Bromofluorob...	0.739	0.728	0.729	0.730	0.730	0.728	0.740	0.716	0.715	0.695	0.690	0.722	2.28
65)		Bromobenzene		0.951	1.003	1.030	1.144	1.044	1.084	1.062	1.006	1.012	1.010	1.035	5.11
66)		n-Propylbenzene	5.038	5.253	5.136	5.237	5.607	5.395	5.736	5.728	5.558	5.670	5.631	5.454	4.61
67)	P	1,1,2,2-Tetrac...		1.514	1.407	1.544	1.795	1.603	1.659	1.676	1.556	1.525	1.513	1.579	6.87
68)		2-Chlorotoluene		0.828	0.952	0.968	0.987	0.944	1.019	1.024	0.979	1.017	1.012	0.973	5.99
69)		1,3,5-Trimethy...	2.560	2.938	2.907	3.006	3.372	3.354	3.668	3.762	3.628	3.744	3.780	3.338	12.70
70)		1,2,3-Trichlor...			0.446	0.489	0.569	0.496	0.535	0.536	0.498	0.496	0.498	0.507	6.92
71)		t-1,4-Dichloro...				0.161	0.175	0.194	0.200	0.219	0.223	0.228	0.228	0.203	12.54
72)		4-Chlorotoluene		2.999	2.756	2.952	3.283	3.136	3.337	3.376	3.209	3.287	3.258	3.159	6.28
73)		tert-Butylbenzene		1.799	1.642	1.804	1.952	1.987	2.107	2.139	2.092	2.142	2.129	1.979	8.93
74)		1,2,4-Trimethy...	3.161	2.825	2.810	2.979	3.419	3.360	3.740	3.758	3.621	3.721	3.695	3.372	11.06
75)		sec-Butylbenzene		3.687	3.574	3.668	4.164	4.270	4.713	4.655	4.593	4.697	4.654	4.268	10.98
76)		4-Isopropyltol...		2.786	2.652	2.651	3.100	3.135	3.511	3.595	3.617	3.740	3.741	3.253	13.63
77)		1,3-Dichlorobe...	1.581	1.824	1.861	1.881	2.057	1.913	1.971	1.959	1.836	1.864	1.848	1.872	6.38
78)		1,4-Dichlorobe...	2.177	1.960	2.114	2.019	2.170	1.943	1.977	1.958	1.837	1.883	1.856	1.990	5.96
79)		n-Butylbenzene		2.999	2.871	2.856	3.056	3.027	3.276	3.328	3.311	3.431	3.387	3.154	6.84
80)		1,2-Dichlorobe...	1.517	1.641	1.681	1.703	1.868	1.744	1.796	1.804	1.682	1.715	1.721	1.716	5.40
81)		1,2-Dibromo-3-...					0.274	0.242	0.272	0.298	0.307	0.334	0.366	0.299	13.90
82)		Hexachlorobuta...			0.164	0.184	0.217	0.239	0.237	0.230	0.231	0.226	0.224	0.217	11.77
83)		1,2,4-Trichlor...		0.942	0.951	0.992	1.094	0.983	1.059	1.095	1.073	1.075	1.098	1.036	6.02
84)		Naphthalene		3.526	3.368	3.115	3.558	3.260	3.645	4.050	4.086	4.181	4.389	3.718	11.60
85)		1,2,3-Trichlor...		0.985	0.871	0.893	1.118	0.956	1.036	1.068	1.039	1.040	1.079	1.008	8.02

(#) = Out of Range

Compound List Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019
Response Via : Initial Calibration

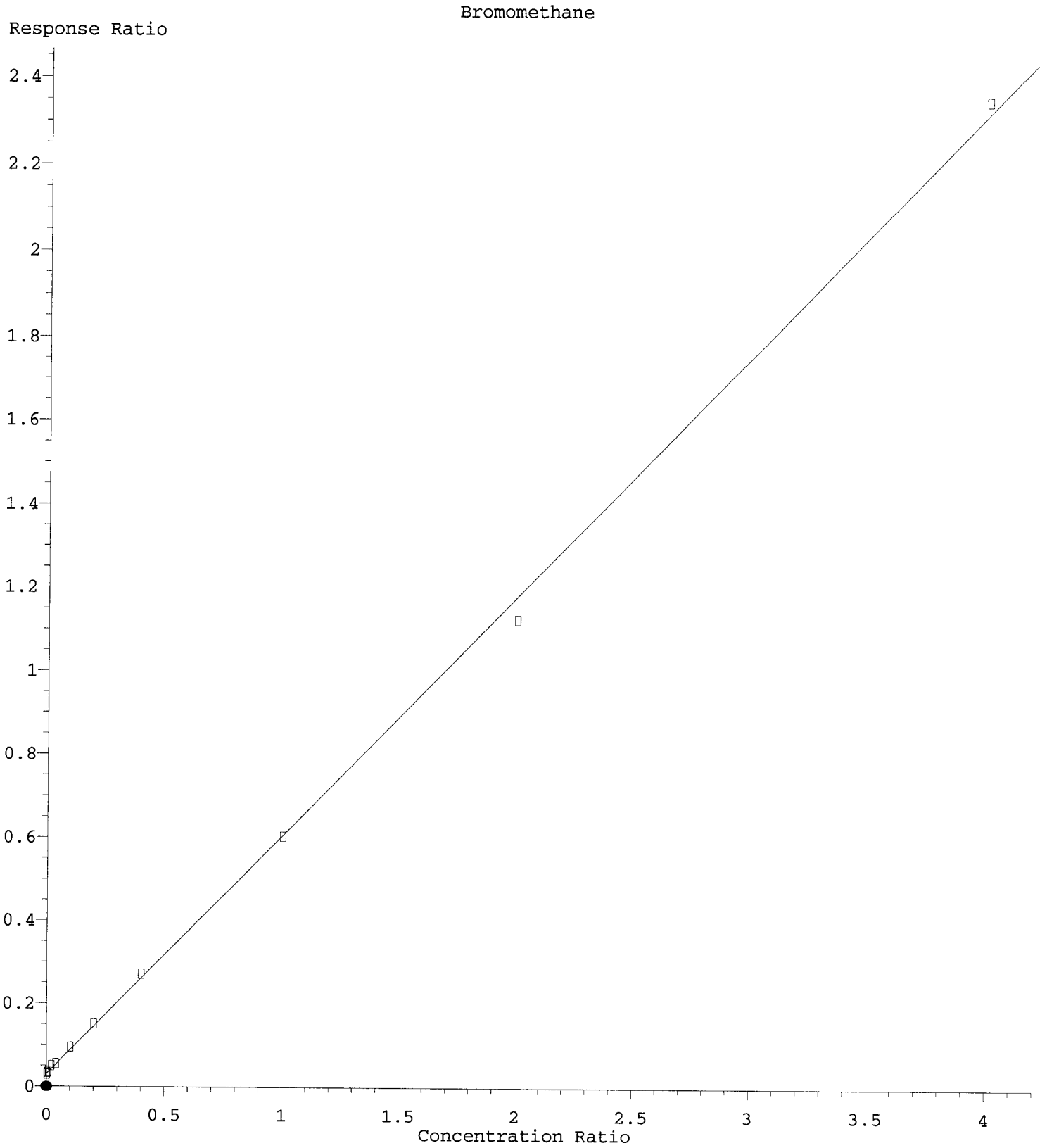
Total Cpnds : 85

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	1.691	0.278	A	2	A	R
3 P	Chloromethane	50	1.897	0.312	A	2	A	R
4 C	Vinyl Chloride	62	1.995	0.328	A	2	A	R
5	Bromomethane	96	2.347	0.385	Q	2	A	R
6	Chloroethane	64	2.469	0.405	Q	2	A	R
7	Trichlorofluoromethane	101	2.597	0.427	A	2	A	R
8	Ethanol	45	3.315	0.544	Q	1	A	R
9 C	1,1-Dichloroethene	61	3.139	0.515	A	2	A	R
10	Carbon Disulfide	76	3.150	0.517	A	2	A	R
11	Freon 113	101	3.200	0.525	A	2	A	R
12	Iodomethane	142	3.290	0.540	A	2	A	R
13	Methylene Chloride	84	3.777	0.620	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	4.264	0.700	A	1	A	R
19	Diisopropyl ether (DIPE)	45	4.507	0.740	A	2	A	R
20 P	1,1-Dichloroethane	63	4.580	0.752	A	2	A	R
21	Acrylonitrile	53	4.635	0.761	A	2	A	R
22	Ethyl-tert-butyl ether (ETBE)	59	4.872	0.800	A	2	A	R
23	c-1,2-Dichloroethene	61	5.128	0.842	A	2	A	R
24	2,2-Dichloropropane	77	5.243	0.861	A	2	A	R
25	Bromochloromethane	49	5.328	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	5.590	0.918	A	2	A	R
29	1,1,1-Trichloroethane	97	5.621	0.923	A	2	A	R
30 S	Dibromofluoromethane (S)	111	5.597	0.919	A	2	A	R
31	1,1-Dichloropropene	75	5.749	0.944	A	2	A	R
32	2-Butanone (MEK)	43	5.736	0.942	A	2	A	R
33	Benzene	78	6.004	0.986	A	2	A	R
34	tert-Amyl methyl ether (TAME)	73	6.156	1.011	A	2	A	R
35	1,2-Dichloroethane (EDC)	62	6.205	1.019	A	2	A	R
36	iso-Butyl Alcohol	43	6.290	1.033	A	2	A	R
37 S	1,4-Difluorobenzene (S)	114	6.655	1.093	A	2	A	R
38	Trichloroethene (TCE)	130	6.624	1.088	A	2	A	R
39	tert-Amyl ethyl ether (TAEE)	59	6.904	1.134	A	2	A	R
40	Dibromomethane	93	7.062	1.160	A	2	A	R
41 C	1,2-Dichloropropane	63	7.172	1.178	A	2	A	R
42	Bromodichloromethane	83	7.251	1.191	A	2	A	R
43 I	Chlorobenzene-d5 (I)	117	9.806	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	8.170	0.833	A	2	A	R
46 C	Toluene	91	8.231	0.839	A	2	A	R
47	Tetrachloroethene (PCE)	166	8.680	0.885	A	2	A	R
48	4-Methyl-2-Pentanone (MIBK)	43	8.669	0.884	A	2	A	R
49	t-1,3-Dichloropropene	75	8.699	0.887	A	2	A	R
50	1,1,2-Trichloroethane	97	8.875	0.905	A	2	A	R
51	Dibromochloromethane	129	9.064	0.924	A	2	A	R
52	1,3-Dichloropropane	76	9.162	0.934	A	2	A	R
53	1,2-Dibromoethane (EDB)	107	9.301	0.948	A	2	A	R
54	2-Hexanone	[illegible]	[illegible]	[illegible]	A	2	A	R

55	P	Chlorobenzene	112	9.825	1.002	A	2	A	R
56	C	Ethylbenzene	91	9.861	1.006	A	2	A	R
57		1,1,1,2-Tetrachloroethane	131	9.886	1.008	A	2	A	R
58		m,p-Xylenes (2)	91	9.995	1.019	A	2	A	R
59		o-Xylene	91	10.378	1.058	A	2	A	R
60		Styrene	104	10.420	1.063	Q	2	A	R
61	P	Bromoform	173	10.439	1.065	Q	2	A	R
62		Isopropylbenzene	105	10.652	1.086	A	2	A	R
63	I	1,4-Dichlorobenzene-d4 (I)	152	11.765	1.000	A	2	A	R
64	S	4-Bromofluorobenzene (S)	174	10.883	0.925	A	2	A	R
65		Bromobenzene	156	10.962	0.932	A	2	A	R
66		n-Propylbenzene	91	10.999	0.935	A	2	A	R
67	P	1,1,2,2-Tetrachloroethane	83	11.047	0.939	A	2	A	R
68		2-Chlorotoluene	126	11.120	0.945	A	2	A	R
69		1,3,5-Trimethylbenzene	105	11.157	0.948	A	2	A	R
70		1,2,3-Trichloropropane	110	11.150	0.948	A	2	A	R
71		t-1,4-Dichloro-2-butene	88	11.187	0.951	A	3	A	R
72		4-Chlorotoluene	91	11.248	0.956	A	2	A	R
73		tert-Butylbenzene	91	11.406	0.969	A	2	A	R
74		1,2,4-Trimethylbenzene	105	11.461	0.974	A	2	A	R
75		sec-Butylbenzene	105	11.546	0.981	A	2	A	R
76		4-Isopropyltoluene	119	11.656	0.991	A	2	A	R
77		1,3-Dichlorobenzene	146	11.710	0.995	A	2	A	R
78		1,4-Dichlorobenzene	146	11.778	1.001	A	2	A	R
79		n-Butylbenzene	91	11.972	1.018	A	2	A	R
80		1,2-Dichlorobenzene	146	12.093	1.028	A	2	A	R
81		1,2-Dibromo-3-Chloropropane	157	12.696	1.079	A	2	A	R
82		Hexachlorobutadiene	223	13.219	1.124	A	3	A	R
83		1,2,4-Trichlorobenzene	180	13.243	1.126	A	2	A	R
84		Naphthalene	128	13.517	1.149	A	2	A	R
85		1,2,3-Trichlorobenzene	180	13.675	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

VJ191024S.M Thu Oct 24 09:43:58 2019

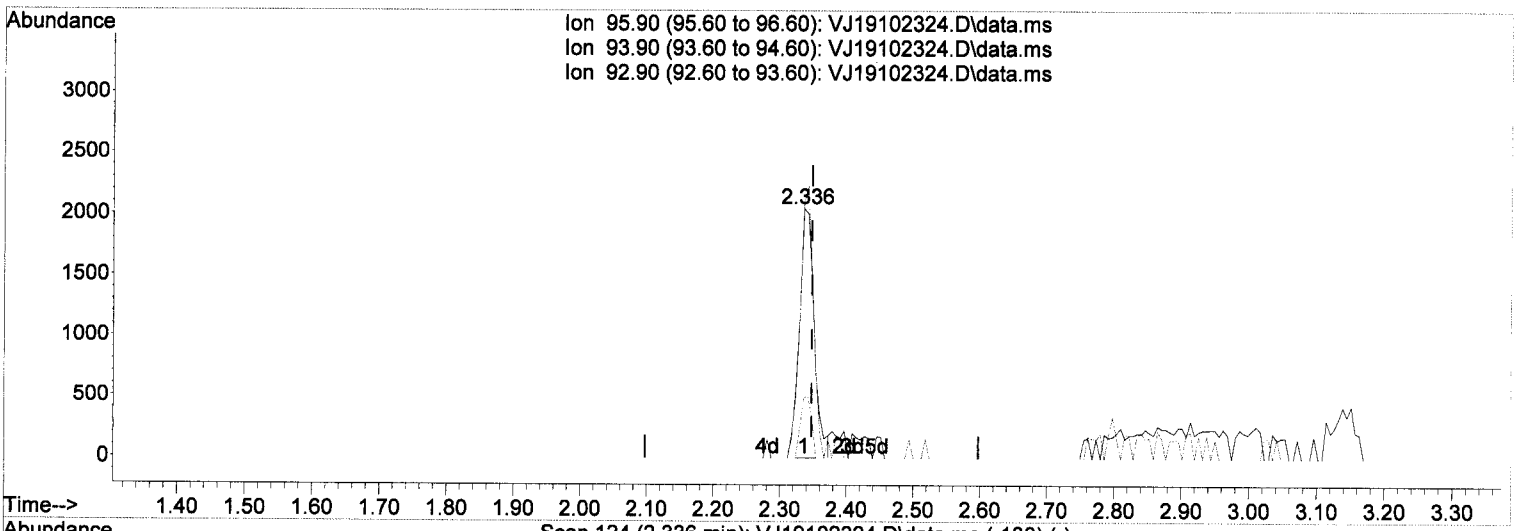


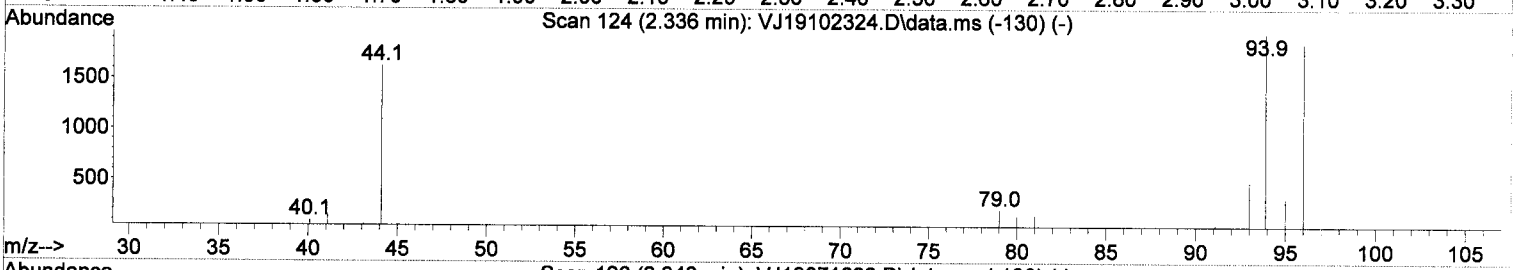
R = -1.25e-003 A*A + 5.77e-001 A + 3.02e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj191024B.M
Calibration Table Last Updated: Thu Oct 24 08:55:53 2019

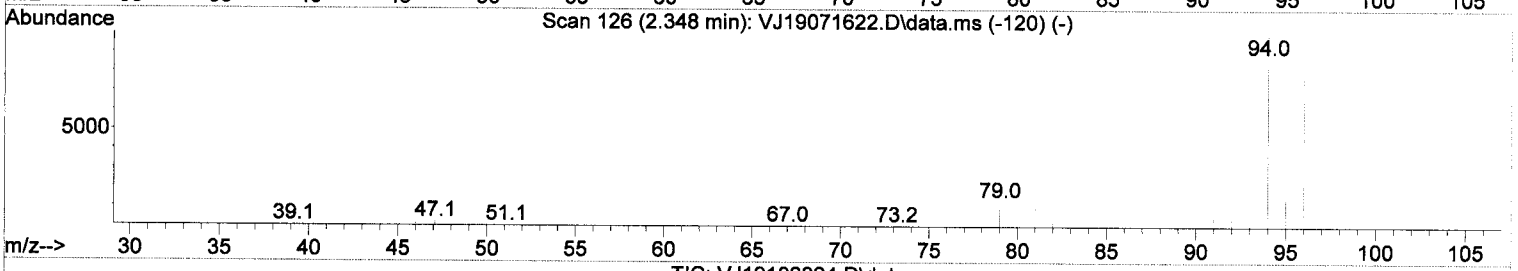
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







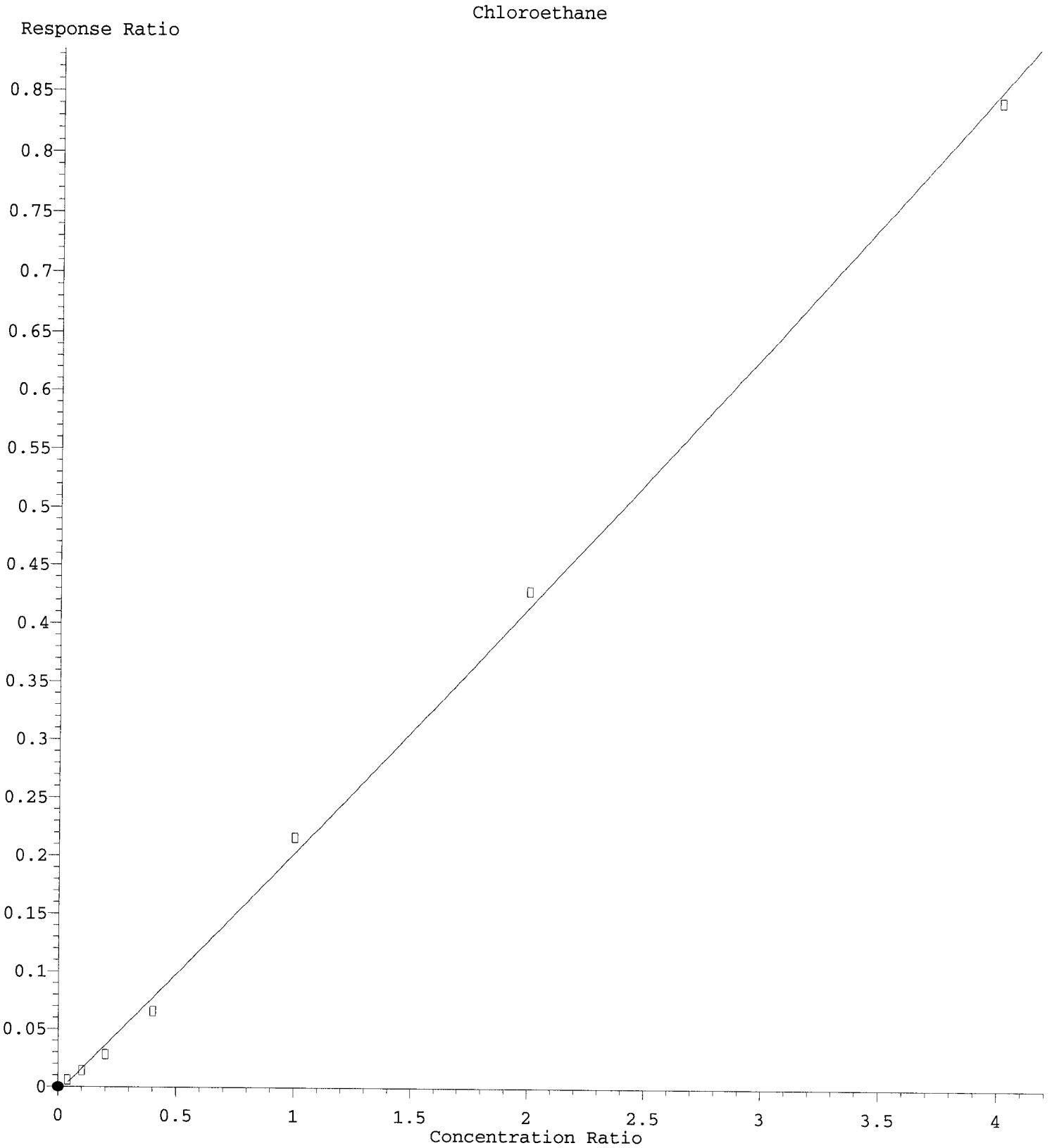
TIC: VJ19102324.D\data.ms

(5) Bromomethane

2.336min (-0.011) 0.28 ug/L

response 3184

Ion	Exp%	Act%
95.90	100.00	100.00
93.90	106.80	103.03
92.90	22.80	24.01
0.00	0.00	0.00

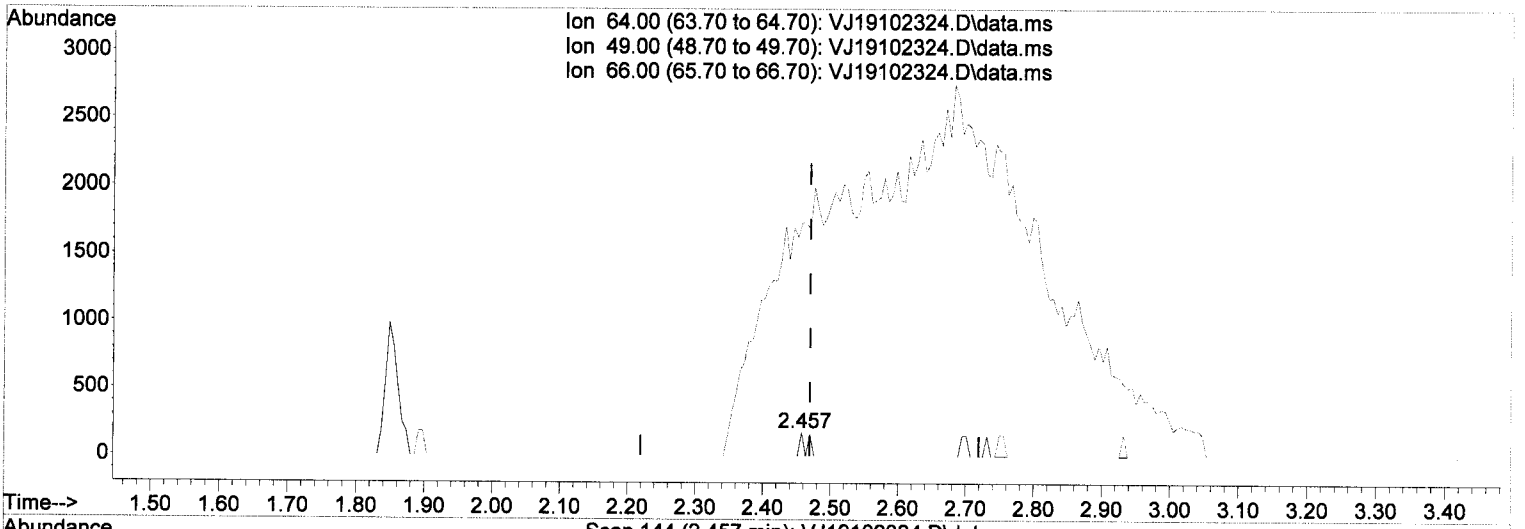


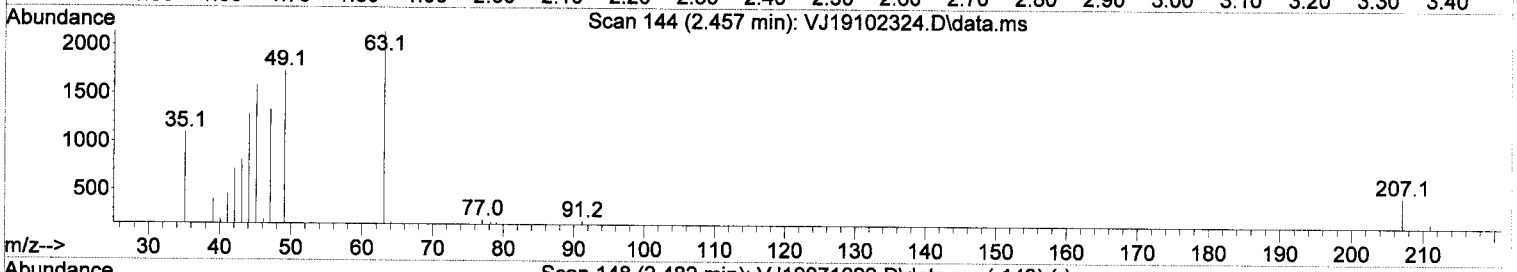
R = 2.15e-003 A*A + 2.06e-001 A - 5.03e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj191024b.m
Calibration Table Last Updated: Thu Oct 24 08:56:18 2019

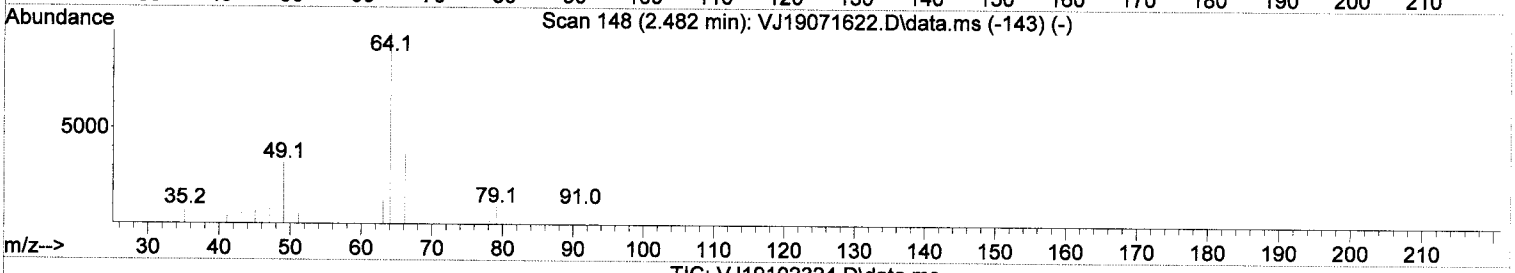
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







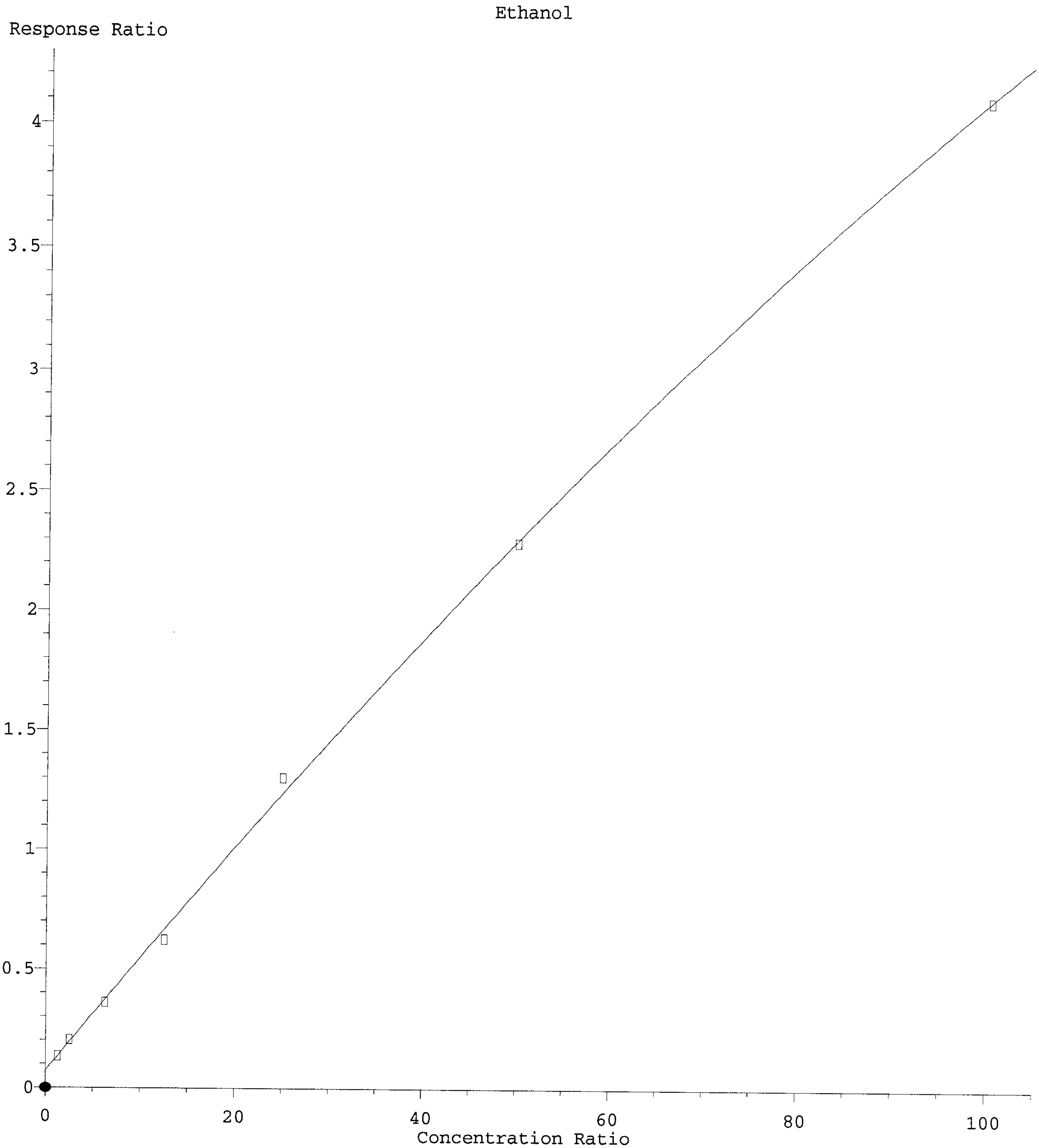
TIC: VJ19102324.D\data.ms

(6) Chloroethane

2.457min (-0.012) 1.53 ug/L m

response 122

Ion	Exp%	Act%
64.00	100.00	100.00
49.00	24.30	995.98#
66.00	31.30	0.00#
0.00	0.00	0.00

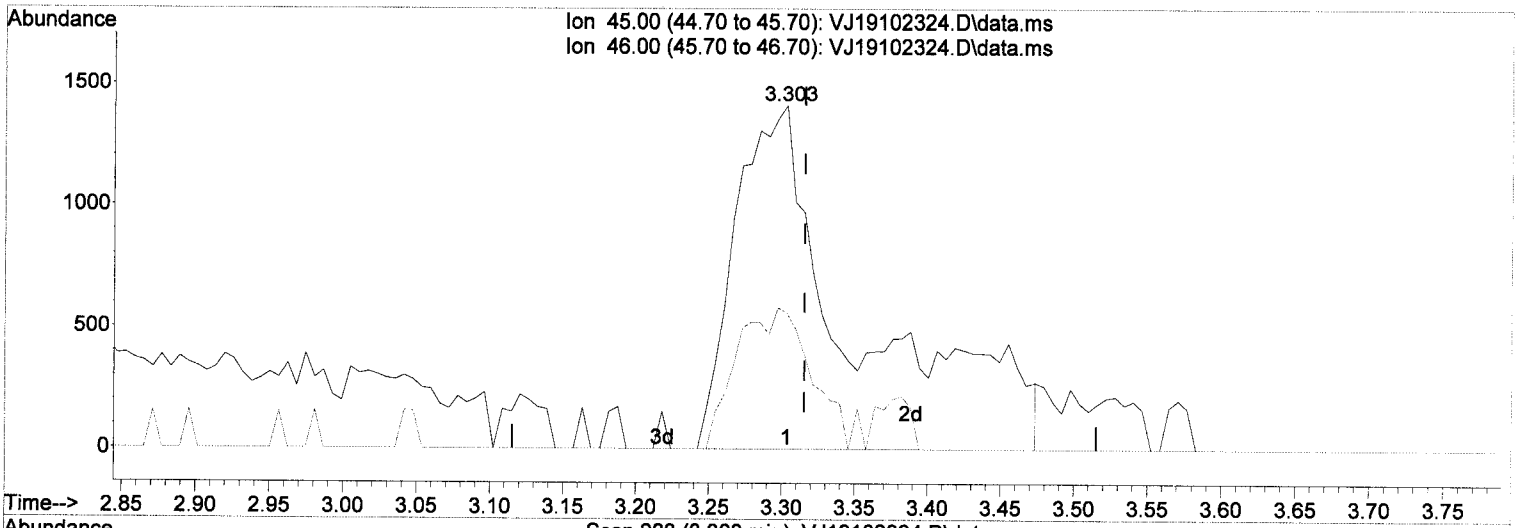


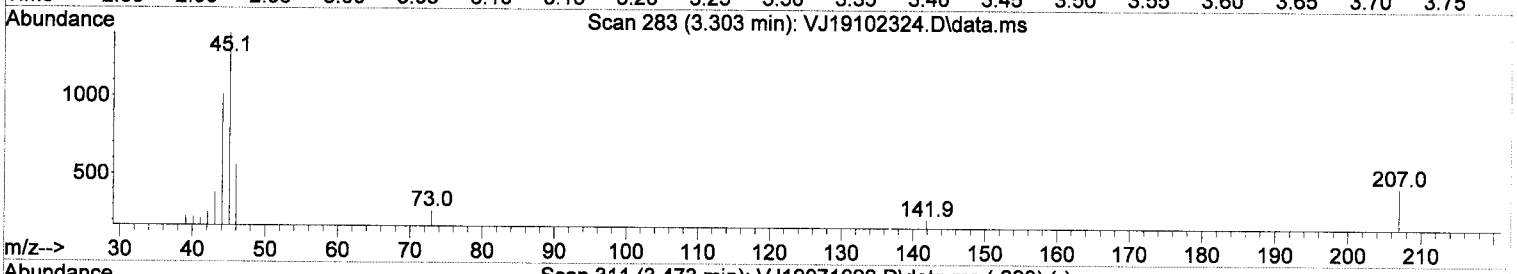
R = -8.41e-005 A*A + 4.86e-002 A + 7.24e-002
Coef of Det (r^2) = 0.999   Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024S.M
Calibration Table Last Updated: Thu Oct 24 08:56:39 2019

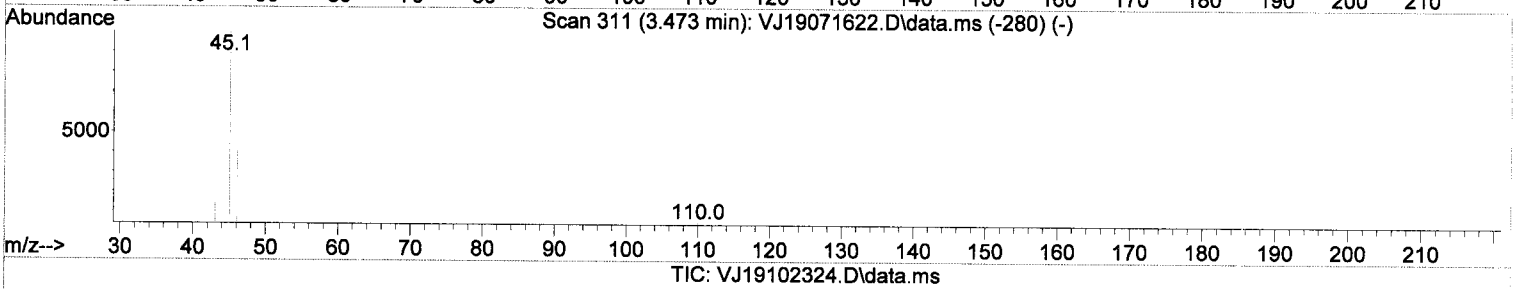
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







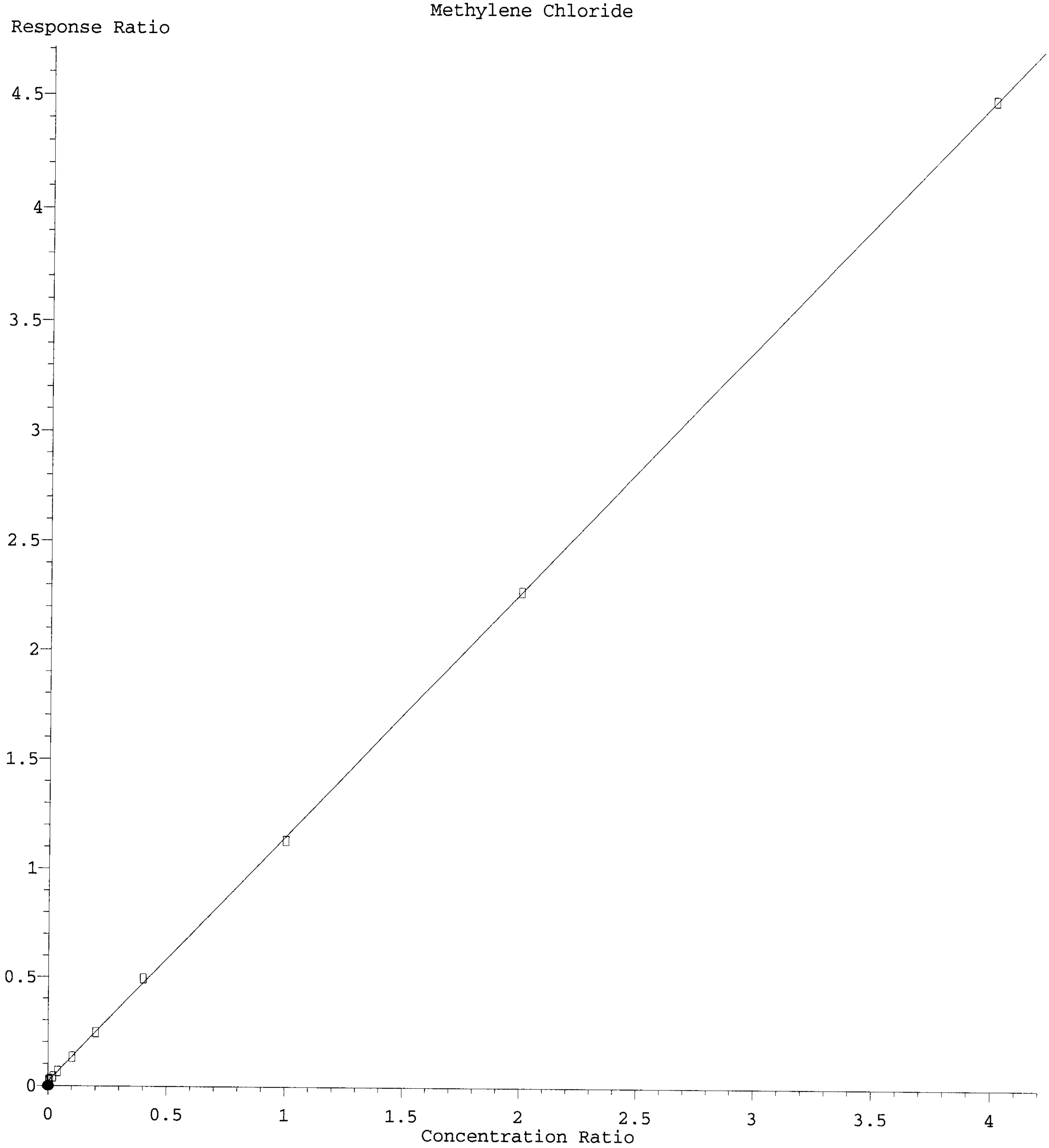
TIC: VJ19102324.D\data.ms

(8) Ethanol

3.303min (-0.012) 13.26 ug/L m

response 8114

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.74
0.00	0.00	0.00
0.00	0.00	0.00

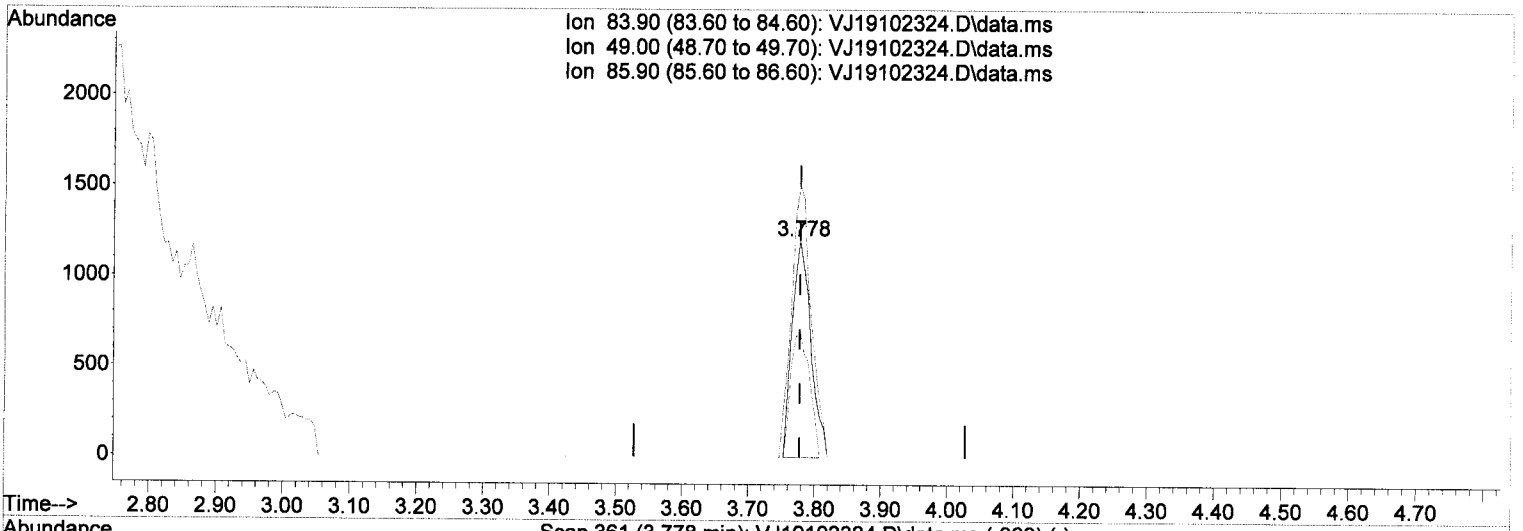


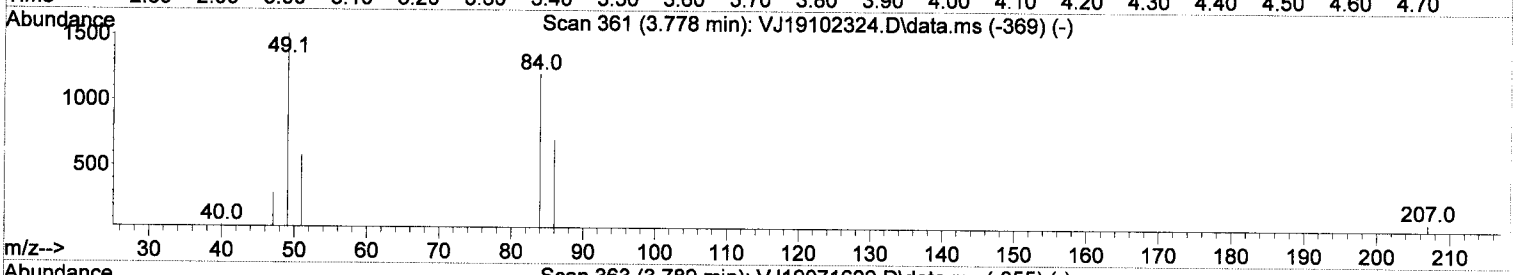
R = -4.57e-003 A*A + 1.13e+000 A + 2.02e-002
Coef of Det (r^2) = 1.000   Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024S.M
Calibration Table Last Updated: Thu Oct 24 08:58:11 2019

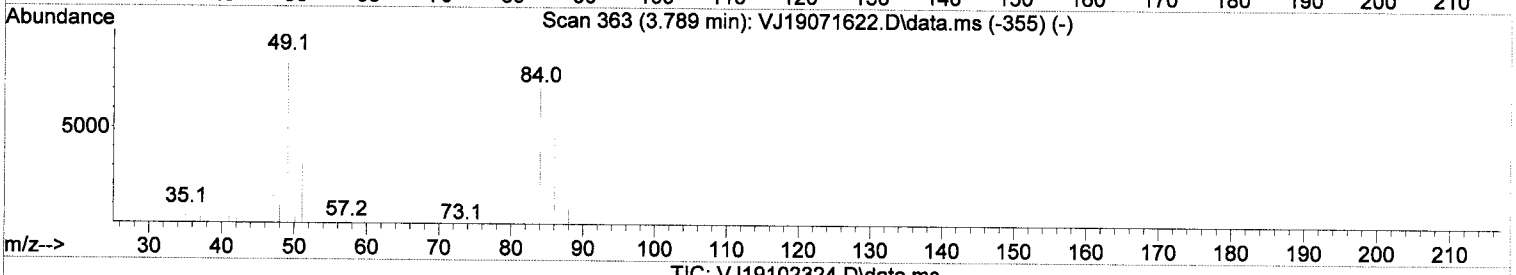
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







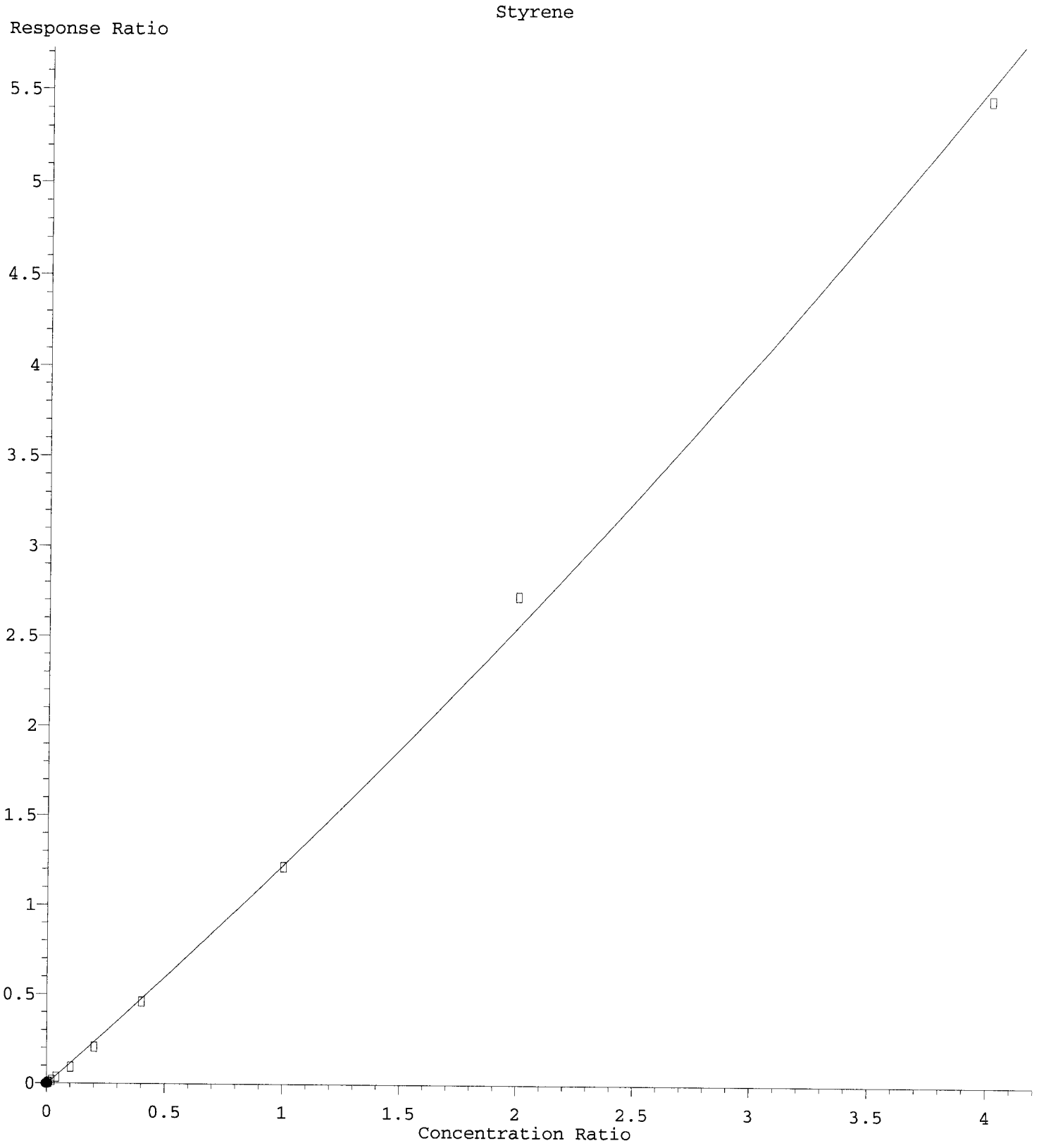
TIC: VJ19102324.D\data.ms

(13) Methylene Chloride

3.778min (+ 0.001) 0.21 ug/L

response 2377

Ion	Exp%	Act%
83.90	100.00	100.00
49.00	123.30	125.15
85.90	63.90	58.51
0.00	0.00	0.00

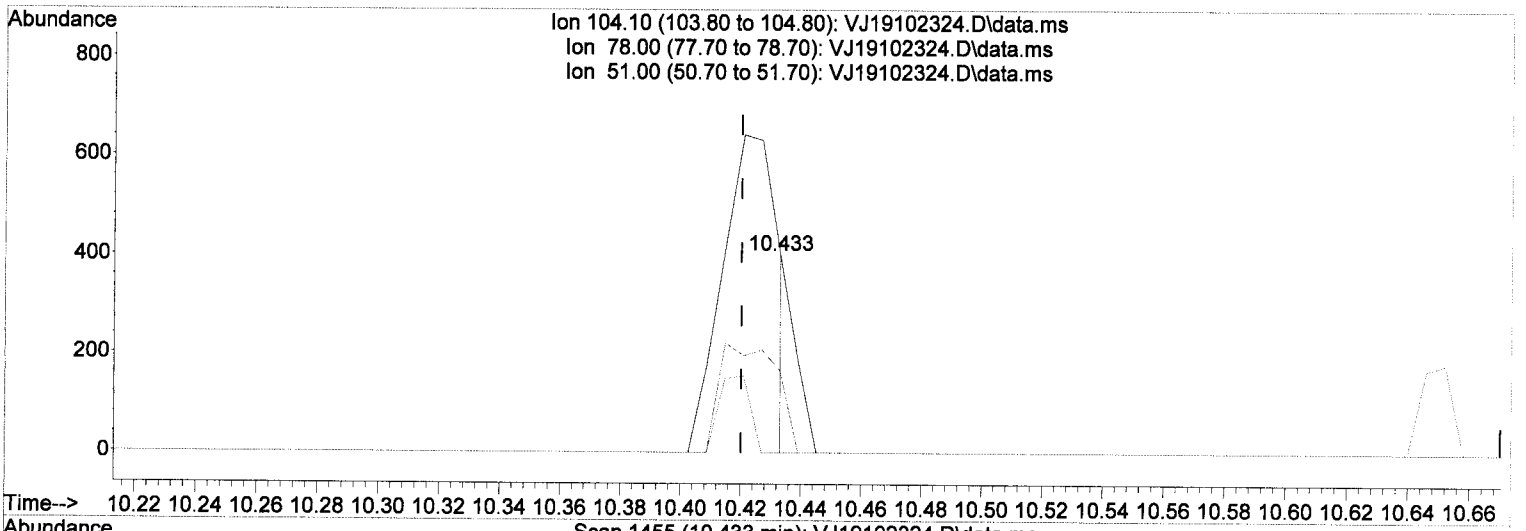


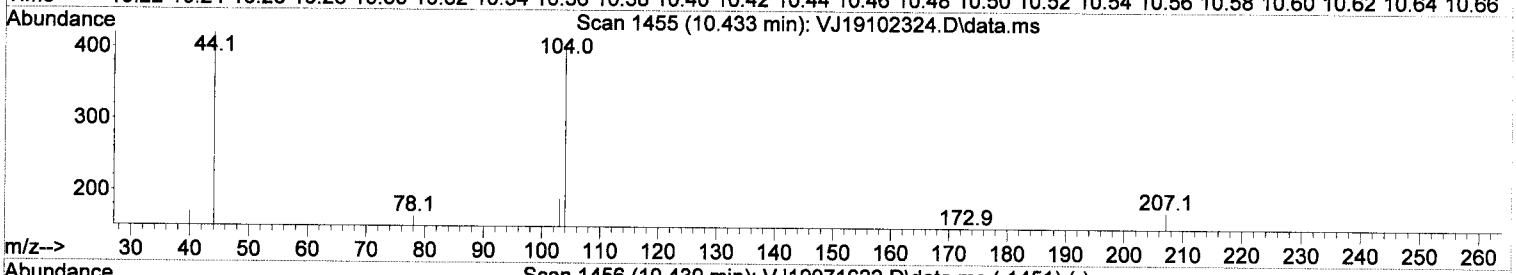
R = 5.07e-002 A*A + 1.18e+000 A - 4.08e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024RDM
Calibration Table Last Updated: Thu Oct 24 09:02:33 2019

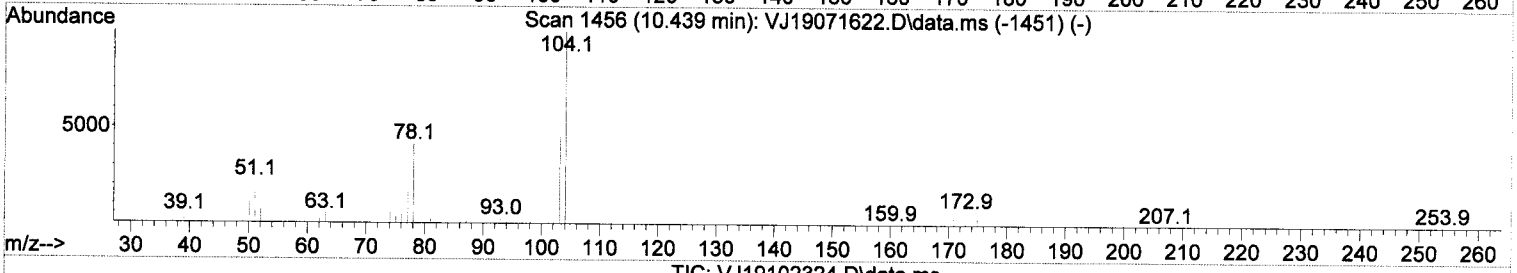
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







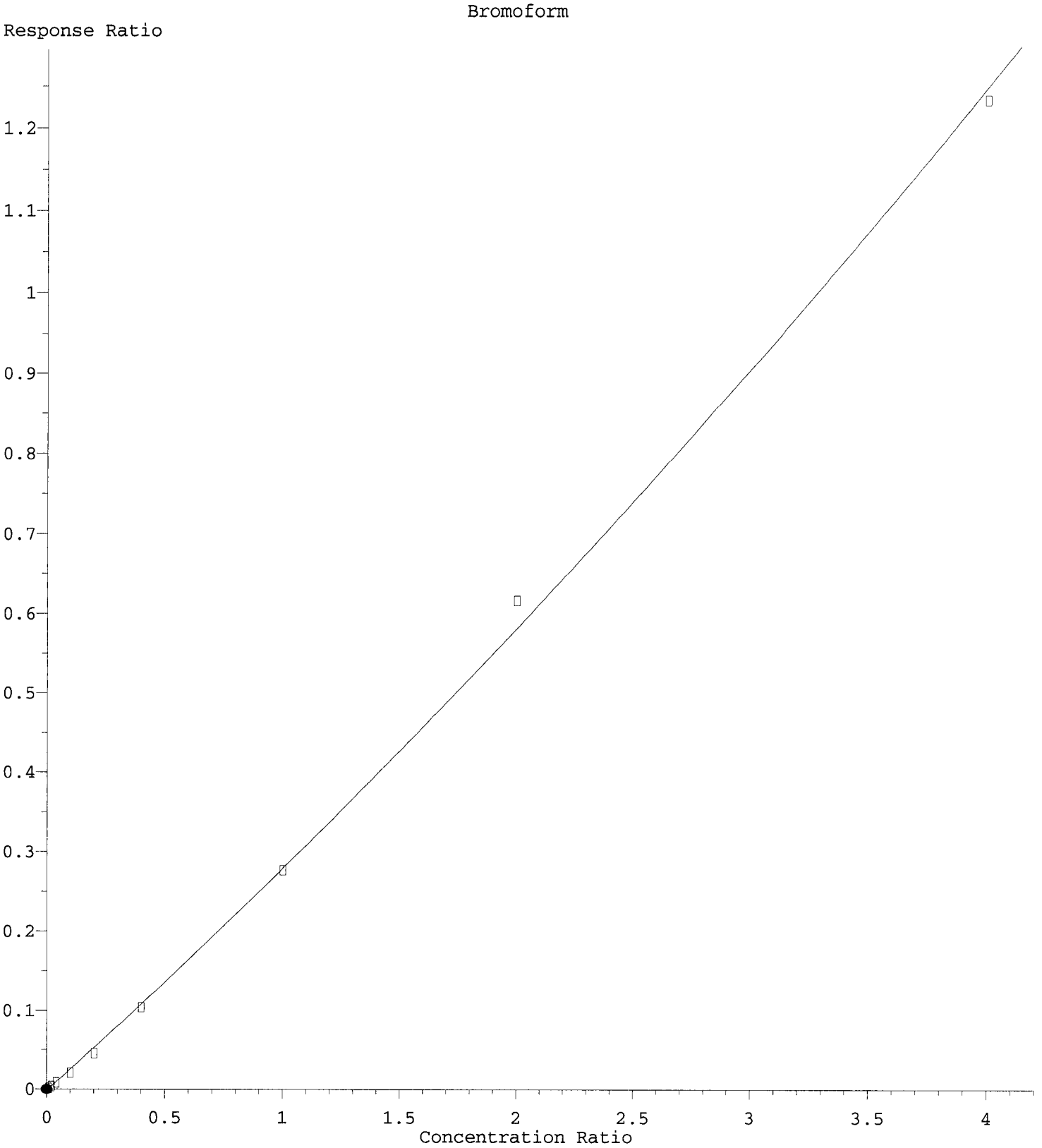
TIC: VJ19102324.D\data.ms

(60) Styrene

10.433min (+ 0.013) 0.18 ug/L m

response 66

Ion	Exp%	Act%
104.10	100.00	100.00
78.00	42.20	41.25
51.00	24.70	0.00
0.00	0.00	0.00

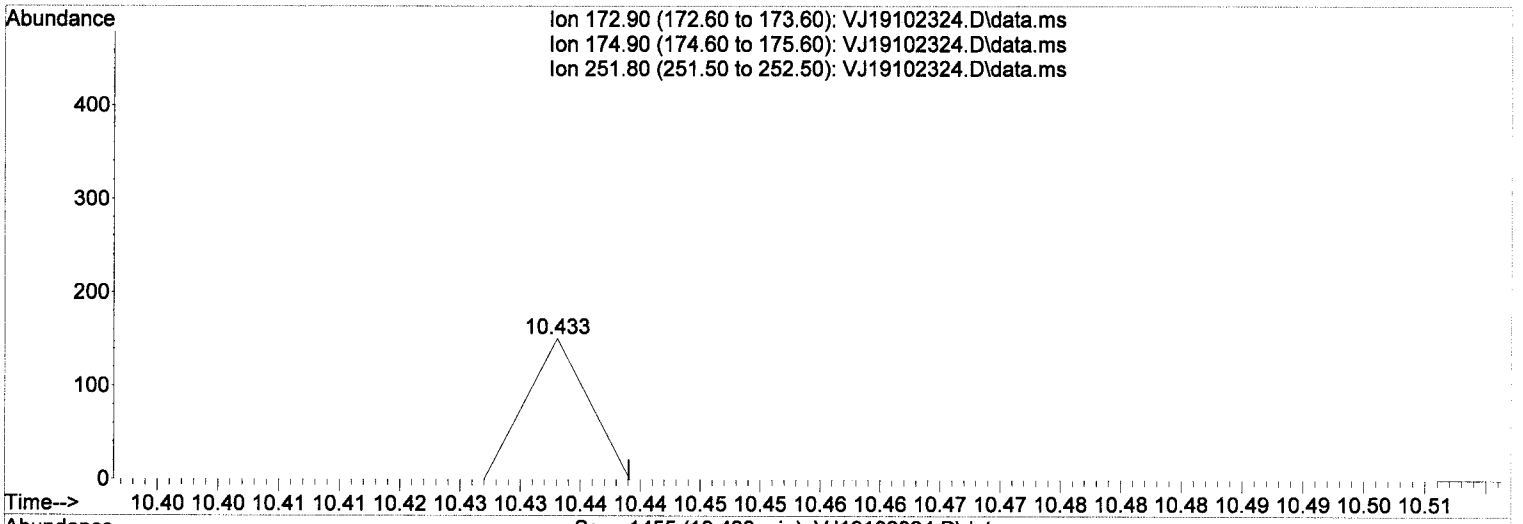


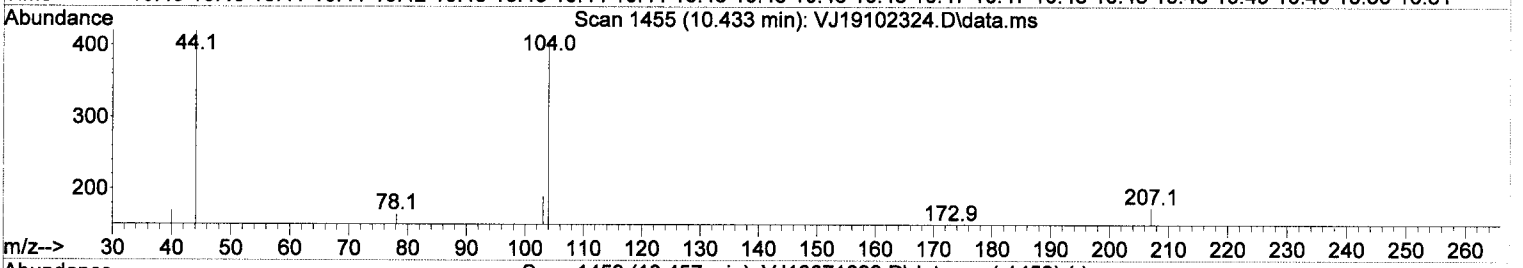
R = 1.05e-002 A*A + 2.71e-001 A - 1.82e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024S.M
Calibration Table Last Updated: Thu Oct 24 09:03:19 2019

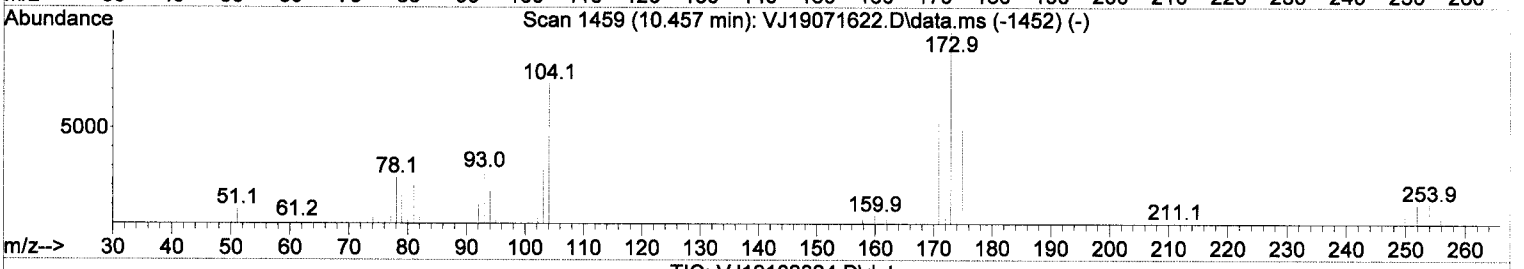
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 09:33:05 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102324.D\data.ms

(61) Bromoform (P)

10.433min (-0.006) 0.38 ug/L (m)

response 55

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:42:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

VM 10/24/19

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	106	0.00
2		Dichlorodifluoromethane	20.000	24.222	-21.1#	131	0.00
3	P	Chloromethane	20.000	21.897	-9.5	117	0.00
4	C	Vinyl Chloride	20.000	22.532	-12.7	118	-0.01
5		Bromomethane	20.000	25.749	-28.7#	128	0.00
6		Chloroethane	20.000	18.062	9.7	112	0.00
7		Trichlorofluoromethane	20.000	19.846	0.8	106	0.00
8		Ethanol	1250.000	32.817	97.4#	9	0.01
9	C	1,1-Dichloroethene	20.000	18.892	5.5	100	0.00
10		Carbon Disulfide	20.000	18.116	9.4	104	0.00
11		Freon 113	20.000	19.495	2.5	102	0.00
12		Iodomethane	20.000	27.678	-38.4#	146	0.00
13		Methylene Chloride	20.000	21.825	-9.1	110	0.00
14		Acetone	40.000	41.334	-3.3	102	0.00
15		t-1,2-Dichloroethene	20.000	20.825	-4.1	110	0.00
16		n-Hexane	20.000	19.050	4.7	101	0.00
17		Methyl-tert-butyl-ether	20.000	20.415	-2.1	107	0.00
18		tert-Butanol (TBA)	1250.000	4.337	99.7#	0	0.00
19		Diisopropyl ether (DIPE)	5.000	0.109	97.8#	2	0.00
20	P	1,1-Dichloroethane	20.000	21.543	-7.7	110	0.00
21		Acrylonitrile	20.000	20.875	-4.4	99	0.00
22		Ethyl-tert-butyl ether (ETB	5.000	0.095	98.1#	2	0.00
23		c-1,2-Dichloroethene	20.000	20.215	-1.1	106	0.00
24		2,2-Dichloropropane	20.000	18.159	9.2	98	0.00
25		Bromochloromethane	20.000	20.515	-2.6	104	0.00
26	C	Chloroform	20.000	21.386	-6.9	109	0.00
27		Carbon Tetrachloride	20.000	21.544	-7.7	106	0.00
28		Tetrahydrofuran	20.000	18.683	6.6	102	0.00
29		1,1,1-Trichloroethane	20.000	20.975	-4.9	106	0.00
30	S	Dibromofluoromethane (S)	50.000	49.967	0.1	106	0.00
31		1,1-Dichloropropene	20.000	20.186	-0.9	105	0.00
32		2-Butanone (MEK)	40.000	37.986	5.0	101	0.00
33		Benzene	20.000	19.904	0.5	106	0.00
34		tert-Amyl methyl ether (TAM	5.000	0.139	97.2#	3	0.00
35		1,2-Dichloroethane (EDC)	20.000	20.788	-3.9	105	0.00
36		iso-Butyl Alcohol	500.000	551.010	-10.2	110	0.01
37	S	1,4-Difluorobenzene (S)	50.000	50.430	-0.9	108	0.00
38		Trichloroethene (TCE)	20.000	21.735	-8.7	111	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	0.073	98.5#	1	0.00
40		Dibromomethane	20.000	20.843	-4.2	106	0.00
41	C	1,2-Dichloropropane	20.000	20.511	-2.6	107	0.00
42		Bromodichloromethane	20.000	21.397	-7.0	104	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	106	0.00
44		c-1,3-Dichloropropene	20.000	21.194	-6.0	104	0.00
45	S	Toluene-d8 (S)	50.000	50.320	-0.6	107	0.00
46	C	Toluene	20.000	20.223	-1.1	106	0.00
47		Tetrachloroethene (PCE)	20.000	21.835	-9.2	109	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	42.772	-6.9	103	0.00
49		t-1,3-Dichloropropene	20.000	22.780	-13.9	108	0.00
50		1,1,2-Trichloroethane	20.000	21.854	-9.3	107	0.00

EOS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:42:15 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	21.602	-8.0	110	0.00
52		1,3-Dichloropropane	20.000	21.388	-6.9	107	0.00
53		1,2-Dibromoethane (EDB)	20.000	22.051	-10.3	106	0.00
54		2-Hexanone	40.000	42.181	-5.5	103	0.00
55	P	Chlorobenzene	20.000	20.823	-4.1	108	0.00
56	C	Ethylbenzene	20.000	21.659	-8.3	107	0.00
57		1,1,1,2-Tetrachloroethane	20.000	22.014	-10.1	110	0.00
58		m,p-Xylenes (2)	40.000	44.355	-10.9	107	0.00
59		o-Xylene	20.000	22.438	-12.2	107	0.00
60		Styrene	20.000	19.442	2.8	106	0.00
61	P	Bromoform	20.000	19.721	1.4	108	0.00
62		Isopropylbenzene	20.000	22.684	-13.4	106	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	103	0.00
64	S	4-Bromofluorobenzene (S)	50.000	49.980	0.0	104	0.00
65		Bromobenzene	20.000	21.539	-7.7	108	0.00
66		n-Propylbenzene	20.000	21.587	-7.9	106	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	21.406	-7.0	104	0.00
68		2-Chlorotoluene	20.000	21.826	-9.1	107	0.00
69		1,3,5-Trimethylbenzene	20.000	23.462	-17.3	107	0.00
70		1,2,3-Trichloropropane	20.000	21.798	-9.0	106	0.00
71		t-1,4-Dichloro-2-butene	20.000	19.798	1.0	95	0.00
72		4-Chlorotoluene	20.000	21.990	-9.9	106	0.00
73		tert-Butylbenzene	20.000	22.261	-11.3	106	0.00
74		1,2,4-Trimethylbenzene	20.000	23.213	-16.1	107	0.00
75		sec-Butylbenzene	20.000	22.606	-13.0	107	0.00
76		4-Isopropyltoluene	20.000	23.461	-17.3	110	0.00
77		1,3-Dichlorobenzene	20.000	21.701	-8.5	107	0.00
78		1,4-Dichlorobenzene	20.000	20.648	-3.2	108	0.00
79		n-Butylbenzene	20.000	22.405	-12.0	110	0.00
80		1,2-Dichlorobenzene	20.000	22.134	-10.7	109	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	19.683	1.6	102	0.00
82		Hexachlorobutadiene	20.000	23.125	-15.6	113	0.00
83		1,2,4-Trichlorobenzene	20.000	22.682	-13.4	111	0.00
84		Naphthalene	20.000	22.568	-12.8	107	0.00
85		1,2,3-Trichlorobenzene	20.000	23.094	-15.5	113	0.00

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:43:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	0.152	99.2#	1	0.00
3	P	Chloromethane	20.000	0.823	95.9#	5	0.00
4	C	Vinyl Chloride	20.000	0.086	99.6#	0	-0.01
5		Bromomethane	20.000	1.087	94.6#	17	0.00
6		Chloroethane	20.000	1.685	91.6#	3	0.00
7		Trichlorofluoromethane	20.000	0.000	100.0#	0	-2.60#
8		Ethanol	1250.000	1319.114	-5.5	109	0.00
9	C	1,1-Dichloroethene	20.000	0.230	98.8#	1	0.00
10		Carbon Disulfide	20.000	0.517	97.4#	3	0.00
11		Freon 113	20.000	0.163	99.2#	1	0.00
12		Iodomethane	20.000	3.629	81.9#	20	0.00
13		Methylene Chloride	20.000	0.246	98.8#	6	0.00
14		Acetone	40.000	1.459	96.4#	4	0.00
15		t-1,2-Dichloroethene	20.000	0.330	98.4#	2	0.00
16		n-Hexane	20.000	0.000	100.0#	0	-4.04#
17		Methyl-tert-butyl-ether	20.000	0.122	99.4#	1	0.00
18		tert-Butanol (TBA)	1250.000	1428.859	-14.3	112	0.00
19		Diisopropyl ether (DIPE)	5.000	5.264	-5.3	110	0.00
20	P	1,1-Dichloroethane	20.000	0.226	98.9#	1	0.00
21		Acrylonitrile	20.000	0.000	100.0#	0	-4.63#
22		Ethyl-tert-butyl ether (ETB	5.000	5.361	-7.2	113	0.00
23		c-1,2-Dichloroethene	20.000	0.259	98.7#	1	0.00
24		2,2-Dichloropropane	20.000	0.189	99.1#	1	0.00
25		Bromochloromethane	20.000	0.153	99.2#	1	0.00
26	C	Chloroform	20.000	0.227	98.9#	1	0.00
27		Carbon Tetrachloride	20.000	0.137	99.3#	1	0.00
28		Tetrahydrofuran	20.000	0.175	99.1#	1	0.00
29		1,1,1-Trichloroethane	20.000	0.134	99.3#	1	0.00
30	S	Dibromofluoromethane (S)	50.000	50.009	-0.0	109	0.00
31		1,1-Dichloropropene	20.000	0.297	98.5#	2	0.00
32		2-Butanone (MEK)	40.000	0.435	98.9#	1	0.00
33		Benzene	20.000	0.261	98.7#	1	0.00
34		tert-Amyl methyl ether (TAM	5.000	4.956	0.9	110	0.00
35		1,2-Dichloroethane (EDC)	20.000	0.125	99.4#	1	0.00
36		iso-Butyl Alcohol	500.000	3.187	99.4#	1	0.03
37	S	1,4-Difluorobenzene (S)	50.000	50.468	-0.9	111	0.00
38		Trichloroethene (TCE)	20.000	0.304	98.5#	2	0.00
39		tert-Amyl ethyl ether (TAEE	5.000	5.390	-7.8	109	0.00
40		Dibromomethane	20.000	0.070	99.6#	0	0.00
41	C	1,2-Dichloropropane	20.000	0.199	99.0#	1	0.00
42		Bromodichloromethane	20.000	0.142	99.3#	1	0.00
43		Chlorobenzene-d5 (I)	50.000	50.000	0.0	111	0.00
44		c-1,3-Dichloropropene	20.000	0.149	99.3#	1	0.01
45	S	Toluene-d8 (S)	50.000	50.233	-0.5	112	0.00
46	C	Toluene	20.000	0.267	98.7#	1	0.00
47		Tetrachloroethene (PCE)	20.000	0.355	98.2#	2	0.00
48		4-Methyl-2-Pentanone (MIBK)	40.000	0.014	100.0#	0	0.00
49		t-1,3-Dichloropropene	20.000	0.110	99.5#	1	0.00
50		1,1,2-Trichloroethane	20.000	0.044	99.8#	0	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:43:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
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	0.000	100.0#	0	-9.06#
52		1,3-Dichloropropane	20.000	0.085	99.6#	0	0.00
53		1,2-Dibromoethane (EDB)	20.000	0.000	100.0#	0	-9.30#
54		2-Hexanone	40.000	0.000	100.0#	0	-9.54#
55	P	Chlorobenzene	20.000	0.286	98.6#	2	0.00
56	C	Ethylbenzene	20.000	0.270	98.7#	1	0.00
57		1,1,1,2-Tetrachloroethane	20.000	0.158	99.2#	1	0.00
58		m,p-Xylenes (2)	40.000	0.538	98.7#	1	0.00
59		o-Xylene	20.000	0.247	98.8#	1	0.00
60		Styrene	20.000	0.344	98.3#	1	0.00
61	P	Bromoform	20.000	0.000	100.0#	0	-10.44#
62		Isopropylbenzene	20.000	0.231	98.8#	1	0.00
63	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	104	0.00
64	S	4-Bromofluorobenzene (S)	50.000	51.065	-2.1	107	0.00
65		Bromobenzene	20.000	0.252	98.7#	1	0.00
66		n-Propylbenzene	20.000	0.318	98.4#	2	0.00
67	P	1,1,2,2-Tetrachloroethane	20.000	0.037	99.8#	0	0.00
68		2-Chlorotoluene	20.000	0.306	98.5#	2	0.00
69		1,3,5-Trimethylbenzene	20.000	0.290	98.6#	1	0.00
70		1,2,3-Trichloropropane	20.000	0.000	100.0#	0	-11.15#
71		t-1,4-Dichloro-2-butene	20.000	0.000	100.0#	0	-11.19#
72		4-Chlorotoluene	20.000	0.339	98.3#	2	0.00
73		tert-Butylbenzene	20.000	0.221	98.9#	1	0.00
74		1,2,4-Trimethylbenzene	20.000	0.295	98.5#	1	0.00
75		sec-Butylbenzene	20.000	0.284	98.6#	1	0.00
76		4-Isopropyltoluene	20.000	0.328	98.4#	2	0.00
77		1,3-Dichlorobenzene	20.000	0.412	97.9#	2	0.00
78		1,4-Dichlorobenzene	20.000	0.394	98.0#	2	0.00
79		n-Butylbenzene	20.000	0.496	97.5#	2	0.00
80		1,2-Dichlorobenzene	20.000	0.266	98.7#	1	0.00
81		1,2-Dibromo-3-Chloropropane	20.000	0.000	100.0#	0	-12.70#
82		Hexachlorobutadiene	20.000	0.597	97.0#	3	0.00
83		1,2,4-Trichlorobenzene	20.000	0.633	96.8#	3	0.00
84		Naphthalene	20.000	0.536	97.3#	3	0.00
85		1,2,3-Trichlorobenzene	20.000	0.539	97.3#	3	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J23072

Analysis Included
8260C Full List
8260C Iodomethane Add On
8260C Oxygenates

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9J23072-TUN1	MS Tune	Soil		A19G118	10/23/2019 9:24:00PM
9J23072-ICB1	Initial Cal Blank	Soil		A19G118	10/23/2019 9:51:00PM
9J23072-CAL1	Cal Standard	Soil	A19J339	"	10/23/2019 10:18:00PM
9J23072-CAL2	Cal Standard	Soil	A19J340	"	10/23/2019 10:45:00PM
9J23072-CAL3	Cal Standard	Soil	A19J341	"	10/23/2019 11:12:00PM
9J23072-CAL4	Cal Standard	Soil	A19J342	"	10/23/2019 11:38:00PM
9J23072-CAL5	Cal Standard	Soil	A19J343	"	10/24/2019 12:05:00AM
9J23072-CAL6	Cal Standard	Soil	A19J344	"	10/24/2019 12:32:00AM
9J23072-CAL7	Cal Standard	Soil	A19J345	"	10/24/2019 12:59:00AM
9J23072-CAL8	Cal Standard	Soil	A19J346	"	10/24/2019 1:26:00AM
9J23072-CAL9	Cal Standard	Soil	A19J347	"	10/24/2019 1:53:00AM
9J23072-CALA	Cal Standard	Soil	A19J348	"	10/24/2019 2:46:00AM
9J23072-CALB	Cal Standard	Soil	A19J349	"	10/24/2019 3:40:00AM
9J23072-ICV1	Initial Cal Check	Soil	A19J131	"	10/24/2019 5:00:00AM
9J23072-ICV2	Initial Cal Check	Soil	A19E195	"	10/24/2019 5:27:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J2404** Instrument: **VOA-GCMS10**

8260C Full List Sequence: **9J23072** Matrix: **Soil**

9J23072-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J23072

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: **A9J2404** Instrument: **VOA-GCMS10**

8260C Full List Sequence: **9J23072** Matrix: **Soil**

9J23072-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
Iodomethane	20	20.0	27.68	138	E05

9J23072-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.

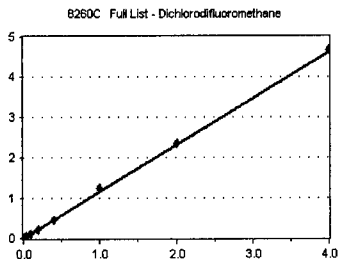
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

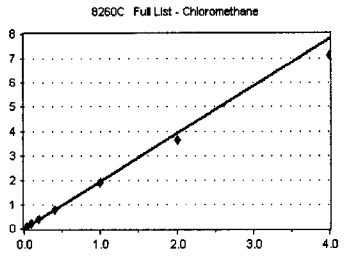


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	1	2035	1.102	1.70
9J23072-CAL5	2	4456	1.175	1.69
9J23072-CAL6	5	11145	1.126	1.70
9J23072-CAL7	10	22844	1.116	1.70
9J23072-CAL8	20	42729	1.135	1.69
9J23072-CAL9	50	131685	1.254	1.69
9J23072-CALA	100	259035	1.178	1.70
9J23072-CALB	200	515195	1.171	1.69

AVE RF **1.157** RF RSD **4.20** AVE RT **1.69**

Chloromethane

Curve Fit: **AVERAGE RF**

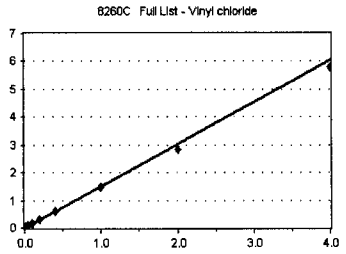


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~2383~~	~~12.136~~	~~1.89~~
~~9J23072-CAL2~~	~~0.2~~	~~2774~~	~~7.289~~	~~1.90~~
~~9J23072-CAL3~~	~~0.4~~	~~3285~~	~~4.405~~	~~1.90~~
~~9J23072-CAL4~~	~~1~~	~~5307~~	~~2.874~~	~~1.90~~
9J23072-CAL5	2	8944	2.359	1.89
9J23072-CAL6	5	20037	2.024	1.90
9J23072-CAL7	10	38733	1.892	1.90
9J23072-CAL8	20	73020	1.940	1.90
9J23072-CAL9	50	201248	1.916	1.89
9J23072-CALA	100	397217	1.806	1.90
9J23072-CALB	200	787223	1.789	1.89

AVE RF **1.961** RF RSD **9.83** AVE RT **1.90**

Vinyl chloride

Curve Fit: **AVERAGE RF**

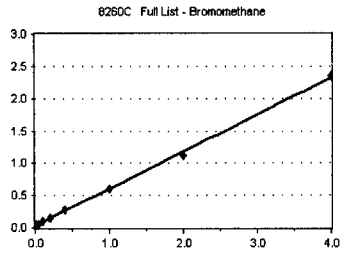


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	1110	1.488	2.01
9J23072-CAL4	1	3035	1.644	2.00
9J23072-CAL5	2	6249	1.648	1.98
9J23072-CAL6	5	14616	1.477	2.00
9J23072-CAL7	10	29953	1.463	2.00
9J23072-CAL8	20	57870	1.538	2.00
9J23072-CAL9	50	155736	1.483	1.98
9J23072-CALA	100	313932	1.428	2.00
9J23072-CALB	200	635586	1.444	1.98

AVE RF **1.513** RF RSD **5.40** AVE RT **1.99**

Bromomethane

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



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	2899	14.764	2.34
9J23072-CAL2	0.2	3184	8.366	2.34
9J23072-CAL3	0.4	3378	4.530	2.34
9J23072-CAL4	1	4613	2.498	2.35
9J23072-CAL5	2	5195	1.370	2.34
9J23072-CAL6	5	9360	0.946	2.35
9J23072-CAL7	10	15471	0.756	2.35
9J23072-CAL8	20	25485	0.677	2.35
9J23072-CAL9	50	63337	0.603	2.34
9J23072-CALA	100	123566	0.562	2.35
9J23072-CALB	200	258257	0.587	2.34

AVE RF **3.242** RF RSD **139.32** AVE RT **2.34**

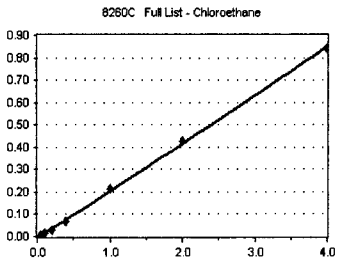
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Chloroethane

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

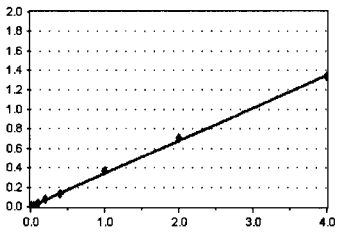


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL5	2	558	0.147	2.46
9J23072-CAL6	5	1384	0.140	2.48
9J23072-CAL7	10	2873	0.140	2.48
9J23072-CAL8	20	6188	0.164	2.47
9J23072-CAL9	50	22708	0.216	2.47
9J23072-CALA	100	47113	0.214	2.49
9J23072-CALB	200	92724	0.211	2.49

AVE RF **0.176** RF RSD **20.51** AVE RT **2.48**

Trichlorofluoromethane

Curve Fit: **AVERAGE RF**

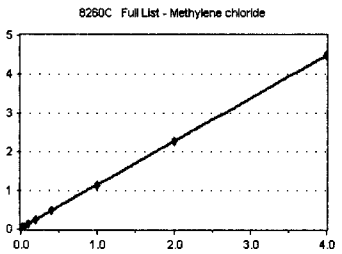


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	1	516	0.279	2.60
9J23072-CAL5	2	1251	0.330	2.60
9J23072-CAL6	5	3402	0.344	2.62
9J23072-CAL7	10	7278	0.356	2.61
9J23072-CAL8	20	12628	0.336	2.60
9J23072-CAL9	50	38671	0.368	2.60
9J23072-CALA	100	77408	0.352	2.61
9J23072-CALB	200	147731	0.336	2.60

AVE RF **0.338** RF RSD **7.88** AVE RT **2.60**

Methylene chloride

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

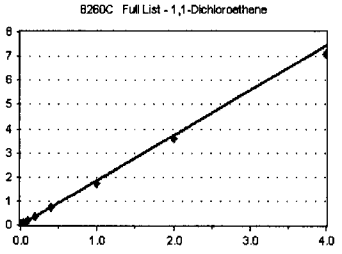


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	2211	11.260	0.00
9J23072-CAL2	0.2	2377	6.246	0.00
9J23072-CAL3	0.4	2718	3.645	0.00
9J23072-CAL4	1	3788	2.052	3.78
9J23072-CAL5	2	6212	1.638	3.78
9J23072-CAL6	5	12998	1.313	3.78
9J23072-CAL7	10	24987	1.221	3.78
9J23072-CAL8	20	46523	1.236	3.78
9J23072-CAL9	50	118736	1.131	3.78
9J23072-CALA	100	249850	1.136	3.78
9J23072-CALB	200	493458	1.121	3.78

AVE RF **2.909** RF RSD **109.50** AVE RT **2.75**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	1510	2.025	3.14
9J23072-CAL4	1	3558	1.927	3.14
9J23072-CAL5	2	7400	1.952	3.14
9J23072-CAL6	5	18097	1.828	3.15
9J23072-CAL7	10	37595	1.836	3.15
9J23072-CAL8	20	70432	1.871	3.14
9J23072-CAL9	50	181540	1.729	3.15
9J23072-CALA	100	396303	1.802	3.15
9J23072-CALB	200	780132	1.773	3.14

AVE RF **1.860** RF RSD **5.03** AVE RT **3.14**

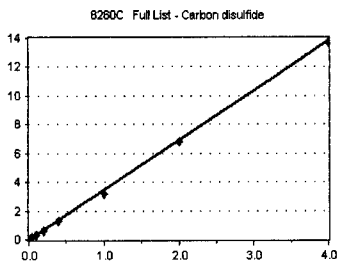
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Carbon disulfide

Curve Fit: **AVERAGE RF**

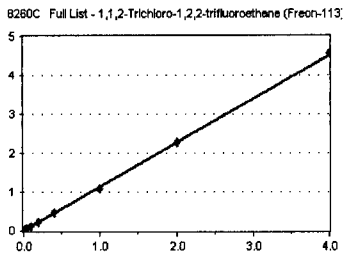


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	947	4.823	3.15
9J23072-CAL2	0.2	1499	3.939	3.15
9J23072-CAL3	0.4	2496	3.347	3.15
9J23072-CAL4	1	6000	3.250	3.16
9J23072-CAL5	2	12853	3.390	3.15
9J23072-CAL6	5	30469	3.078	3.16
9J23072-CAL7	10	63760	3.114	3.16
9J23072-CAL8	20	120674	3.206	3.15
9J23072-CAL9	50	335203	3.192	3.16
9J23072-CALA	100	748104	3.402	3.16
9J23072-CALB	200	1509890	3.431	3.15

AVE RF **3.470** RF RSD **14.56** AVE RT **3.15**

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

Curve Fit: **AVERAGE RF**

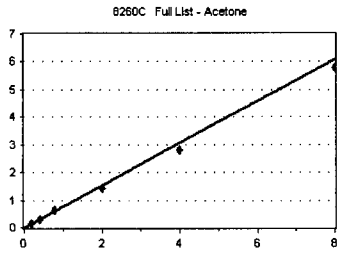


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	761	1.020	3.19
9J23072-CAL4	1	2153	1.166	3.21
9J23072-CAL5	2	4614	1.217	3.19
9J23072-CAL6	5	11080	1.119	3.21
9J23072-CAL7	10	23337	1.140	3.21
9J23072-CAL8	20	43205	1.148	3.20
9J23072-CAL9	50	113502	1.081	3.20
9J23072-CALA	100	250927	1.141	3.21
9J23072-CALB	200	501626	1.140	3.19

AVE RF **1.130** RF RSD **4.85** AVE RT **3.20**

Acetone

Curve Fit: **AVERAGE RF**

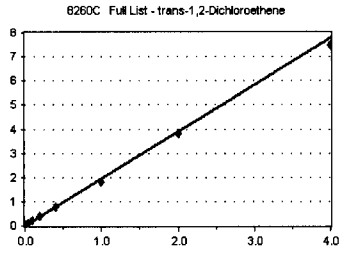


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.8~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL4~~	~~2~~	~~5145~~	~~1.393~~	~~3.88~~
~~9J23072-CAL5~~	~~4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL6	10	16748	0.846	3.88
9J23072-CAL7	20	31545	0.770	3.88
9J23072-CAL8	40	61696	0.820	3.87
9J23072-CAL9	100	150797	0.718	3.87
9J23072-CALA	200	308333	0.701	3.87
9J23072-CALB	400	636343	0.723	3.86

AVE RF **0.763** RF RSD **7.78** AVE RT **3.87**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	714	1.876	3.94
9J23072-CAL3	0.4	1485	1.991	3.95
9J23072-CAL4	1	3719	2.014	3.95
9J23072-CAL5	2	7911	2.086	3.95
9J23072-CAL6	5	19492	1.969	3.95
9J23072-CAL7	10	40127	1.960	3.95
9J23072-CAL8	20	73863	1.963	3.95
9J23072-CAL9	50	191374	1.822	3.95
9J23072-CALA	100	416493	1.894	3.95
9J23072-CALB	200	823777	1.872	3.94

AVE RF **1.945** RF RSD **4.05** AVE RT **3.95**

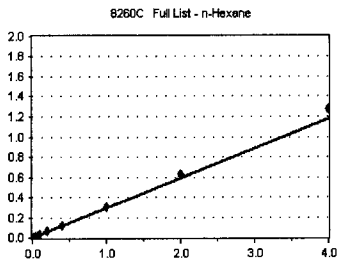
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

n-Hexane

Curve Fit: **AVERAGE RF**

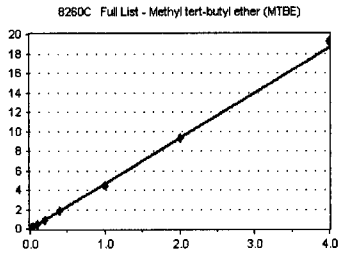


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	1	445	0.241	4.04
9J23072-CAL5	2	1139	0.300	4.04
9J23072-CAL6	5	2790	0.282	4.05
9J23072-CAL7	10	6208	0.303	4.05
9J23072-CAL8	20	11103	0.295	4.05
9J23072-CAL9	50	31443	0.299	4.05
9J23072-CALA	100	69515	0.316	4.05
9J23072-CALB	200	140691	0.320	4.04

AVE RF **0.295** RF RSD **8.37** AVE RT **4.04**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

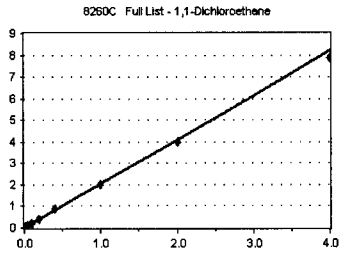


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	1	8793	4.762	4.12
9J23072-CAL5	2	18230	4.808	4.10
9J23072-CAL6	5	45549	4.602	4.11
9J23072-CAL7	10	90735	4.432	4.11
9J23072-CAL8	20	176865	4.700	4.11
9J23072-CAL9	50	469291	4.469	4.11
9J23072-CALA	100	1020787	4.642	4.11
9J23072-CALB	200	2113381	4.802	4.10

AVE RF **4.652** RF RSD **3.10** AVE RT **4.11**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**

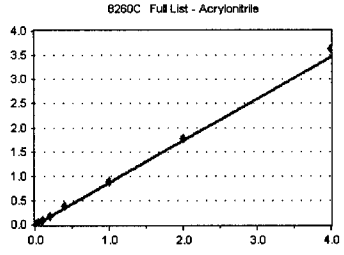


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	720	1.892	4.58
9J23072-CAL3	0.4	1458	1.955	4.58
9J23072-CAL4	1	4012	2.173	4.58
9J23072-CAL5	2	8482	2.237	4.58
9J23072-CAL6	5	21122	2.134	4.59
9J23072-CAL7	10	42318	2.067	4.59
9J23072-CAL8	20	80359	2.135	4.58
9J23072-CAL9	50	207492	1.976	4.58
9J23072-CALA	100	436977	1.987	4.58
9J23072-CALB	200	865836	1.967	4.58

AVE RF **2.052** RF RSD **5.51** AVE RT **4.58**

Acrylonitrile

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	409	0.548	4.64
9J23072-CAL4	1	1605	0.869	4.64
9J23072-CAL5	2	3497	0.922	4.64
9J23072-CAL6	5	8805	0.890	4.64
9J23072-CAL7	10	18110	0.885	4.64
9J23072-CAL8	20	36419	0.968	4.64
9J23072-CAL9	50	93684	0.892	4.63
9J23072-CALA	100	195553	0.889	4.64
9J23072-CALB	200	400678	0.910	4.63

AVE RF **0.864** RF RSD **14.09** AVE RT **4.64**

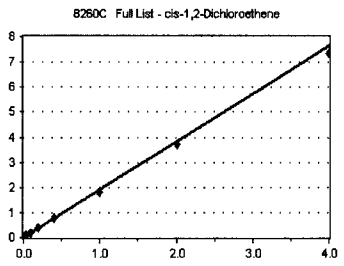
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

cis-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

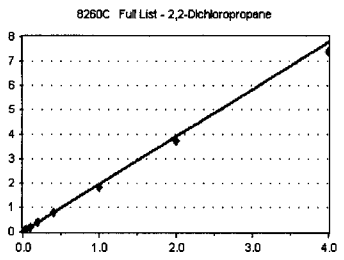


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	1499	2.010	5.13
9J23072-CAL4	1	3680	1.993	5.13
9J23072-CAL5	2	7651	2.018	5.13
9J23072-CAL6	5	18773	1.897	5.13
9J23072-CAL7	10	38569	1.884	5.13
9J23072-CAL8	20	73333	1.949	5.13
9J23072-CAL9	50	189767	1.807	5.13
9J23072-CALA	100	410212	1.866	5.13
9J23072-CALB	200	811012	1.843	5.13

AVE RF **1.918** RF RSD **4.01** AVE RT **5.13**

2,2-Dichloropropane

Curve Fit: **AVERAGE RF**

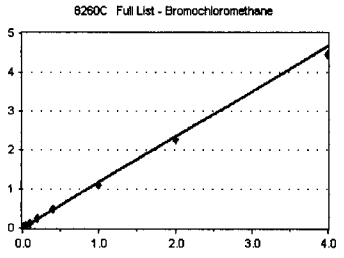


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	761	2.000	5.24
9J23072-CAL3	0.4	1640	2.199	5.24
9J23072-CAL4	1	3688	1.997	5.24
9J23072-CAL5	2	7702	2.031	5.24
9J23072-CAL6	5	18540	1.873	5.24
9J23072-CAL7	10	38645	1.888	5.24
9J23072-CAL8	20	72158	1.917	5.24
9J23072-CAL9	50	189548	1.805	5.24
9J23072-CALA	100	411005	1.869	5.24
9J23072-CALB	200	813691	1.849	5.24

AVE RF **1.943** RF RSD **5.98** AVE RT **5.24**

Bromochloromethane

Curve Fit: **AVERAGE RF**

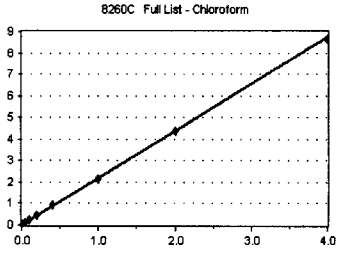


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	807	1.082	5.33
9J23072-CAL4	1	2314	1.253	5.34
9J23072-CAL5	2	4784	1.262	5.32
9J23072-CAL6	5	11641	1.176	5.34
9J23072-CAL7	10	23752	1.160	5.33
9J23072-CAL8	20	45927	1.220	5.33
9J23072-CAL9	50	116893	1.113	5.33
9J23072-CALA	100	249374	1.134	5.33
9J23072-CALB	200	489443	1.112	5.33

AVE RF **1.168** RF RSD **5.55** AVE RT **5.33**

Chloroform

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	740	1.944	5.41
9J23072-CAL3	0.4	1517	2.034	5.42
9J23072-CAL4	1	4201	2.275	5.42
9J23072-CAL5	2	8976	2.367	5.41
9J23072-CAL6	5	22188	2.242	5.42
9J23072-CAL7	10	46150	2.254	5.42
9J23072-CAL8	20	86201	2.290	5.41
9J23072-CAL9	50	226777	2.160	5.41
9J23072-CALA	100	483892	2.201	5.42
9J23072-CALB	200	951891	2.163	5.41

AVE RF **2.193** RF RSD **5.73** AVE RT **5.42**

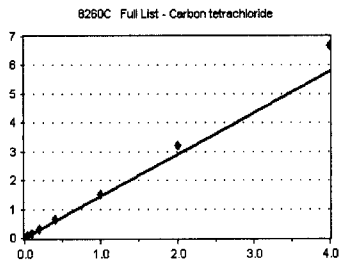
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**

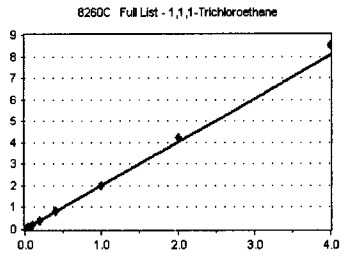


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	367	0.964	5.55
9J23072-CAL3	0.4	934	1.252	5.55
9J23072-CAL4	1	2727	1.477	5.56
9J23072-CAL5	2	5728	1.511	5.55
9J23072-CAL6	5	14343	1.449	5.55
9J23072-CAL7	10	30244	1.477	5.56
9J23072-CAL8	20	58891	1.565	5.55
9J23072-CAL9	50	158501	1.509	5.55
9J23072-CALA	100	354527	1.612	5.56
9J23072-CALB	200	735322	1.671	5.55

AVE RF **1.449** RF RSD **14.03** AVE RT **5.56**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**

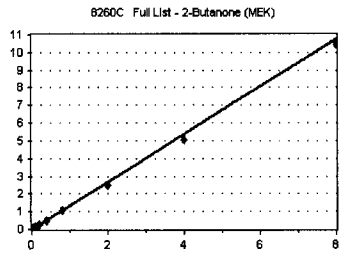


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	686	1.803	5.63
9J23072-CAL3	0.4	1334	1.789	5.62
9J23072-CAL4	1	3664	1.984	5.62
9J23072-CAL5	2	8216	2.167	5.62
9J23072-CAL6	5	20044	2.025	5.62
9J23072-CAL7	10	41348	2.020	5.63
9J23072-CAL8	20	79966	2.125	5.62
9J23072-CAL9	50	208934	1.990	5.62
9J23072-CALA	100	466945	2.124	5.62
9J23072-CALB	200	937584	2.130	5.62

AVE RF **2.016** RF RSD **6.58** AVE RT **5.62**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**

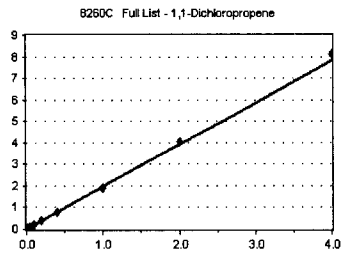


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.8~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	2	5985	1.621	5.74
9J23072-CAL5	4	10911	1.439	5.74
9J23072-CAL6	10	25206	1.273	5.74
9J23072-CAL7	20	51036	1.246	5.74
9J23072-CAL8	40	101470	1.348	5.74
9J23072-CAL9	100	262305	1.249	5.73
9J23072-CALA	200	557729	1.268	5.74
9J23072-CALB	400	1150574	1.307	5.73

AVE RF **1.344** RF RSD **9.59** AVE RT **5.73**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	1389	1.863	5.75
9J23072-CAL4	1	3601	1.950	5.75
9J23072-CAL5	2	7729	2.038	5.75
9J23072-CAL6	5	18701	1.889	5.75
9J23072-CAL7	10	39421	1.926	5.75
9J23072-CAL8	20	75436	2.004	5.75
9J23072-CAL9	50	199471	1.899	5.75
9J23072-CALA	100	445742	2.027	5.75
9J23072-CALB	200	896409	2.037	5.75

AVE RF **1.959** RF RSD **3.52** AVE RT **5.75**

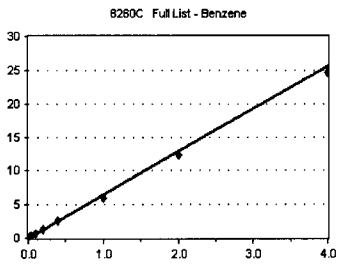
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Benzene

Curve Fit: **AVERAGE RF**

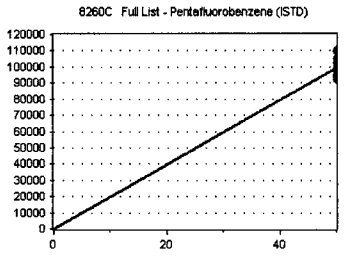


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	1432	7.293	6.00
9J23072-CAL2	0.2	2559	6.724	6.00
9J23072-CAL3	0.4	4719	6.328	6.00
9J23072-CAL4	1	11702	6.338	6.00
9J23072-CAL5	2	25316	6.677	6.00
9J23072-CAL6	5	62213	6.286	6.00
9J23072-CAL7	10	128327	6.268	6.00
9J23072-CAL8	20	240789	6.398	6.00
9J23072-CAL9	50	625910	5.960	6.00
9J23072-CALA	100	1359633	6.183	6.00
9J23072-CALB	200	2717357	6.174	6.00

AVE RF **6.421** RF RSD **5.63** AVE RT **6.00**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

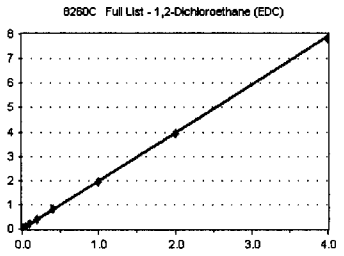


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	98175	1963.500	6.09
9J23072-CAL2	50	95145	1902.900	6.09
9J23072-CAL3	50	93220	1864.400	6.09
9J23072-CAL4	50	92321	1846.420	6.10
9J23072-CAL5	50	94791	1895.820	6.09
9J23072-CAL6	50	98978	1979.560	6.09
9J23072-CAL7	50	102360	2047.200	6.10
9J23072-CAL8	50	94087	1881.740	6.09
9J23072-CAL9	50	105013	2100.260	6.09
9J23072-CALA	50	109942	2198.840	6.09
9J23072-CALB	50	110028	2200.560	6.09

AVE RF **1989.200** RF RSD **6.53** AVE RT **6.09**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**

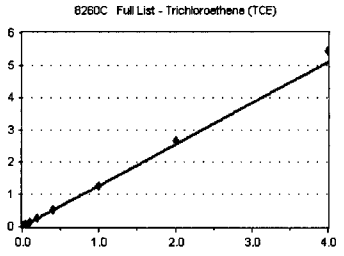


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	709	1.863	6.21
9J23072-CAL3	0.4	1352	1.813	6.21
9J23072-CAL4	1	3762	2.037	6.21
9J23072-CAL5	2	8154	2.151	6.21
9J23072-CAL6	5	19717	1.992	6.21
9J23072-CAL7	10	40742	1.990	6.21
9J23072-CAL8	20	77917	2.070	6.21
9J23072-CAL9	50	202778	1.931	6.21
9J23072-CALA	100	434140	1.974	6.21
9J23072-CALB	200	860316	1.955	6.21

AVE RF **1.978** RF RSD **4.93** AVE RT **6.21**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	381	1.001	6.62
9J23072-CAL3	0.4	944	1.266	6.62
9J23072-CAL4	1	2385	1.292	6.63
9J23072-CAL5	2	5111	1.348	6.62
9J23072-CAL6	5	12809	1.294	6.63
9J23072-CAL7	10	26231	1.281	6.63
9J23072-CAL8	20	49869	1.325	6.63
9J23072-CAL9	50	131822	1.255	6.62
9J23072-CALA	100	292620	1.331	6.62
9J23072-CALB	200	600664	1.365	6.63

AVE RF **1.276** RF RSD **8.06** AVE RT **6.62**

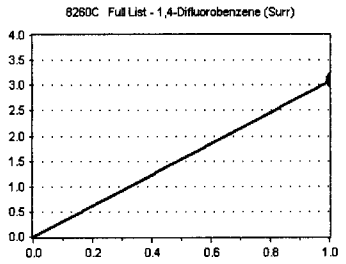
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

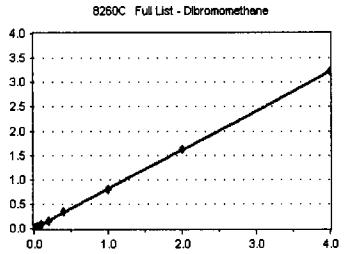


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	299782	3.054	6.66
9J23072-CAL2	50	296071	3.112	6.66
9J23072-CAL3	50	285274	3.060	6.66
9J23072-CAL4	50	284090	3.077	6.66
9J23072-CAL5	50	289317	3.052	6.66
9J23072-CAL6	50	303595	3.067	6.66
9J23072-CAL7	50	313300	3.061	6.66
9J23072-CAL8	50	285833	3.038	6.66
9J23072-CAL9	50	323717	3.083	6.66
9J23072-CALA	50	338746	3.081	6.66
9J23072-CALB	50	346693	3.151	6.66

AVE RF **3.076** RF RSD **1.03** AVE RT **6.66**

Dibromomethane

Curve Fit: **AVERAGE RF**

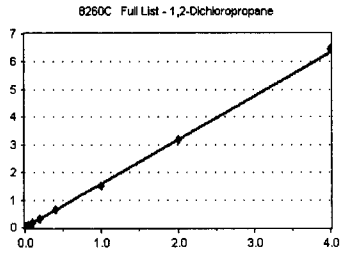


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	565	0.758	7.06
9J23072-CAL4	1	1439	0.779	7.07
9J23072-CAL5	2	3204	0.845	7.06
9J23072-CAL6	5	8013	0.810	7.06
9J23072-CAL7	10	16435	0.803	7.06
9J23072-CAL8	20	31731	0.843	7.06
9J23072-CAL9	50	83755	0.798	7.06
9J23072-CALA	100	179023	0.814	7.06
9J23072-CALB	200	353624	0.803	7.06

AVE RF **0.806** RF RSD **3.43** AVE RT **7.06**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**

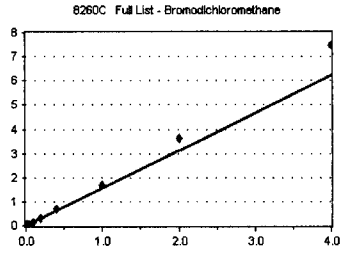


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	1176	1.577	7.17
9J23072-CAL4	1	2881	1.560	7.17
9J23072-CAL5	2	6237	1.645	7.17
9J23072-CAL6	5	15592	1.575	7.18
9J23072-CAL7	10	32431	1.584	7.17
9J23072-CAL8	20	61016	1.621	7.17
9J23072-CAL9	50	160675	1.530	7.17
9J23072-CALA	100	350522	1.594	7.17
9J23072-CALB	200	710561	1.614	7.17

AVE RF **1.589** RF RSD **2.17** AVE RT **7.17**

Bromodichloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	437	1.148	7.25
9J23072-CAL3	0.4	1004	1.346	7.25
9J23072-CAL4	1	2597	1.407	7.25
9J23072-CAL5	2	5797	1.529	7.25
9J23072-CAL6	5	14894	1.505	7.25
9J23072-CAL7	10	31433	1.535	7.25
9J23072-CAL8	20	63632	1.691	7.25
9J23072-CAL9	50	175537	1.672	7.25
9J23072-CALA	100	400178	1.820	7.25
9J23072-CALB	200	825346	1.875	7.25

AVE RF **1.553** RF RSD **14.23** AVE RT **7.25**

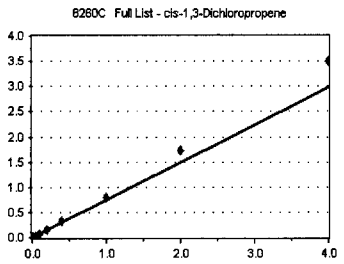
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

cis-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

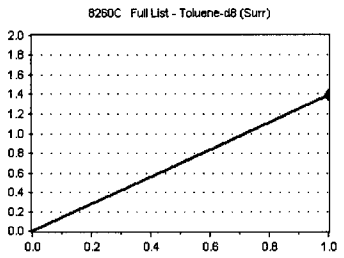


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	596	0.568	7.95
9J23072-CAL3	0.4	1346	0.665	7.96
9J23072-CAL4	1	3342	0.668	7.96
9J23072-CAL5	2	7516	0.740	7.95
9J23072-CAL6	5	19353	0.729	7.95
9J23072-CAL7	10	40620	0.742	7.95
9J23072-CAL8	20	80676	0.798	7.95
9J23072-CAL9	50	225850	0.801	7.95
9J23072-CALA	100	509437	0.865	7.95
9J23072-CALB	200	1055097	0.876	7.95

AVE RF **0.745** RF RSD **12.78** AVE RT **7.95**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

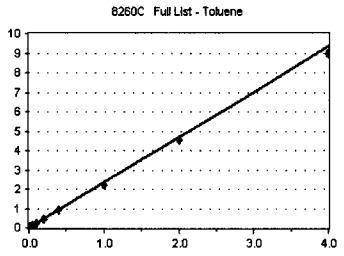


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	367697	1.398	8.17
9J23072-CAL2	50	363461	1.385	8.17
9J23072-CAL3	50	352756	1.395	8.17
9J23072-CAL4	50	350128	1.399	8.17
9J23072-CAL5	50	358352	1.410	8.17
9J23072-CAL6	50	369631	1.392	8.17
9J23072-CAL7	50	383154	1.399	8.17
9J23072-CAL8	50	349892	1.384	8.17
9J23072-CAL9	50	394687	1.399	8.17
9J23072-CALA	50	411311	1.397	8.17
9J23072-CALB	50	415139	1.379	8.17

AVE RF **1.394** RF RSD **0.64** AVE RT **8.17**

Toluene

Curve Fit: **AVERAGE RF**

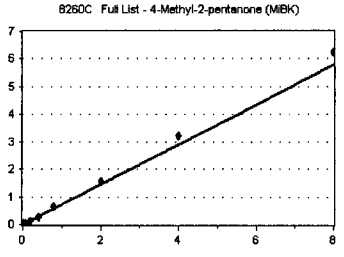


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	1352	2.571	8.23
9J23072-CAL2	0.2	2544	2.423	8.24
9J23072-CAL3	0.4	4766	2.356	8.23
9J23072-CAL4	1	11638	2.326	8.23
9J23072-CAL5	2	24811	2.441	8.23
9J23072-CAL6	5	59671	2.246	8.23
9J23072-CAL7	10	124843	2.279	8.23
9J23072-CAL8	20	237451	2.349	8.23
9J23072-CAL9	50	618659	2.194	8.23
9J23072-CALA	100	1343640	2.282	8.23
9J23072-CALB	200	2694190	2.237	8.23

AVE RF **2.337** RF RSD **4.66** AVE RT **8.23**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.8	2938	0.726	8.67
9J23072-CAL4	2	5887	0.588	8.67
9J23072-CAL5	4	13736	0.676	8.67
9J23072-CAL6	10	35142	0.662	8.68
9J23072-CAL7	20	77248	0.705	8.67
9J23072-CAL8	40	161301	0.798	8.67
9J23072-CAL9	100	437036	0.775	8.67
9J23072-CALA	200	950533	0.807	8.68
9J23072-CALB	400	1880689	0.781	8.68

AVE RF **0.724** RF RSD **10.15** AVE RT **8.67**

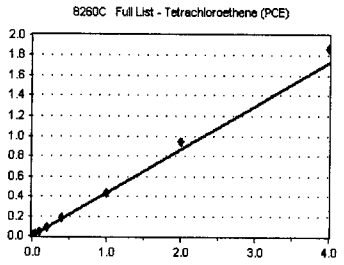
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**

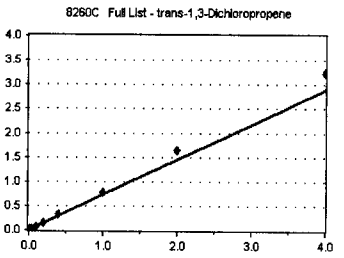


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	350	0.333	8.68
9J23072-CAL3	0.4	805	0.398	8.68
9J23072-CAL4	1	2158	0.431	8.68
9J23072-CAL5	2	4654	0.458	8.68
9J23072-CAL6	5	11684	0.440	8.68
9J23072-CAL7	10	24512	0.448	8.68
9J23072-CAL8	20	46373	0.459	8.68
9J23072-CAL9	50	122230	0.433	8.68
9J23072-CALA	100	275505	0.468	8.68
9J23072-CALB	200	563695	0.468	8.68

AVE RF **0.434** RF RSD **9.46** AVE RT **8.68**

trans-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

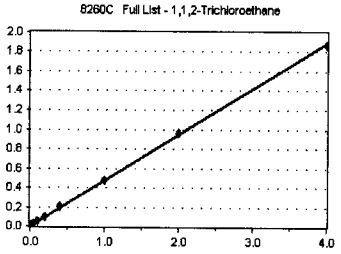


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	580	0.552	8.71
9J23072-CAL3	0.4	1392	0.688	8.70
9J23072-CAL4	1	3091	0.618	8.71
9J23072-CAL5	2	7062	0.695	8.70
9J23072-CAL6	5	18504	0.697	8.71
9J23072-CAL7	10	41087	0.750	8.71
9J23072-CAL8	20	81643	0.808	8.70
9J23072-CAL9	50	221998	0.787	8.70
9J23072-CALA	100	481174	0.817	8.71
9J23072-CALB	200	979397	0.813	8.71

AVE RF **0.722** RF RSD **12.37** AVE RT **8.70**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

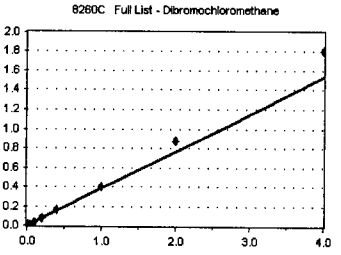


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	417	0.397	8.88
9J23072-CAL3	0.4	933	0.461	8.88
9J23072-CAL4	1	2304	0.460	8.88
9J23072-CAL5	2	5217	0.513	8.88
9J23072-CAL6	5	13046	0.491	8.88
9J23072-CAL7	10	26718	0.488	8.88
9J23072-CAL8	20	51573	0.510	8.88
9J23072-CAL9	50	133185	0.472	8.88
9J23072-CALA	100	282770	0.480	8.88
9J23072-CALB	200	564264	0.469	8.88

AVE RF **0.474** RF RSD **6.91** AVE RT **8.88**

Dibromochloromethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~522~~	~~0.258~~	~~9.06~~
9J23072-CAL4	1	1520	0.304	9.07
9J23072-CAL5	2	3616	0.356	9.06
9J23072-CAL6	5	9350	0.352	9.06
9J23072-CAL7	10	19925	0.364	9.06
9J23072-CAL8	20	40104	0.397	9.06
9J23072-CAL9	50	113957	0.404	9.06
9J23072-CALA	100	256674	0.436	9.07
9J23072-CALB	200	542189	0.450	9.06

AVE RF **0.383** RF RSD **12.61** AVE RT **9.07**

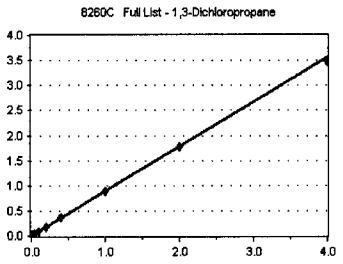
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**

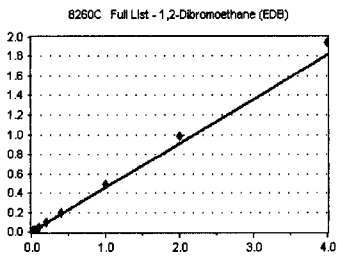


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	851	0.810	9.16
9J23072-CAL3	0.4	1718	0.849	9.17
9J23072-CAL4	1	4392	0.878	9.16
9J23072-CAL5	2	9958	0.980	9.16
9J23072-CAL6	5	24045	0.905	9.16
9J23072-CAL7	10	49530	0.904	9.16
9J23072-CAL8	20	95374	0.943	9.16
9J23072-CAL9	50	247593	0.878	9.16
9J23072-CALA	100	523949	0.890	9.16
9J23072-CALB	200	1049067	0.871	9.16

AVE RF **0.891** RF RSD **5.29** AVE RT **9.16**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**

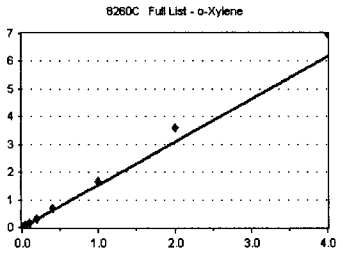


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	426	0.406	9.30
9J23072-CAL3	0.4	788	0.390	9.30
9J23072-CAL4	1	2060	0.412	9.30
9J23072-CAL5	2	4697	0.462	9.30
9J23072-CAL6	5	12041	0.453	9.30
9J23072-CAL7	10	25458	0.465	9.30
9J23072-CAL8	20	50265	0.497	9.30
9J23072-CAL9	50	135703	0.481	9.30
9J23072-CALA	100	289923	0.492	9.30
9J23072-CALB	200	586578	0.487	9.30

AVE RF **0.454** RF RSD **8.56** AVE RT **9.30**

o-Xylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	723	1.375	0.00
9J23072-CAL2	0.2	1440	1.371	10.38
9J23072-CAL3	0.4	2627	1.299	10.38
9J23072-CAL4	1	7125	1.424	10.38
9J23072-CAL5	2	15404	1.516	10.38
9J23072-CAL6	5	39703	1.495	10.38
9J23072-CAL7	10	86841	1.585	10.38
9J23072-CAL8	20	172231	1.704	10.38
9J23072-CAL9	50	471843	1.673	10.38
9J23072-CALA	100	1054003	1.790	10.38
9J23072-CALB	200	2102591	1.746	10.38

AVE RF **1.543** RF RSD **10.87** AVE RT **9.43**

2-Hexanone

Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.8~~	~~1510~~	~~0.373~~	~~9.55~~
~~9J23072-CAL4~~	~~2~~	~~3832~~	~~0.383~~	~~9.55~~
9J23072-CAL5	4	9451	0.465	9.55
9J23072-CAL6	10	23467	0.442	9.55
9J23072-CAL7	20	53666	0.490	9.55
9J23072-CAL8	40	118204	0.585	9.55
9J23072-CAL9	100	323576	0.574	9.55
9J23072-CALA	200	720460	0.612	9.55
9J23072-CALB	400	1458573	0.606	9.55

AVE RF **0.539** RF RSD **13.20** AVE RT **9.55**

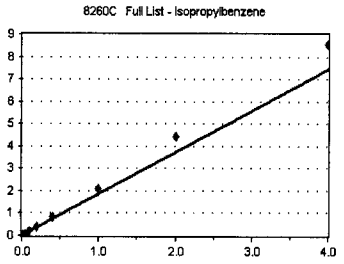
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Isopropylbenzene

Curve Fit: **AVERAGE RF**

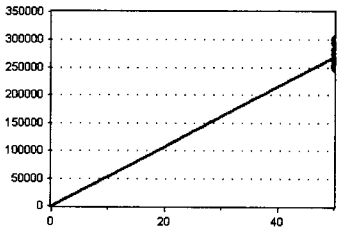


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	797	1.515	0.00
9J23072-CAL2	0.2	1688	1.608	10.65
9J23072-CAL3	0.4	3200	1.582	10.65
9J23072-CAL4	1	8399	1.678	10.65
9J23072-CAL5	2	18251	1.796	10.65
9J23072-CAL6	5	47833	1.801	10.65
9J23072-CAL7	10	107252	1.958	10.65
9J23072-CAL8	20	211570	2.093	10.65
9J23072-CAL9	50	584329	2.072	10.65
9J23072-CALA	100	1303605	2.214	10.65
9J23072-CALB	200	2575948	2.139	10.65

AVE RF **1.860** RF RSD **13.31** AVE RT **9.68**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

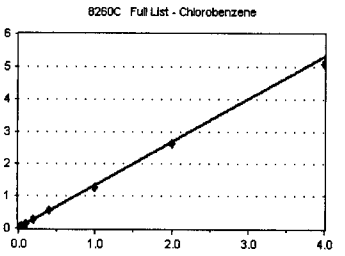


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	262966	5259.320	9.81
9J23072-CAL2	50	262504	5250.080	9.81
9J23072-CAL3	50	252875	5057.500	9.81
9J23072-CAL4	50	250210	5004.200	9.81
9J23072-CAL5	50	254089	5081.780	9.81
9J23072-CAL6	50	265619	5312.380	9.81
9J23072-CAL7	50	273877	5477.540	9.81
9J23072-CAL8	50	252726	5054.520	9.81
9J23072-CAL9	50	282031	5640.620	9.81
9J23072-CALA	50	294436	5888.720	9.81
9J23072-CALB	50	301031	6020.620	9.81

AVE RF **5367.935** RF RSD **6.51** AVE RT **9.81**

Chlorobenzene

Curve Fit: **AVERAGE RF**

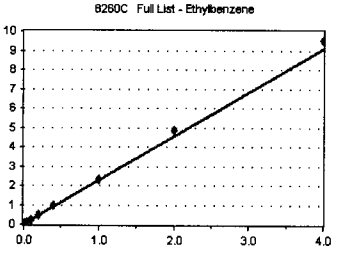


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	695	1.321	9.82
9J23072-CAL2	0.2	1422	1.354	9.83
9J23072-CAL3	0.4	2767	1.368	9.83
9J23072-CAL4	1	6563	1.311	9.82
9J23072-CAL5	2	14691	1.445	9.82
9J23072-CAL6	5	35206	1.325	9.83
9J23072-CAL7	10	72570	1.325	9.82
9J23072-CAL8	20	137767	1.363	9.83
9J23072-CAL9	50	353531	1.254	9.83
9J23072-CALA	100	776195	1.318	9.82
9J23072-CALB	200	1537073	1.277	9.83

AVE RF **1.333** RF RSD **3.80** AVE RT **9.82**

Ethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	1105	2.101	9.86
9J23072-CAL2	0.2	2188	2.084	9.86
9J23072-CAL3	0.4	4399	2.174	9.86
9J23072-CAL4	1	10768	2.152	9.86
9J23072-CAL5	2	23566	2.319	9.86
9J23072-CAL6	5	59905	2.255	9.86
9J23072-CAL7	10	127729	2.332	9.86
9J23072-CAL8	20	245666	2.430	9.86
9J23072-CAL9	50	654045	2.319	9.86
9J23072-CALA	100	1432837	2.433	9.86
9J23072-CALB	200	2864835	2.379	9.86

AVE RF **2.271** RF RSD **5.56** AVE RT **9.86**

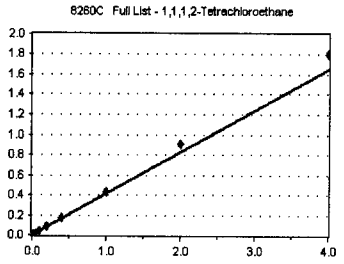
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

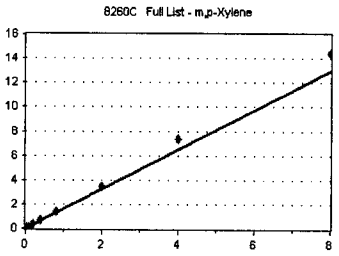


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	712	0.352	9.89
9J23072-CAL4	1	1888	0.377	9.89
9J23072-CAL5	2	4053	0.399	9.89
9J23072-CAL6	5	10760	0.405	9.89
9J23072-CAL7	10	22448	0.410	9.89
9J23072-CAL8	20	44112	0.436	9.89
9J23072-CAL9	50	121183	0.430	9.89
9J23072-CALA	100	268092	0.455	9.89
9J23072-CALB	200	543615	0.451	9.89

AVE RF **0.413** RF RSD **8.29** AVE RT **9.89**

m,p-Xylene

Curve Fit: **AVERAGE RF**

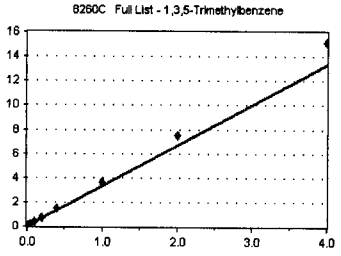


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.2	1531	1.456	10.00
9J23072-CAL2	0.4	3071	1.462	10.00
9J23072-CAL3	0.8	5672	1.402	10.00
9J23072-CAL4	2	14581	1.457	10.00
9J23072-CAL5	4	32148	1.582	10.00
9J23072-CAL6	10	85048	1.601	10.00
9J23072-CAL7	20	185431	1.693	10.00
9J23072-CAL8	40	359257	1.777	10.00
9J23072-CAL9	100	967453	1.715	10.00
9J23072-CALA	200	2158981	1.833	10.00
9J23072-CALB	400	4351315	1.807	10.00

AVE RF **1.617** RF RSD **9.72** AVE RT **10.00**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**

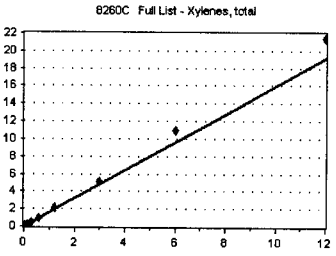


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	562	2.560	0.00
9J23072-CAL2	0.2	1298	2.938	11.16
9J23072-CAL3	0.4	2457	2.907	11.16
9J23072-CAL4	1	6251	3.006	11.16
9J23072-CAL5	2	14119	3.372	11.16
9J23072-CAL6	5	37585	3.354	11.16
9J23072-CAL7	10	83861	3.668	11.16
9J23072-CAL8	20	167903	3.762	11.16
9J23072-CAL9	50	450995	3.628	11.16
9J23072-CALA	100	1011802	3.744	11.16
9J23072-CALB	200	2020440	3.780	11.16

AVE RF **3.338** RF RSD **12.70** AVE RT **10.14**

Xylenes, total

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.3	2254	1.429	10.00
9J23072-CAL2	0.6	4511	1.432	10.38
9J23072-CAL3	1.2	8299	1.367	10.38
9J23072-CAL4	3	21706	1.446	10.38
9J23072-CAL5	6	47552	1.560	10.38
9J23072-CAL6	15	124751	1.566	10.38
9J23072-CAL7	30	272272	1.657	10.38
9J23072-CAL8	60	531488	1.753	10.38
9J23072-CAL9	150	1439296	1.701	10.38
9J23072-CALA	300	3212984	1.819	10.38
9J23072-CALB	600	6453906	1.787	10.38

AVE RF **1.592** RF RSD **10.07** AVE RT **10.34**

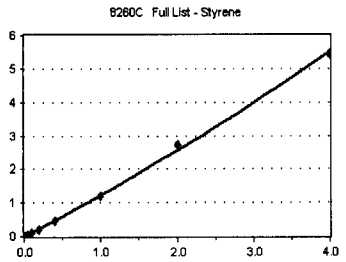
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Styrene

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

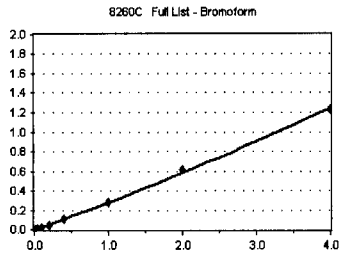


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	892	0.850	10.42
9J23072-CAL3	0.4	1570	0.776	10.42
9J23072-CAL4	1	3854	0.770	10.42
9J23072-CAL5	2	8686	0.855	10.42
9J23072-CAL6	5	24248	0.913	10.42
9J23072-CAL7	10	55991	1.022	10.42
9J23072-CAL8	20	116013	1.148	10.42
9J23072-CAL9	50	342762	1.215	10.42
9J23072-CALA	100	801932	1.362	10.42
9J23072-CALB	200	1640257	1.362	10.42

AVE RF **1.027** RF RSD **22.43** AVE RT **10.42**

Bromoform

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

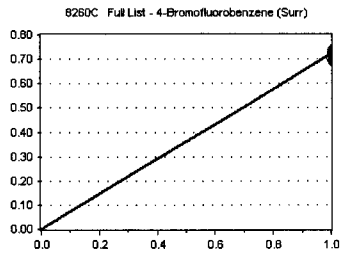


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	307	0.152	10.43
9J23072-CAL4	1	884	0.177	10.44
9J23072-CAL5	2	2069	0.204	10.44
9J23072-CAL6	5	5470	0.206	10.44
9J23072-CAL7	10	12367	0.226	10.44
9J23072-CAL8	20	26337	0.261	10.44
9J23072-CAL9	50	78066	0.277	10.44
9J23072-CALA	100	181310	0.308	10.44
9J23072-CALB	200	371025	0.308	10.44

AVE RF **0.235** RF RSD **23.91** AVE RT **10.44**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

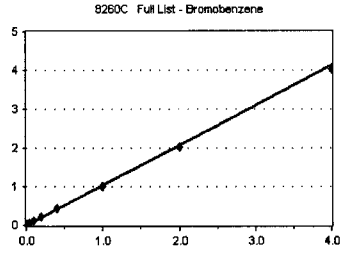


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	81163	0.739	10.88
9J23072-CAL2	50	80374	0.728	10.88
9J23072-CAL3	50	77055	0.729	10.88
9J23072-CAL4	50	75855	0.730	10.88
9J23072-CAL5	50	76386	0.730	10.88
9J23072-CAL6	50	81641	0.728	10.88
9J23072-CAL7	50	84648	0.740	10.88
9J23072-CAL8	50	79925	0.716	10.88
9J23072-CAL9	50	88914	0.715	10.88
9J23072-CALA	50	93929	0.695	10.88
9J23072-CALB	50	92209	0.690	10.88

AVE RF **0.722** RF RSD **2.28** AVE RT **10.88**

Bromobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	420	0.951	10.97
9J23072-CAL3	0.4	848	1.003	10.96
9J23072-CAL4	1	2143	1.030	10.96
9J23072-CAL5	2	4789	1.144	10.96
9J23072-CAL6	5	11698	1.044	10.96
9J23072-CAL7	10	24784	1.084	10.96
9J23072-CAL8	20	47411	1.062	10.96
9J23072-CAL9	50	125116	1.007	10.96
9J23072-CALA	100	273427	1.012	10.97
9J23072-CALB	200	539540	1.010	10.97

AVE RF **1.035** RF RSD **5.11** AVE RT **10.96**

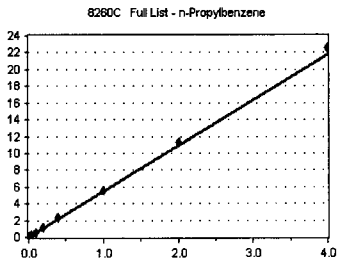
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

n-Propylbenzene

Curve Fit: **AVERAGE RF**

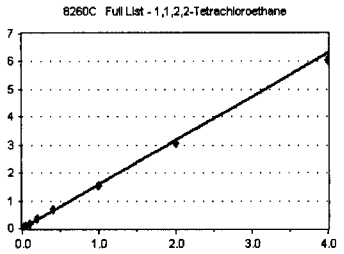


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	1106	5.038	10.99
9J23072-CAL2	0.2	2321	5.253	10.99
9J23072-CAL3	0.4	4342	5.136	11.00
9J23072-CAL4	1	10891	5.237	11.00
9J23072-CAL5	2	23478	5.607	10.99
9J23072-CAL6	5	60466	5.395	11.00
9J23072-CAL7	10	131143	5.736	11.00
9J23072-CAL8	20	255618	5.728	11.00
9J23072-CAL9	50	690882	5.558	10.99
9J23072-CALA	100	1532146	5.670	11.00
9J23072-CALB	200	3009505	5.631	11.00

AVE RF **5.454** RF RSD **4.61** AVE RT **11.00**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

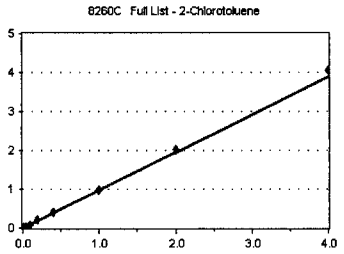


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~305~~	~~1.389~~	~~11.04~~
9J23072-CAL2	0.2	669	1.514	11.04
9J23072-CAL3	0.4	1189	1.407	11.05
9J23072-CAL4	1	3210	1.544	11.05
9J23072-CAL5	2	7515	1.795	11.05
9J23072-CAL6	5	17963	1.603	11.05
9J23072-CAL7	10	37925	1.659	11.05
9J23072-CAL8	20	74780	1.676	11.05
9J23072-CAL9	50	193478	1.556	11.05
9J23072-CALA	100	412177	1.525	11.05
9J23072-CALB	200	808397	1.513	11.05

AVE RF **1.579** RF RSD **6.87** AVE RT **11.05**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**

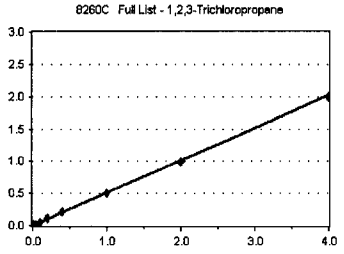


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	366	0.828	11.11
9J23072-CAL3	0.4	805	0.952	11.11
9J23072-CAL4	1	2013	0.968	11.11
9J23072-CAL5	2	4132	0.987	11.11
9J23072-CAL6	5	10583	0.944	11.11
9J23072-CAL7	10	23286	1.019	11.12
9J23072-CAL8	20	45697	1.024	11.12
9J23072-CAL9	50	121749	0.979	11.11
9J23072-CALA	100	274790	1.017	11.12
9J23072-CALB	200	541055	1.012	11.12

AVE RF **0.973** RF RSD **5.99** AVE RT **11.12**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~133~~	~~0.301~~	~~11.15~~
9J23072-CAL3	0.4	377	0.446	11.15
9J23072-CAL4	1	1017	0.489	11.15
9J23072-CAL5	2	2381	0.569	11.15
9J23072-CAL6	5	5563	0.496	11.15
9J23072-CAL7	10	12228	0.535	11.15
9J23072-CAL8	20	23923	0.536	11.15
9J23072-CAL9	50	61884	0.498	11.15
9J23072-CALA	100	134120	0.496	11.15
9J23072-CALB	200	266315	0.498	11.15

AVE RF **0.507** RF RSD **6.92** AVE RT **11.15**

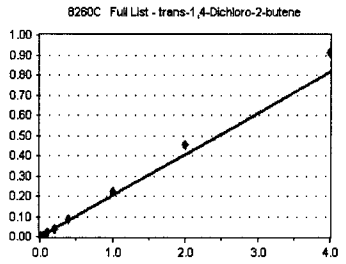
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

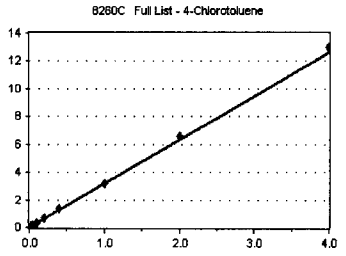


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	1	335	0.161	11.19
9J23072-CAL5	2	731	0.175	11.19
9J23072-CAL6	5	2176	0.194	11.19
9J23072-CAL7	10	4566	0.200	11.19
9J23072-CAL8	20	9771	0.219	11.19
9J23072-CAL9	50	27694	0.223	11.19
9J23072-CALA	100	61632	0.228	11.19
9J23072-CALB	200	121850	0.228	11.19

AVE RF **0.203** RF RSD **12.54** AVE RT **11.19**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**

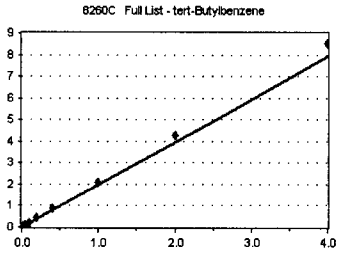


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	1325	2.999	11.25
9J23072-CAL3	0.4	2330	2.756	11.25
9J23072-CAL4	1	6138	2.952	11.25
9J23072-CAL5	2	13748	3.283	11.25
9J23072-CAL6	5	35148	3.136	11.25
9J23072-CAL7	10	76302	3.337	11.25
9J23072-CAL8	20	150657	3.376	11.25
9J23072-CAL9	50	398929	3.209	11.25
9J23072-CALA	100	888249	3.287	11.25
9J23072-CALB	200	1741373	3.258	11.25

AVE RF **3.159** RF RSD **6.28** AVE RT **11.25**

tert-Butylbenzene

Curve Fit: **AVERAGE RF**

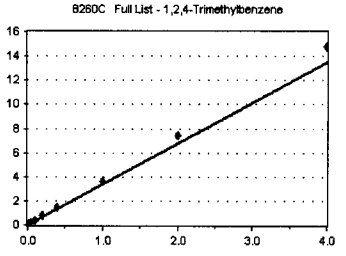


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	795	1.799	11.40
9J23072-CAL3	0.4	1388	1.642	11.41
9J23072-CAL4	1	3751	1.804	11.41
9J23072-CAL5	2	8173	1.952	11.41
9J23072-CAL6	5	22268	1.987	11.41
9J23072-CAL7	10	48165	2.107	11.41
9J23072-CAL8	20	95439	2.139	11.41
9J23072-CAL9	50	260062	2.092	11.41
9J23072-CALA	100	578812	2.142	11.41
9J23072-CALB	200	1137746	2.129	11.41

AVE RF **1.979** RF RSD **8.93** AVE RT **11.41**

1,2,4-Trimethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	694	3.161	11.46
9J23072-CAL2	0.2	1248	2.825	11.46
9J23072-CAL3	0.4	2375	2.810	11.46
9J23072-CAL4	1	6195	2.979	11.46
9J23072-CAL5	2	14318	3.419	11.46
9J23072-CAL6	5	37661	3.360	11.46
9J23072-CAL7	10	85499	3.740	11.46
9J23072-CAL8	20	167688	3.758	11.46
9J23072-CAL9	50	450083	3.621	11.46
9J23072-CALA	100	1005539	3.721	11.46
9J23072-CALB	200	1974970	3.695	11.46

AVE RF **3.372** RF RSD **11.06** AVE RT **11.46**

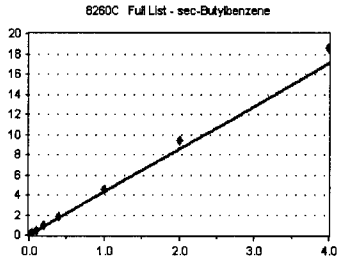
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

sec-Butylbenzene

Curve Fit: **AVERAGE RF**

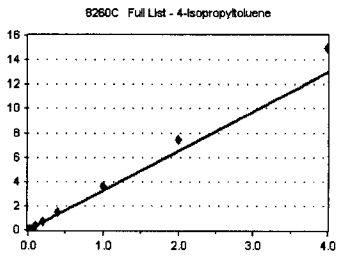


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	1629	3.687	11.55
9J23072-CAL3	0.4	3021	3.574	11.55
9J23072-CAL4	1	7629	3.668	11.55
9J23072-CAL5	2	17439	4.164	11.55
9J23072-CAL6	5	47859	4.270	11.55
9J23072-CAL7	10	107745	4.713	11.55
9J23072-CAL8	20	207744	4.655	11.55
9J23072-CAL9	50	570890	4.593	11.55
9J23072-CALA	100	1269236	4.697	11.55
9J23072-CALB	200	2487376	4.654	11.55

AVE RF **4.268** RF RSD **10.98** AVE RT **11.55**

4-Isopropyltoluene

Curve Fit: **AVERAGE RF**

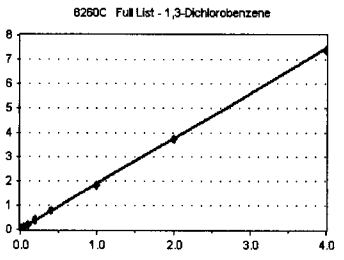


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	1231	2.786	11.66
9J23072-CAL3	0.4	2242	2.652	11.66
9J23072-CAL4	1	5514	2.651	11.66
9J23072-CAL5	2	12982	3.100	11.66
9J23072-CAL6	5	35139	3.135	11.66
9J23072-CAL7	10	80264	3.511	11.66
9J23072-CAL8	20	160438	3.595	11.66
9J23072-CAL9	50	449627	3.617	11.66
9J23072-CALA	100	1010639	3.740	11.66
9J23072-CALB	200	1999489	3.741	11.66

AVE RF **3.253** RF RSD **13.63** AVE RT **11.66**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

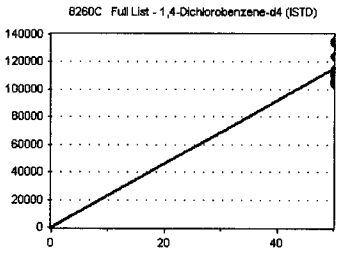


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	347	1.581	11.72
9J23072-CAL2	0.2	806	1.824	11.71
9J23072-CAL3	0.4	1573	1.861	11.71
9J23072-CAL4	1	3912	1.881	11.71
9J23072-CAL5	2	8614	2.057	11.71
9J23072-CAL6	5	21435	1.913	11.71
9J23072-CAL7	10	45072	1.971	11.71
9J23072-CAL8	20	87437	1.959	11.71
9J23072-CAL9	50	228262	1.836	11.71
9J23072-CALA	100	503820	1.864	11.71
9J23072-CALB	200	987891	1.848	11.71

AVE RF **1.872** RF RSD **6.38** AVE RT **11.71**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	109763	2195.260	11.77
9J23072-CAL2	50	110460	2209.200	11.77
9J23072-CAL3	50	105667	2113.340	11.77
9J23072-CAL4	50	103980	2079.600	11.77
9J23072-CAL5	50	104689	2093.780	11.77
9J23072-CAL6	50	112071	2241.420	11.77
9J23072-CAL7	50	114313	2286.260	11.77
9J23072-CAL8	50	111564	2231.280	11.77
9J23072-CAL9	50	124308	2486.160	11.77
9J23072-CALA	50	135112	2702.240	11.77
9J23072-CALB	50	133612	2672.240	11.77

AVE RF **2300.980** RF RSD **9.61** AVE RT **11.77**

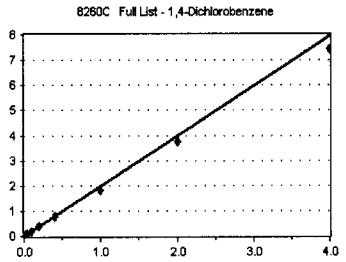
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

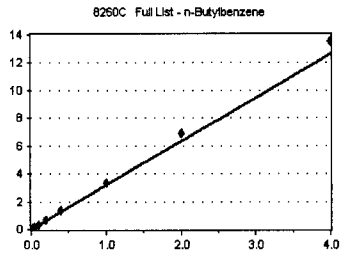


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	478	2.177	11.78
9J23072-CAL2	0.2	866	1.960	11.77
9J23072-CAL3	0.4	1787	2.114	11.78
9J23072-CAL4	1	4198	2.019	11.78
9J23072-CAL5	2	9088	2.170	11.78
9J23072-CAL6	5	21770	1.943	11.78
9J23072-CAL7	10	45209	1.977	11.78
9J23072-CAL8	20	87387	1.958	11.78
9J23072-CAL9	50	228373	1.837	11.78
9J23072-CALA	100	508874	1.883	11.78
9J23072-CALB	200	992164	1.856	11.78

AVE RF **1.990** RF RSD **5.96** AVE RT **11.78**

n-Butylbenzene

Curve Fit: **AVERAGE RF**

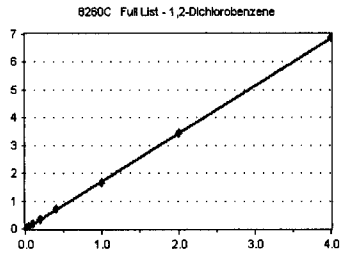


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	1325	2.999	11.97
9J23072-CAL3	0.4	2427	2.871	11.97
9J23072-CAL4	1	5940	2.856	11.97
9J23072-CAL5	2	12799	3.056	11.97
9J23072-CAL6	5	33924	3.027	11.97
9J23072-CAL7	10	74888	3.276	11.97
9J23072-CAL8	20	148499	3.328	11.97
9J23072-CAL9	50	411527	3.311	11.97
9J23072-CALA	100	927051	3.431	11.97
9J23072-CALB	200	1809932	3.387	11.97

AVE RF **3.154** RF RSD **6.84** AVE RT **11.97**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

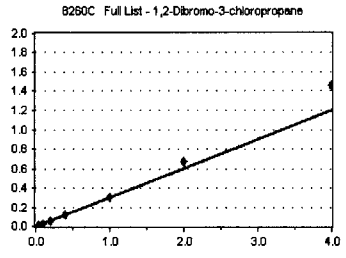


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	0.1	333	1.517	12.09
9J23072-CAL2	0.2	725	1.641	12.09
9J23072-CAL3	0.4	1421	1.681	12.09
9J23072-CAL4	1	3541	1.703	12.09
9J23072-CAL5	2	7821	1.868	12.09
9J23072-CAL6	5	19542	1.744	12.09
9J23072-CAL7	10	41072	1.796	12.09
9J23072-CAL8	20	80490	1.804	12.09
9J23072-CAL9	50	209123	1.682	12.09
9J23072-CALA	100	463375	1.715	12.09
9J23072-CALB	200	919855	1.721	12.09

AVE RF **1.716** RF RSD **5.40** AVE RT **12.09**

1,2-Dibromo-3-chloropropane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.4~~	~~70~~	~~8.281~~	~~12.69~~
~~9J23072-CAL4~~	~~1~~	~~497~~	~~0.239~~	~~12.70~~
9J23072-CAL5	2	1147	0.274	12.70
9J23072-CAL6	5	2712	0.242	12.70
9J23072-CAL7	10	6225	0.272	12.70
9J23072-CAL8	20	13313	0.298	12.70
9J23072-CAL9	50	38129	0.307	12.70
9J23072-CALA	100	90298	0.334	12.70
9J23072-CALB	200	195586	0.366	12.70

AVE RF **0.299** RF RSD **13.90** AVE RT **12.70**

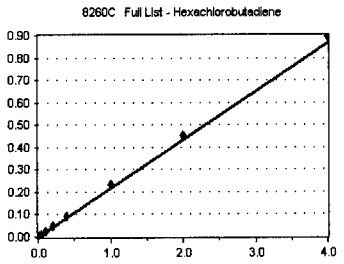
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VJ191024S VJ191024G**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

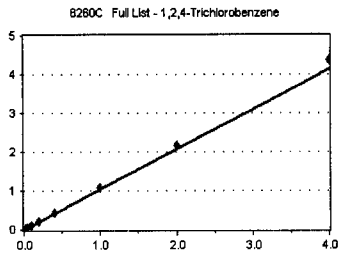


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.4	139	0.164	13.22
9J23072-CAL4	1	383	0.184	13.22
9J23072-CAL5	2	910	0.217	13.22
9J23072-CAL6	5	2682	0.239	13.21
9J23072-CAL7	10	5408	0.237	13.22
9J23072-CAL8	20	10256	0.230	13.22
9J23072-CAL9	50	28768	0.231	13.22
9J23072-CALA	100	61067	0.226	13.22
9J23072-CALB	200	119522	0.224	13.22

AVE RF **0.217** RF RSD **11.77** AVE RT **13.22**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

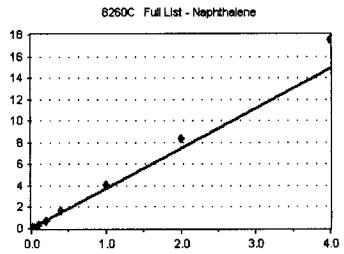


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	416	0.942	13.24
9J23072-CAL3	0.4	804	0.951	13.24
9J23072-CAL4	1	2063	0.992	13.24
9J23072-CAL5	2	4581	1.094	13.24
9J23072-CAL6	5	11011	0.983	13.24
9J23072-CAL7	10	24214	1.059	13.24
9J23072-CAL8	20	48878	1.095	13.24
9J23072-CAL9	50	133371	1.073	13.24
9J23072-CALA	100	290565	1.075	13.24
9J23072-CALB	200	586605	1.098	13.24

AVE RF **1.036** RF RSD **6.02** AVE RT **13.24**

Naphthalene

Curve Fit: **AVERAGE RF**

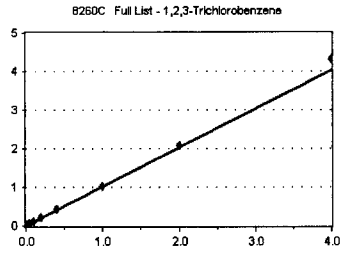


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	1558	3.526	13.52
9J23072-CAL3	0.4	2847	3.368	13.52
9J23072-CAL4	1	6478	3.115	13.52
9J23072-CAL5	2	14900	3.558	13.52
9J23072-CAL6	5	36533	3.260	13.52
9J23072-CAL7	10	83341	3.645	13.52
9J23072-CAL8	20	180749	4.050	13.52
9J23072-CAL9	50	507971	4.086	13.51
9J23072-CALA	100	1129820	4.181	13.52
9J23072-CALB	200	2345481	4.389	13.51

AVE RF **3.718** RF RSD **11.60** AVE RT **13.52**

1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL2	0.2	435	0.985	13.68
9J23072-CAL3	0.4	736	0.871	13.68
9J23072-CAL4	1	1857	0.893	13.68
9J23072-CAL5	2	4683	1.118	13.68
9J23072-CAL6	5	10716	0.956	13.68
9J23072-CAL7	10	23691	1.036	13.68
9J23072-CAL8	20	47658	1.068	13.68
9J23072-CAL9	50	129134	1.039	13.68
9J23072-CALA	100	281123	1.040	13.68
9J23072-CALB	200	576564	1.079	13.68

AVE RF **1.008** RF RSD **8.02** AVE RT **13.68**

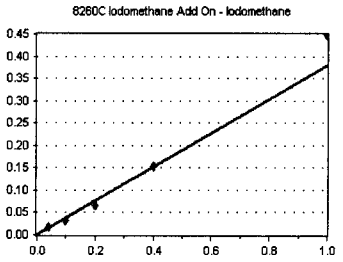
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Iodomethane Add On** Instrument Cal ID: **VJ191024S VJ191024G**

Iodomethane

Curve Fit: **AVERAGE RF**

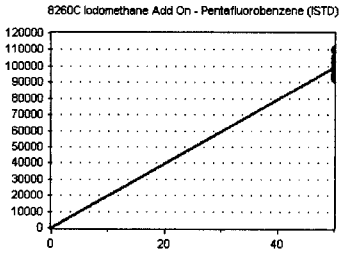


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.1~~	~~851~~	~~4.334~~	~~3.29~~
~~9J23072-CAL2~~	~~0.2~~	~~823~~	~~2.162~~	~~3.29~~
~~9J23072-CAL3~~	~~0.4~~	~~849~~	~~1.138~~	~~3.30~~
~~9J23072-CAL4~~	~~1~~	~~1059~~	~~0.574~~	~~3.30~~
9J23072-CAL5	2	1558	0.411	3.29
9J23072-CAL6	5	3207	0.324	3.30
9J23072-CAL7	10	6769	0.331	3.30
9J23072-CAL8	20	14327	0.381	3.29
9J23072-CAL9	50	47020	0.448	3.29
~~9J23072-CALA~~	~~100~~	~~117106~~	~~0.533~~	~~3.30~~
~~9J23072-CALB~~	~~200~~	~~265396~~	~~0.603~~	~~3.29~~

AVE RF **0.379** RF RSD **13.91** AVE RT **3.29**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	98175	1963.500	6.09
9J23072-CAL2	50	95145	1902.900	6.09
9J23072-CAL3	50	93220	1864.400	6.09
9J23072-CAL4	50	92321	1846.420	6.10
9J23072-CAL5	50	94791	1895.820	6.09
9J23072-CAL6	50	98978	1979.560	6.09
9J23072-CAL7	50	102360	2047.200	6.10
9J23072-CAL8	50	94087	1881.740	6.09
9J23072-CAL9	50	105013	2100.260	6.09
9J23072-CALA	50	109942	2198.840	6.09
9J23072-CALB	50	110028	2200.560	6.09

AVE RF **1989.200** RF RSD **6.53** AVE RT **6.09**

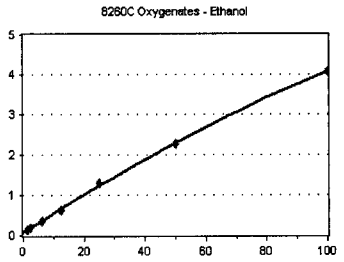
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ191024S VJ191024G**

Ethanol

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

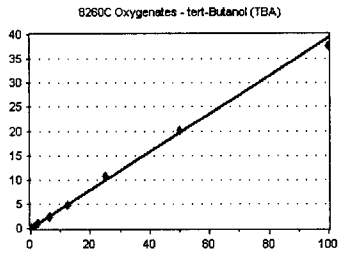


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~25~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	62.5	12276	0.106	3.33
9J23072-CAL5	125	19108	8.063	3.35
9J23072-CAL6	312	35634	5.770	3.38
9J23072-CAL7	625	63621	4.972	3.35
9J23072-CAL8	1250	122288	5.199	3.32
9J23072-CAL9	2500	239469	0.046	3.35
9J23072-CALA	5000	449287	4.087	3.35

AVE RF **6.184** RF RSD **37.93** AVE RT **3.35**

tert-Butanol (TBA)

Curve Fit: **AVERAGE RF**

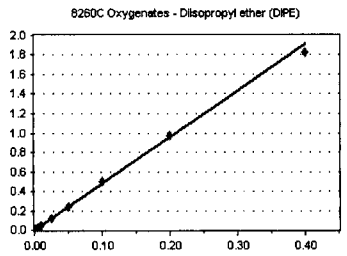


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	25	17903	0.384	4.26
9J23072-CAL4	62.5	43663	0.378	4.28
9J23072-CAL5	125	97251	0.410	4.32
9J23072-CAL6	312	228821	0.370	4.34
9J23072-CAL7	625	487639	0.381	4.26
9J23072-CAL8	1250	1026400	0.436	4.26
9J23072-CAL9	2500	2117115	0.403	4.32
9J23072-CALA	5000	4143802	0.377	4.33

AVE RF **0.393** RF RSD **5.68** AVE RT **4.30**

Diisopropyl ether (DIPE)

Curve Fit: **AVERAGE RF**

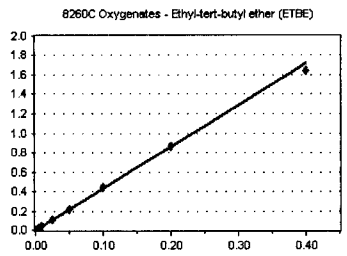


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.1	894	4.795	4.51
9J23072-CAL4	0.25	2248	4.870	4.51
9J23072-CAL5	0.5	4580	4.832	4.51
9J23072-CAL6	1.25	11435	4.621	4.51
9J23072-CAL7	2.5	23966	4.683	4.51
9J23072-CAL8	5	46804	4.975	4.51
9J23072-CAL9	10	102191	4.866	4.50
9J23072-CALA	20	200708	4.564	4.51

AVE RF **4.776** RF RSD **2.93** AVE RT **4.51**

Ethyl-tert-butyl ether (ETBE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	0.25	2080	4.506	4.88
9J23072-CAL5	0.5	4172	4.401	4.87
9J23072-CAL6	1.25	10218	4.129	4.87
9J23072-CAL7	2.5	21616	4.224	4.88
9J23072-CAL8	5	41722	4.434	4.87
9J23072-CAL9	10	90750	4.321	4.87
9J23072-CALA	20	180440	4.103	4.87

AVE RF **4.303** RF RSD **3.61** AVE RT **4.87**

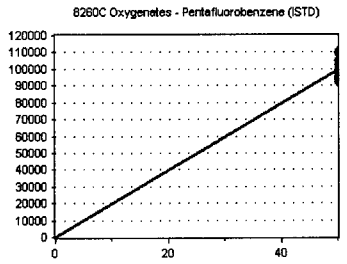
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ191024S VJ191024G**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

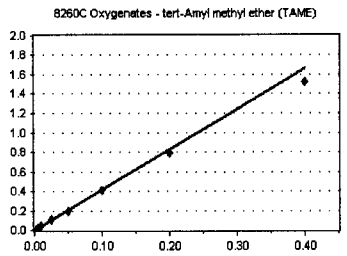


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	98175	1963.500	6.09
9J23072-CAL2	50	95145	1902.900	6.09
9J23072-CAL3	50	93220	1864.400	6.09
9J23072-CAL4	50	92321	1846.420	6.10
9J23072-CAL5	50	94791	1895.820	6.09
9J23072-CAL6	50	98978	1979.560	6.09
9J23072-CAL7	50	102360	2047.200	6.10
9J23072-CAL8	50	94087	1881.740	6.09
9J23072-CAL9	50	105013	2100.260	6.09
9J23072-CALA	50	109942	2198.840	6.09
9J23072-CALB	50	110028	2200.560	6.09

AVE RF **1989.200** RF RSD **6.53** AVE RT **6.09**

tert-Amyl methyl ether (TAME)

Curve Fit: **AVERAGE RF**

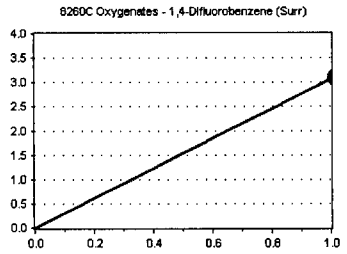


Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL4	0.25	2154	4.666	6.16
9J23072-CAL5	0.5	4293	4.529	6.15
9J23072-CAL6	1.25	10184	4.116	6.16
9J23072-CAL7	2.5	20102	3.928	6.16
9J23072-CAL8	5	38296	4.070	6.16
9J23072-CAL9	10	82359	3.921	6.15
9J23072-CALA	20	167834	3.816	6.16

AVE RF **4.150** RF RSD **7.81** AVE RT **6.15**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

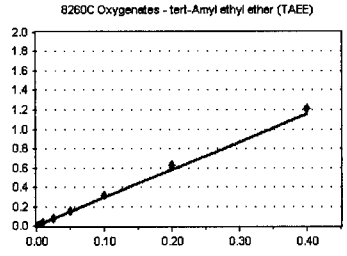


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	299782	3.054	6.66
9J23072-CAL2	50	296071	3.112	6.66
9J23072-CAL3	50	285274	3.060	6.66
9J23072-CAL4	50	284090	3.077	6.66
9J23072-CAL5	50	289317	3.052	6.66
9J23072-CAL6	50	303595	3.067	6.66
9J23072-CAL7	50	313300	3.061	6.66
9J23072-CAL8	50	285833	3.038	6.66
9J23072-CAL9	50	323717	3.083	6.66
9J23072-CALA	50	338746	3.081	6.66
9J23072-CALB	50	346693	3.151	6.66

AVE RF **3.076** RF RSD **1.03** AVE RT **6.66**

tert-Amyl ethyl ether (TAEE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J23072-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J23072-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J23072-CAL3	0.1	396	2.124	6.91
9J23072-CAL4	0.25	1238	2.682	6.91
9J23072-CAL5	0.5	3009	3.174	6.90
9J23072-CAL6	1.25	7162	2.894	6.91
9J23072-CAL7	2.5	14950	2.921	6.91
9J23072-CAL8	5	29237	3.107	6.91
9J23072-CAL9	10	65747	3.130	6.90
9J23072-CALA	20	133080	3.026	6.90

AVE RF **2.882** RF RSD **11.98** AVE RT **6.91**

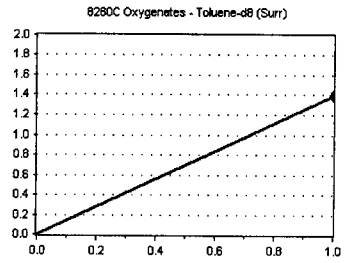
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VJ191024S VJ191024G**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

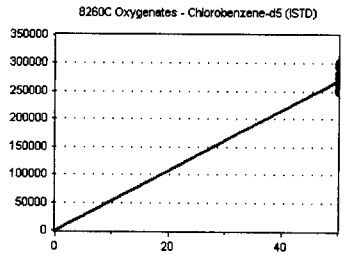


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	367697	1.398	8.17
9J23072-CAL2	50	363461	1.385	8.17
9J23072-CAL3	50	352756	1.395	8.17
9J23072-CAL4	50	350128	1.399	8.17
9J23072-CAL5	50	358352	1.410	8.17
9J23072-CAL6	50	369631	1.392	8.17
9J23072-CAL7	50	383154	1.399	8.17
9J23072-CAL8	50	349892	1.384	8.17
9J23072-CAL9	50	394687	1.399	8.17
9J23072-CALA	50	411311	1.397	8.17
9J23072-CALB	50	415139	1.379	8.17

AVE RF **1.394** RF RSD **0.64** AVE RT **8.17**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

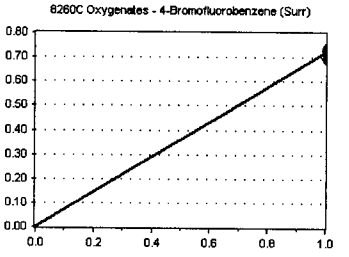


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	262966	5259.320	9.81
9J23072-CAL2	50	262504	5250.080	9.81
9J23072-CAL3	50	252875	5057.500	9.81
9J23072-CAL4	50	250210	5004.200	9.81
9J23072-CAL5	50	254089	5081.780	9.81
9J23072-CAL6	50	265619	5312.380	9.81
9J23072-CAL7	50	273877	5477.540	9.81
9J23072-CAL8	50	252726	5054.520	9.81
9J23072-CAL9	50	282031	5640.620	9.81
9J23072-CALA	50	294436	5888.720	9.81
9J23072-CALB	50	301031	6020.620	9.81

AVE RF **5367.935** RF RSD **6.51** AVE RT **9.81**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

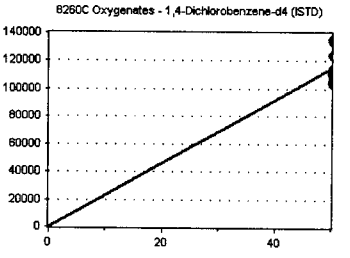


Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	81163	0.739	10.88
9J23072-CAL2	50	80374	0.728	10.88
9J23072-CAL3	50	77055	0.729	10.88
9J23072-CAL4	50	75855	0.730	10.88
9J23072-CAL5	50	76386	0.730	10.88
9J23072-CAL6	50	81641	0.728	10.88
9J23072-CAL7	50	84648	0.740	10.88
9J23072-CAL8	50	79925	0.716	10.88
9J23072-CAL9	50	88914	0.715	10.88
9J23072-CALA	50	93929	0.695	10.88
9J23072-CALB	50	92209	0.690	10.88

AVE RF **0.722** RF RSD **2.28** AVE RT **10.88**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CAL1	50	109763	2195.260	11.77
9J23072-CAL2	50	110460	2209.200	11.77
9J23072-CAL3	50	105667	2113.340	11.77
9J23072-CAL4	50	103980	2079.600	11.77
9J23072-CAL5	50	104689	2093.780	11.77
9J23072-CAL6	50	112071	2241.420	11.77
9J23072-CAL7	50	114313	2286.260	11.77
9J23072-CAL8	50	111564	2231.280	11.77
9J23072-CAL9	50	124308	2486.160	11.77
9J23072-CALA	50	135112	2702.240	11.77
9J23072-CALB	50	133612	2672.240	11.77

AVE RF **2300.980** RF RSD **9.61** AVE RT **11.77**

Calibration Status Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ191024G.M
Title : NWTPH-Gx by GC/MS
Last Update : Thu Oct 24 12:01:51 2019
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	50	50	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102345.D
2	100	100	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102346.D
3	250	250	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102347.D
4	500	500	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102348.D
5	1000	1000	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102349.D
6	2500	2500	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102350.D
7	5000	5000	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102351.D
8	10K	10000	50	C:\msdchem\1\data\2019-10\9J23072\VJ19102352.D

#	ID	Update Time	Quant Time	Acquisition Time
1	50	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 8:08 am
2	100	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 8:35 am
3	250	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 9:02 am
4	500	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 9:29 am
5	1000	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 9:56 am
6	2500	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 10:23 am
7	5000	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 10:50 am
8	10K	Oct 24 12:01 2019	Oct 24 11:56 2019	24 Oct 2019 11:16 am

VJ191024G.M Thu Oct 24 13:08:01 2019

Response Factor Report VOA-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : VJ191024G.M
Title : NWTPH-Gx by GC/MS
Last Update : Thu Oct 24 12:01:51 2019
Response Via : Initial Calibration

Calibration Files
50 =VJ19102345.D 100 =VJ19102346.D 250 =VJ19102347.D 500 =VJ19102348.D 1000=VJ19102349.D 2500=VJ19102350.D
5000=VJ19102351.D 10K =VJ19102352.D

		Compound	50	100	250	500	1000	2500	5000	10K	Avg	%RSD
1)	I	Pentafluorobenzene...	ISTD									
2)	S	1,4-Difluorobe...	1.899	1.904	1.904	1.922	1.905	1.925	1.900	1.860	1.902	1.04
3)	S	4-Bromofluorob...	0.509	0.508	0.513	0.520	0.513	0.534	0.506	0.496	0.512	2.12
4)	H	NWTPH-Gx (TPH)	2.460	2.371	2.382	2.428	2.537	2.727	2.647	2.958	2.564	7.93
5)	H	TPHg (C5-C9)	5.532	4.652	3.604	3.420	3.367	3.453	3.261	3.535	3.853	20.93
6)	H	TPHg (C6-C10)	4.141	3.503	3.007	2.939	2.904	2.990	2.805	3.052	3.168	14.03
7)	H	CA-LUFT (C5-C12)	6.201	5.202	4.158	3.981	3.974	4.105	3.923	4.254	4.475	18.10
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

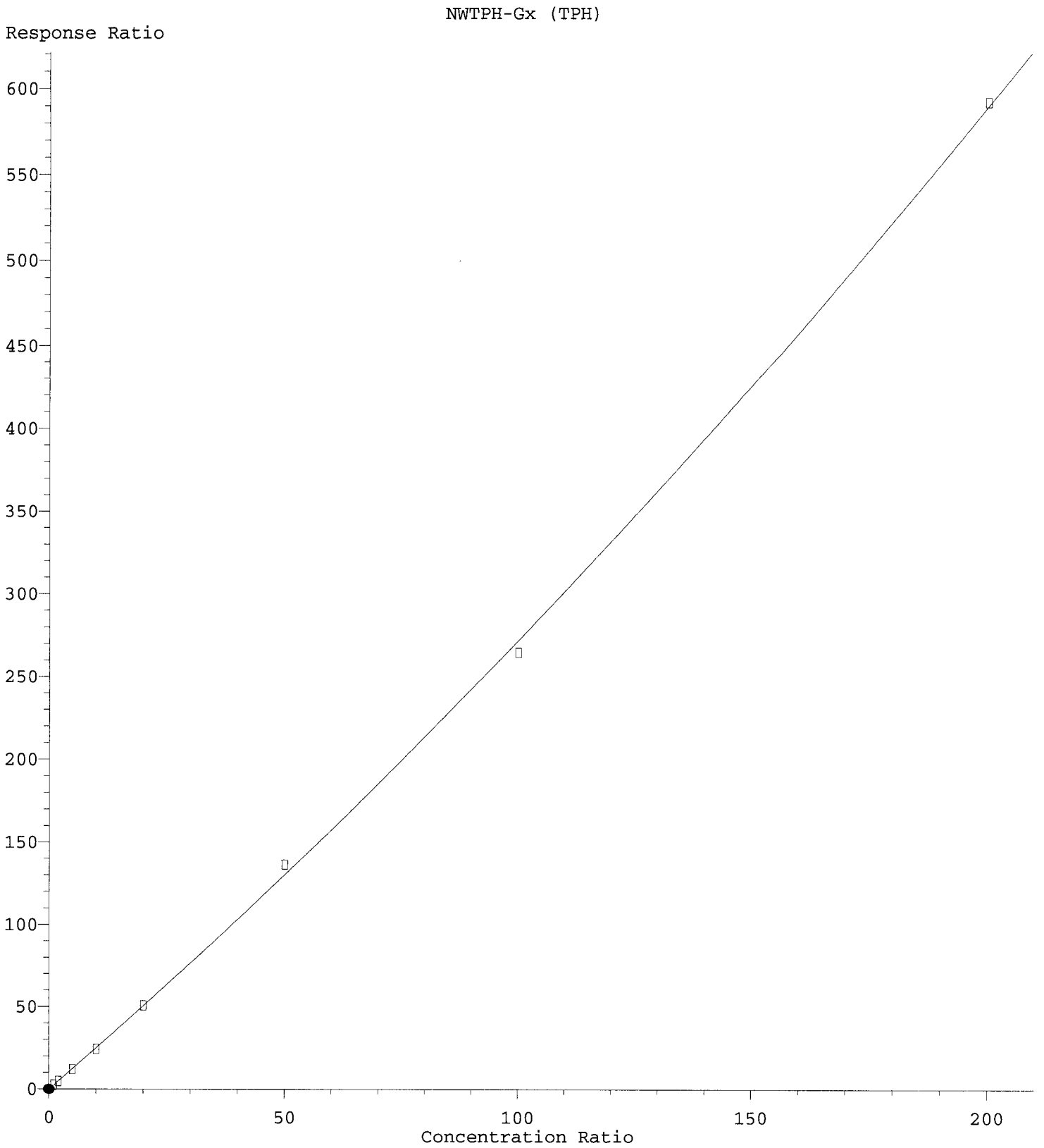
Method Path : C:\msdchem\1\methods\
Method File : VJ191024G.M
Title : NWTPH-Gx by GC/MS
Last Update : Thu Oct 24 12:01:51 2019
Response Via : Initial Calibration

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

VJ191024G.M Thu Oct 24 13:07:57 2019

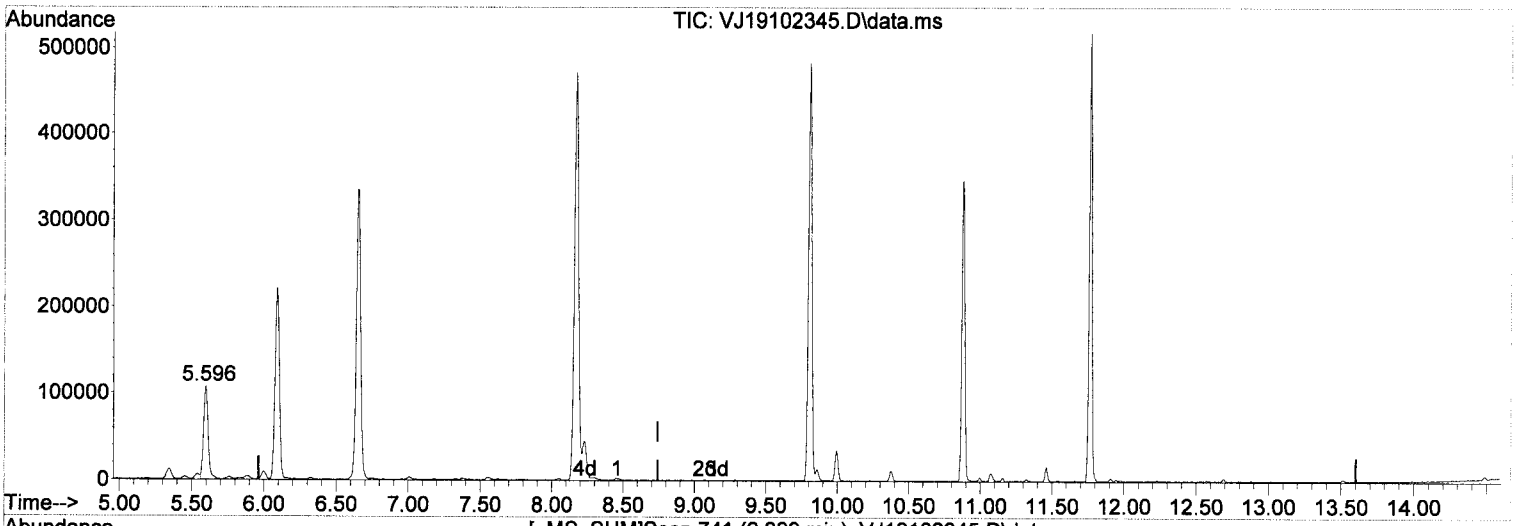


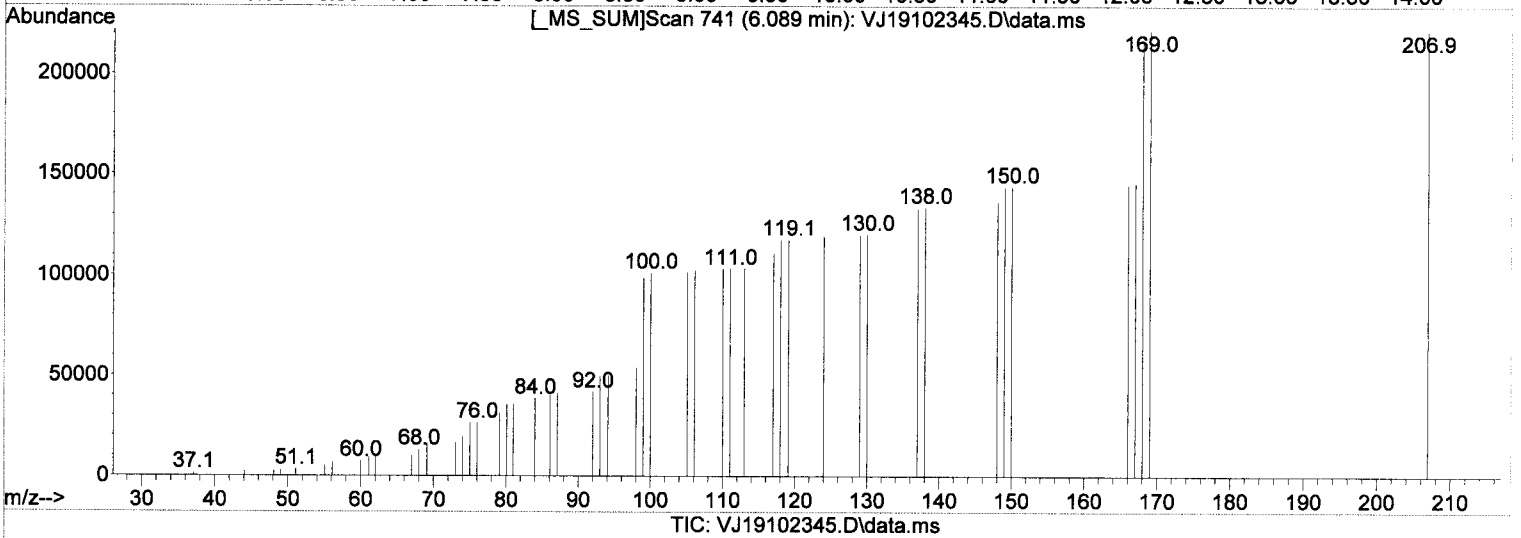
R = 2.27e-003 A*A + 2.49e+000 A - 1.74e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vu191024g.m
Calibration Table Last Updated: Thu Oct 24 12:02:16 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 12:05:02 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





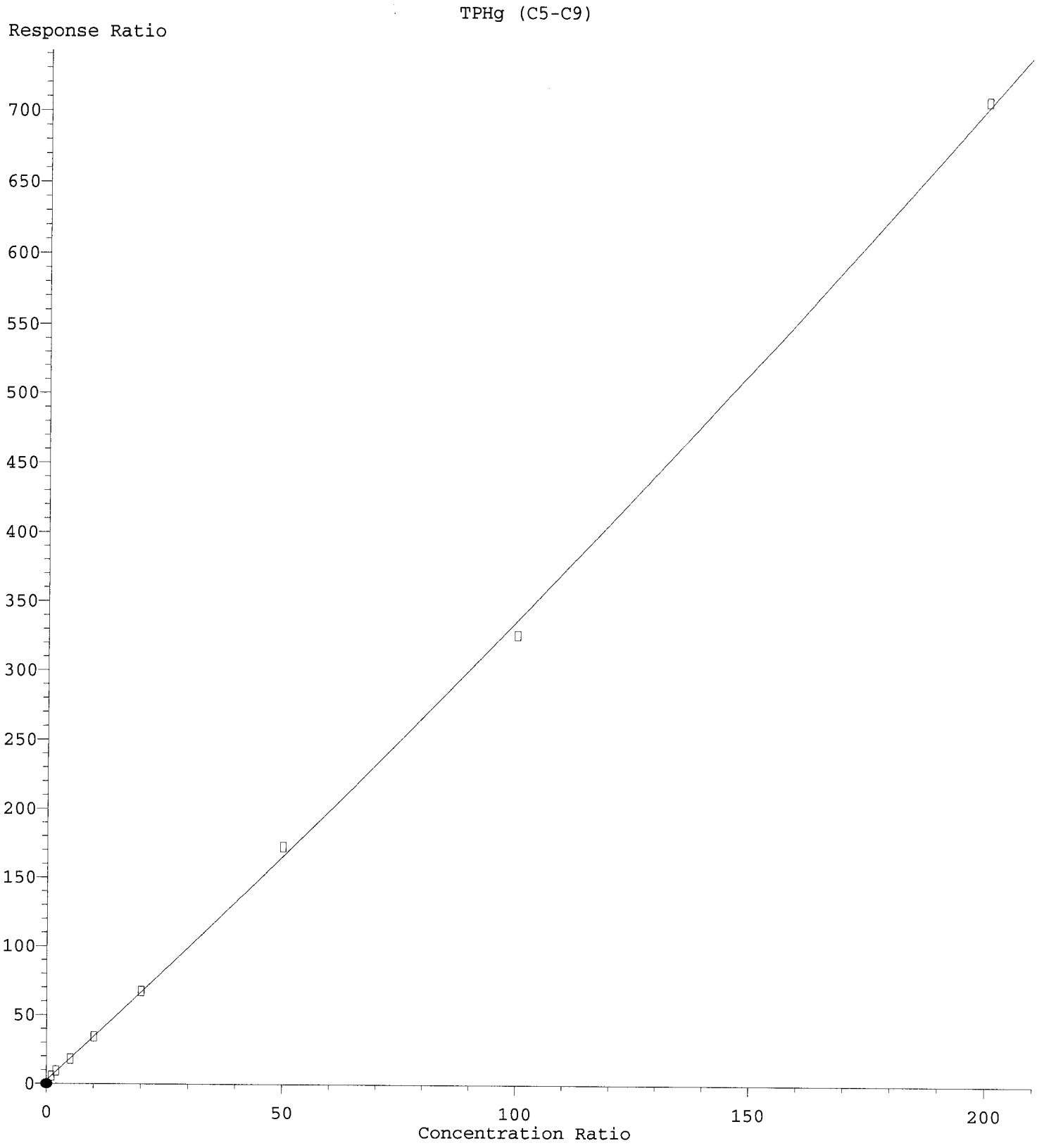
TIC: VJ19102345.D\data.ms

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

8.739min (0.000) 37.80 ug/L m

response 261399

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	7.24#
0.00	0.00	6.00#
0.00	0.00	0.00

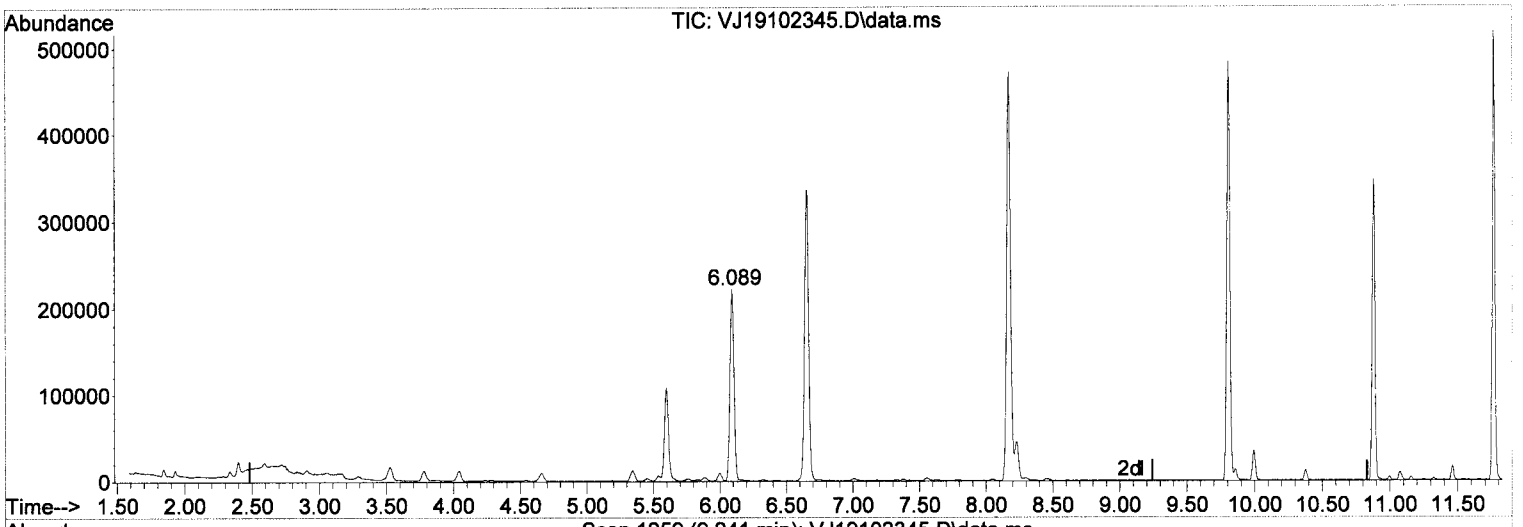


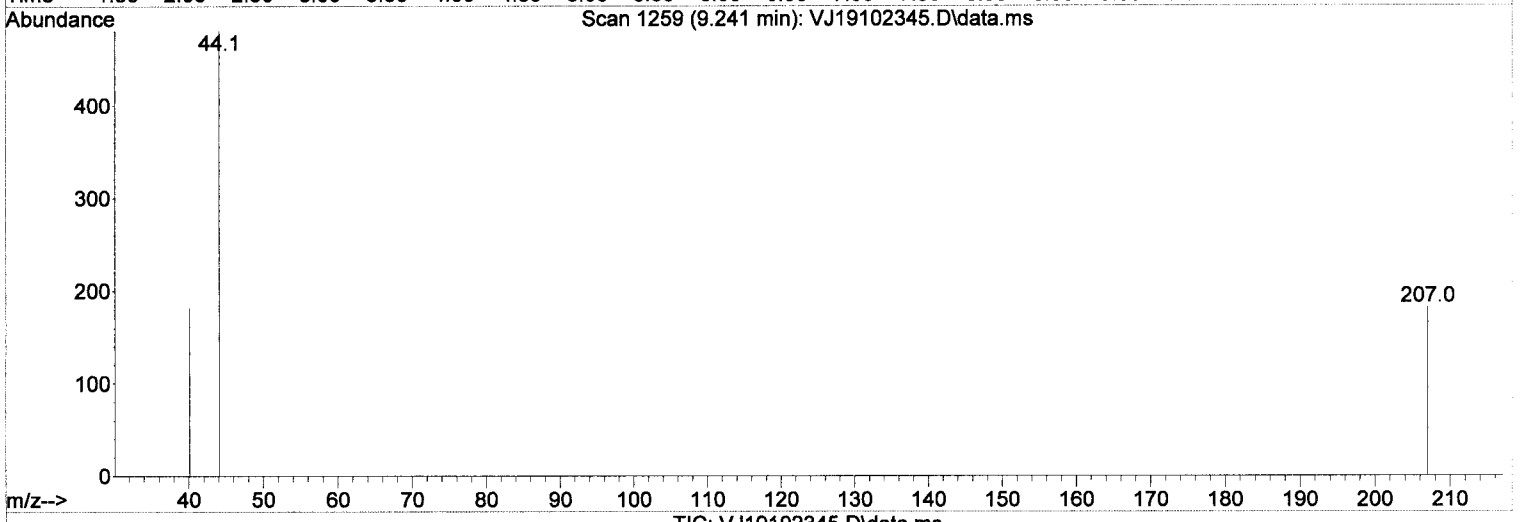
R = 1.62e-003 A*A + 3.18e+000 A + 2.52e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024RDMDG 2019 -3. Riverbank Angled Borings Page 827 of 2535
Calibration Table Last Updated: Thu Oct 24 12:02:25 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 12:05:02 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





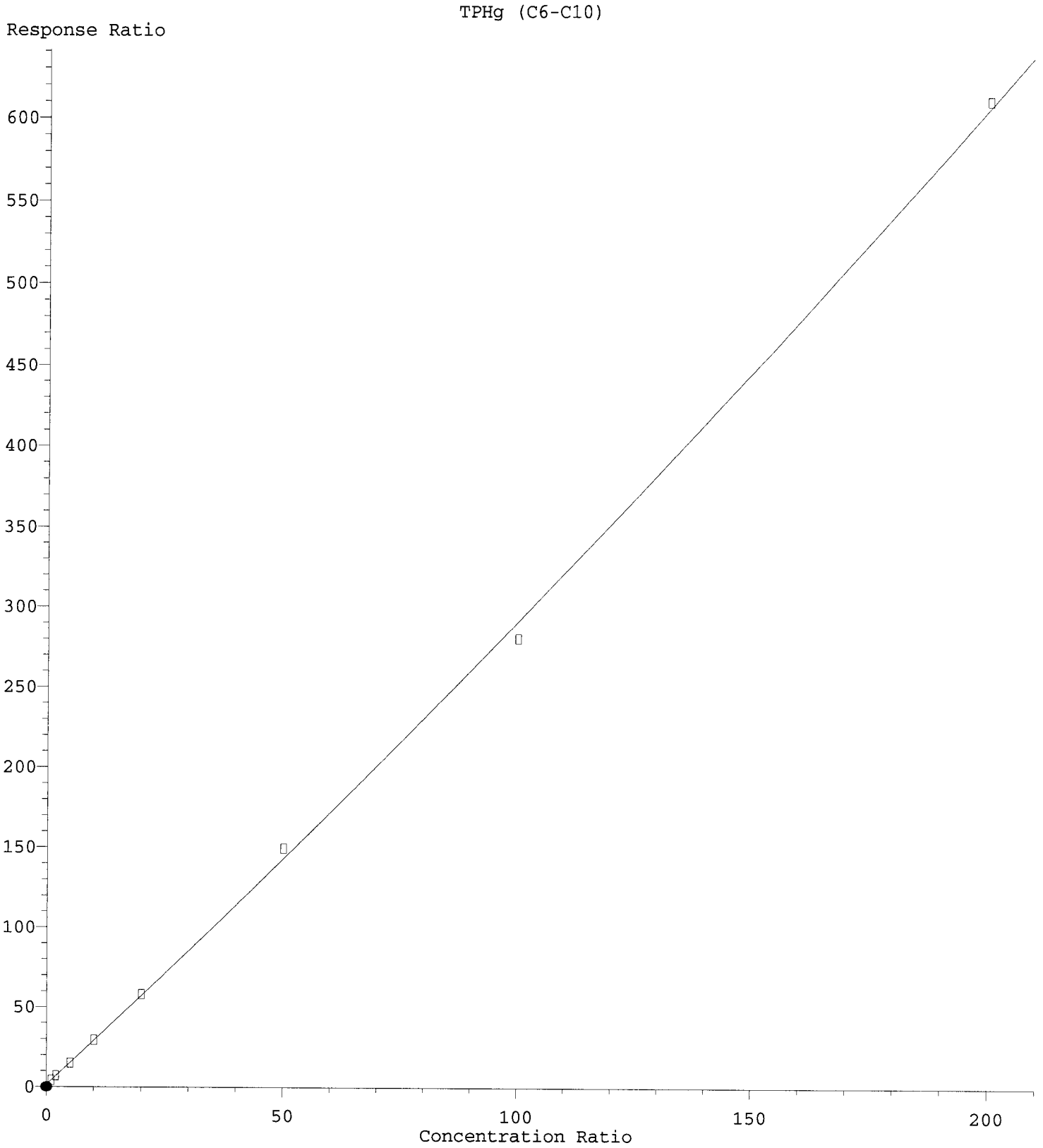
TIC: VJ19102345.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) 40.57 ug/L m

response 778590

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.43#
0.00	0.00	2.01#
0.00	0.00	0.00

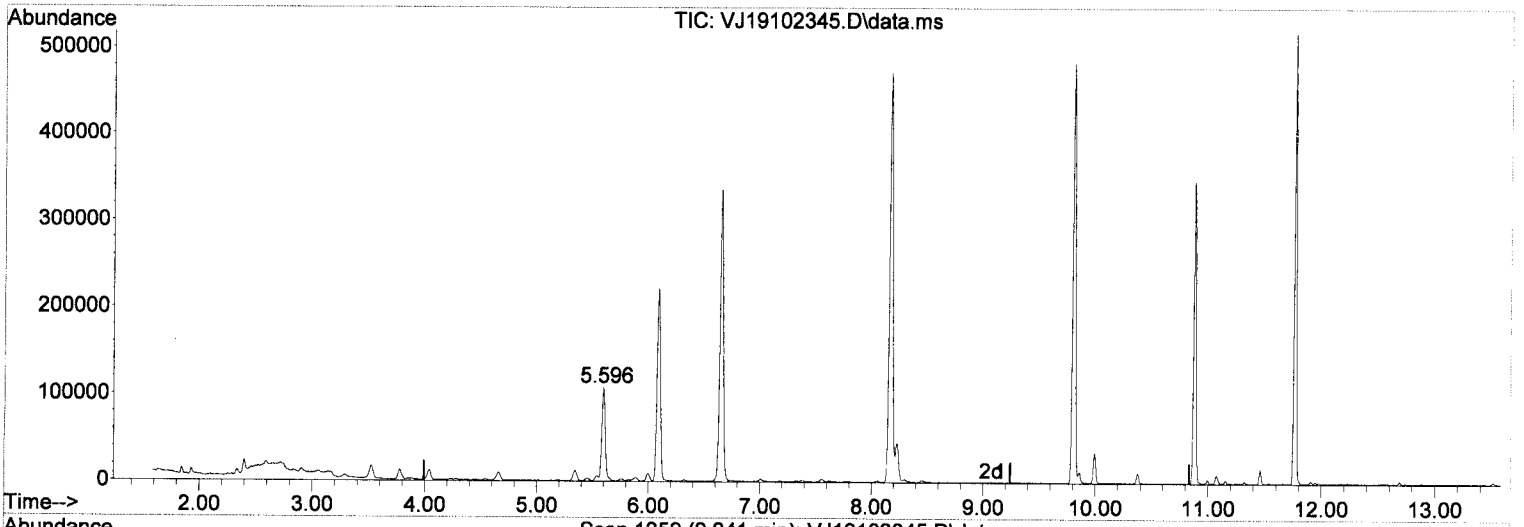


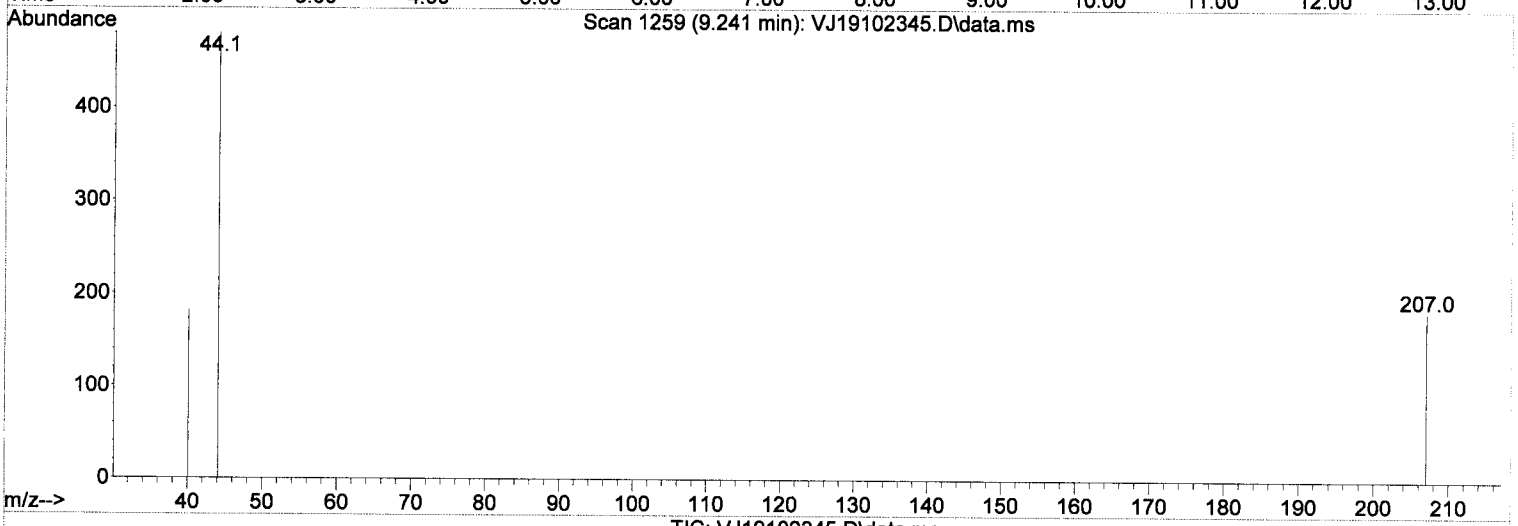
R = 1.29e-003 A*A + 2.77e+000 A + 1.43e+000
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\vj191024B.M
Calibration Table Last Updated: Thu Oct 24 12:02:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 12:05:02 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





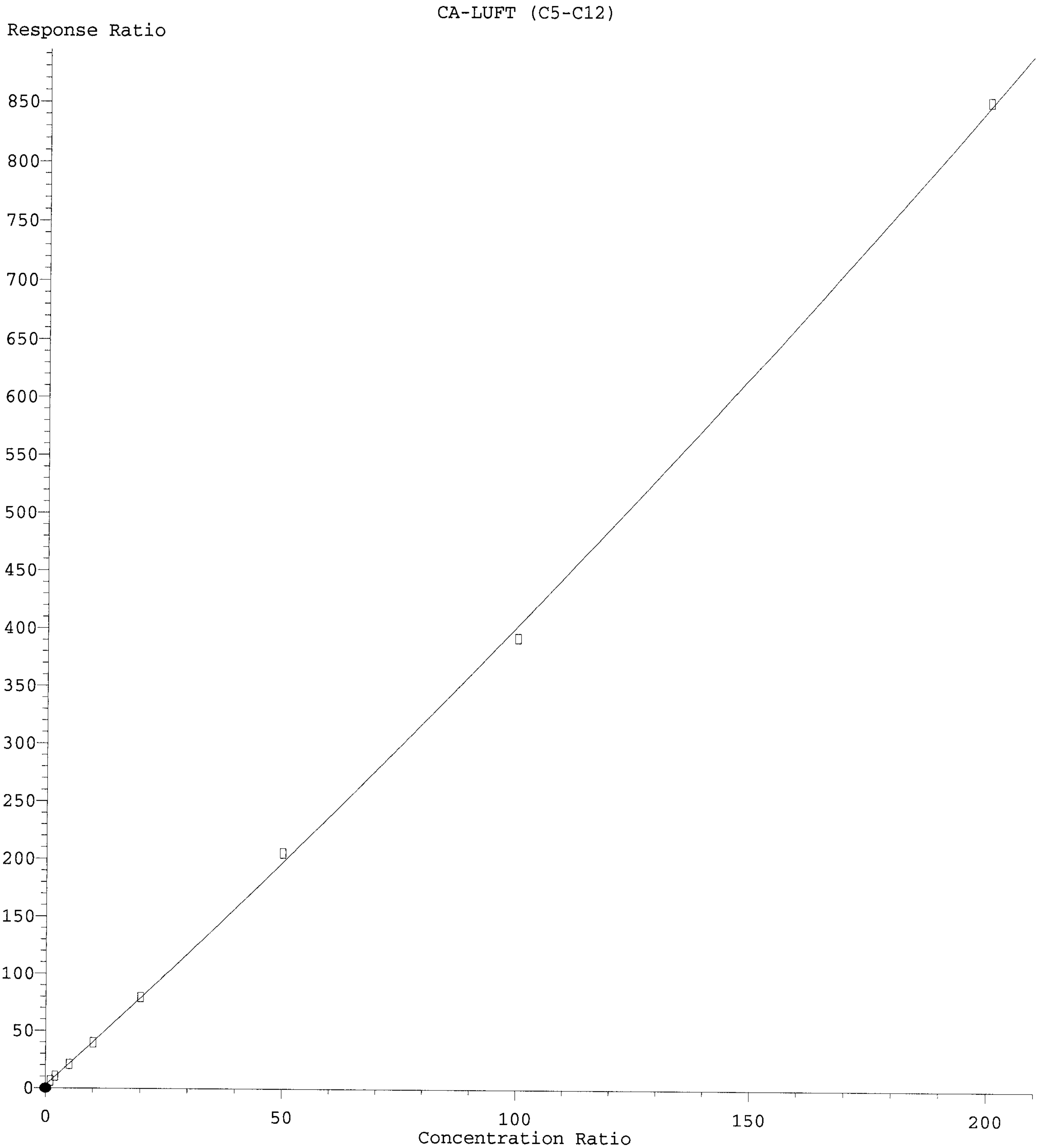
TIC: VJ19102345.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 12.37 ug/L m

response 322302

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	5.87#
0.00	0.00	4.87#
0.00	0.00	0.00



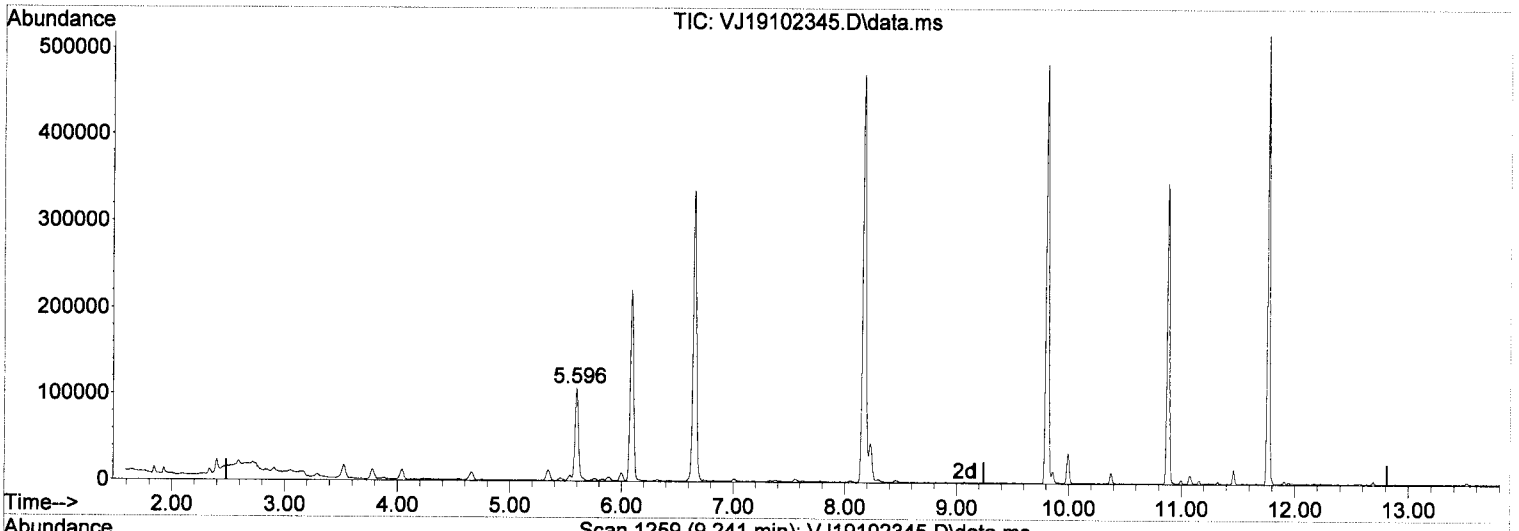
R = 2.20e-003 A*A + 3.78e+000 A + 2.48e+000
Coef of Det (r^2) = 1.000   Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VJ191024G.M

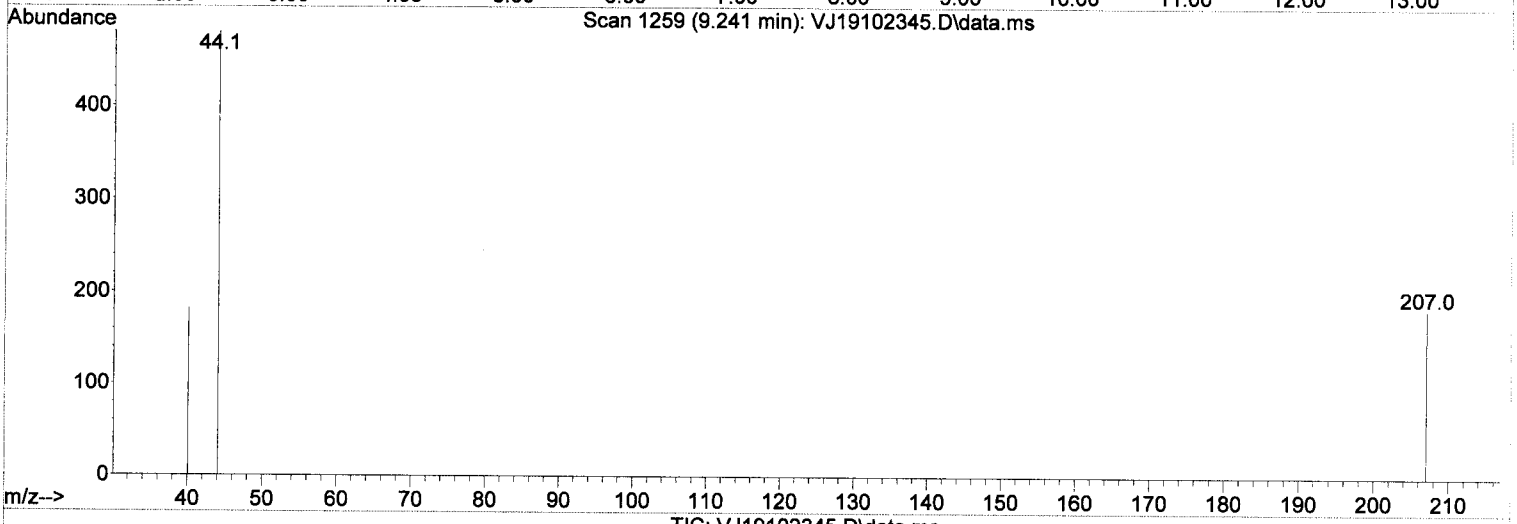
Calibration Table Last Updated: Thu Oct 24 12:02:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\REQUANT\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 12:05:02 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 3.21 ug/L m

response 414726

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	4.56#
0.00	0.00	3.78#
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102355.D
Acq On : 24 Oct 2019 12:37 pm
Operator : MM
Sample : 9J23072-ICV3
Misc : 1X 5mL 500PPB GX+MeOH
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Oct 24 13:07:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
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	111	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	49.403	1.2	109	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	47.916	4.2	105	0.00
4	H	NWTPH-Gx (TPH)	500.000	488.493	2.3	112	0.00
5	H	TPHg (C5-C9)	500.000	470.459	5.9	106	0.00
6	H	TPHg (C6-C10)	500.000	483.247	3.4	107	0.00
7	H	CA-LUFT (C5-C12)	500.000	474.172	5.2	108	0.00
8		Benzene (NR)	-1.000	0.000	0.0	111	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	108	0.00
10		Toluene (NR)	-1.000	0.000	0.0	112	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	107	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	108	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	124	0.00

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

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J23072

Analysis Included
8015D-Mod Gasoline (C6-C10) by GC/MS
CA LUFT GRO
NWTPH-Gx

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9J23072-TUN2	MS Tune	Soil		A19G118	10/24/2019 6:21:00AM
9J23072-ICB2	Initial Cal Blank	Soil		A19G118	10/24/2019 7:41:00AM
9J23072-CALC	Cal Standard	Soil	A19J269	"	10/24/2019 8:08:00AM
9J23072-CALD	Cal Standard	Soil	A19J270	"	10/24/2019 8:35:00AM
9J23072-CALE	Cal Standard	Soil	A19J271	"	10/24/2019 9:02:00AM
9J23072-CALF	Cal Standard	Soil	A19J272	"	10/24/2019 9:29:00AM
9J23072-CALG	Cal Standard	Soil	A19J273	"	10/24/2019 9:56:00AM
9J23072-CALH	Cal Standard	Soil	A19J274	"	10/24/2019 10:23:00AM
9J23072-CALI	Cal Standard	Soil	A19J275	"	10/24/2019 10:50:00AM
9J23072-CALJ	Cal Standard	Soil	A19J276	"	10/24/2019 11:16:00AM
9J23072-ICV3	Initial Cal Check	Soil	A19G350	"	10/24/2019 12:37:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J2404** Instrument: **VOA-GCMS10**

8015D-Mod Gasoline (C6-C1(Sequence: **9J23072** Matrix: **Soil**

9J23072-CALC	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALE	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALF	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALG	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALH	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALI	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J23072-CALJ	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: 9J23072

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: **A9J2404** Instrument: **VOA-GCMS10**

NWTPH-Gx Sequence: **9J23072** Matrix: **Soil**

9J23072-ICV3	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.

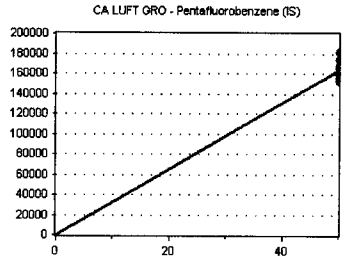
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **CA LUFT GRO** Instrument Cal ID: **VJ191024S VJ191024G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

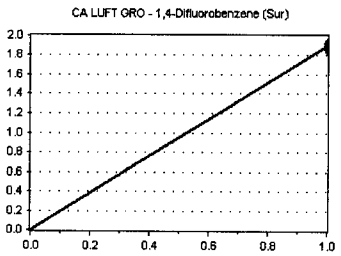


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	152567	3051.340	6.09
9J23072-CALD	50	153392	3067.840	6.09
9J23072-CALE	50	155593	3111.860	6.10
9J23072-CALF	50	159177	3183.540	6.10
9J23072-CALG	50	167155	3343.100	6.09
9J23072-CALH	50	165305	3306.100	6.10
9J23072-CALI	50	174020	3480.400	6.10
9J23072-CALJ	50	181337	3626.740	6.09

AVE RF **3271.365** RF RSD **6.32** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

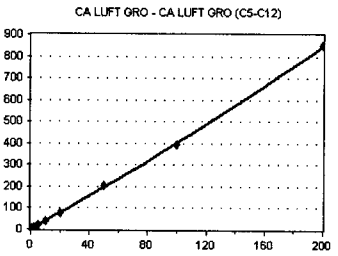


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	289686	1.899	6.66
9J23072-CALD	50	292121	1.904	6.66
9J23072-CALE	50	296265	1.904	6.66
9J23072-CALF	50	305907	1.922	6.66
9J23072-CALG	50	318452	1.905	6.66
9J23072-CALH	50	318152	1.925	6.66
9J23072-CALI	50	330721	1.900	6.66
9J23072-CALJ	50	337220	1.860	6.66

AVE RF **1.902** RF RSD **1.04** AVE RT **6.66**

CA LUFT GRO (C5-C12)

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

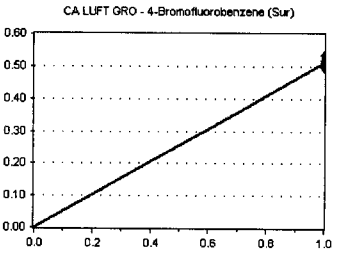


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	946025	6.201	0.00
9J23072-CALD	100	1596035	5.202	9.24
9J23072-CALE	250	3235032	4.158	9.24
9J23072-CALF	500	6336737	3.981	9.24
9J23072-CALG	1000	1.328617E+07	3.974	9.24
9J23072-CALH	2500	3.392865E+07	4.105	9.24
9J23072-CALI	5000	6.826362E+07	3.923	9.24
9J23072-CALJ	10000	1.542917E+08	4.254	9.24

AVE RF **4.475** RF RSD **18.10** AVE RT **8.08**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	77731	0.509	10.88
9J23072-CALD	50	77996	0.508	10.88
9J23072-CALE	50	79823	0.513	10.88
9J23072-CALF	50	82765	0.520	10.88
9J23072-CALG	50	85756	0.513	10.88
9J23072-CALH	50	88206	0.534	10.88
9J23072-CALI	50	88041	0.506	10.88
9J23072-CALJ	50	90011	0.496	10.88

AVE RF **0.512** RF RSD **2.12** AVE RT **10.88**

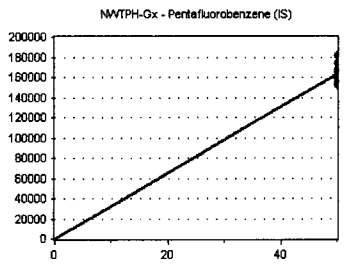
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **NWTPH-Gx** Instrument Cal ID: **VJ191024S VJ191024G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

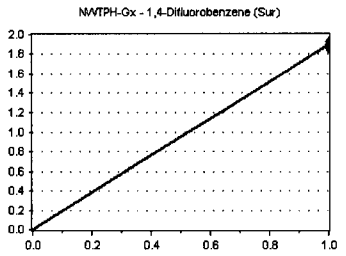


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	152567	3051.340	6.09
9J23072-CALD	50	153392	3067.840	6.09
9J23072-CALE	50	155593	3111.860	6.10
9J23072-CALF	50	159177	3183.540	6.10
9J23072-CALG	50	167155	3343.100	6.09
9J23072-CALH	50	165305	3306.100	6.10
9J23072-CALI	50	174020	3480.400	6.10
9J23072-CALJ	50	181337	3626.740	6.09

AVE RF **3271.365** RF RSD **6.32** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

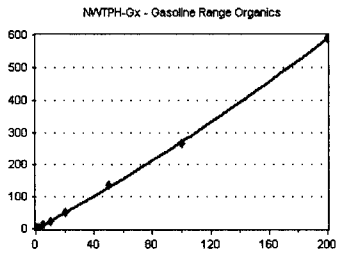


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	289686	1.899	6.66
9J23072-CALD	50	292121	1.904	6.66
9J23072-CALE	50	296265	1.904	6.66
9J23072-CALF	50	305907	1.922	6.66
9J23072-CALG	50	318452	1.905	6.66
9J23072-CALH	50	318152	1.925	6.66
9J23072-CALI	50	330721	1.900	6.66
9J23072-CALJ	50	337220	1.860	6.66

AVE RF **1.902** RF RSD **1.04** AVE RT **6.66**

Gasoline Range Organics

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

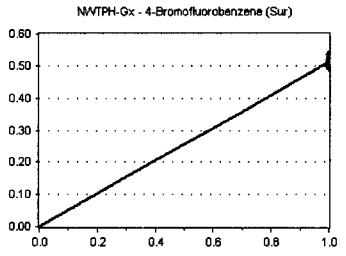


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	375320	2.460	8.74
9J23072-CALD	100	727259	2.371	8.74
9J23072-CALE	250	1852913	2.382	8.74
9J23072-CALF	500	3865293	2.428	8.74
9J23072-CALG	1000	8482501	2.537	8.74
9J23072-CALH	2500	2.254156E+07	2.727	8.74
9J23072-CALI	5000	4.606917E+07	2.647	8.74
9J23072-CALJ	10000	1.072841E+08	2.958	8.74

AVE RF **2.564** RF RSD **7.93** AVE RT **8.74**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	77731	0.509	10.88
9J23072-CALD	50	77996	0.508	10.88
9J23072-CALE	50	79823	0.513	10.88
9J23072-CALF	50	82765	0.520	10.88
9J23072-CALG	50	85756	0.513	10.88
9J23072-CALH	50	88206	0.534	10.88
9J23072-CALI	50	88041	0.506	10.88
9J23072-CALJ	50	90011	0.496	10.88

AVE RF **0.512** RF RSD **2.12** AVE RT **10.88**

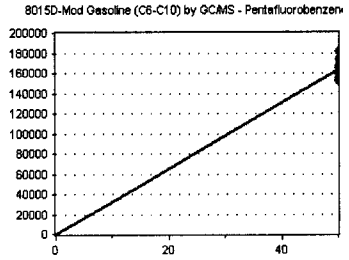
Element Calibration Review Sheet

Calibration ID: **A9J2404** Instrument: **VOA-GCMS10** Calibration Date: **10/24/2019**

Analysis: **8015D-Mod Gasoline (C6-C1** Instrument Cal ID: **VJ191024S VJ191024G**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

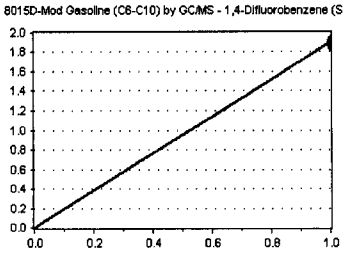


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	152567	3051.340	6.09
9J23072-CALD	50	153392	3067.840	6.09
9J23072-CALE	50	155593	3111.860	6.10
9J23072-CALF	50	159177	3183.540	6.10
9J23072-CALG	50	167155	3343.100	6.09
9J23072-CALH	50	165305	3306.100	6.10
9J23072-CALI	50	174020	3480.400	6.10
9J23072-CALJ	50	181337	3626.740	6.09

AVE RF **3271.365** RF RSD **6.32** AVE RT **6.09**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

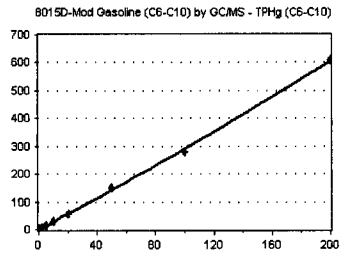


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	289686	1.899	6.66
9J23072-CALD	50	292121	1.904	6.66
9J23072-CALE	50	296265	1.904	6.66
9J23072-CALF	50	305907	1.922	6.66
9J23072-CALG	50	318452	1.905	6.66
9J23072-CALH	50	318152	1.925	6.66
9J23072-CALI	50	330721	1.900	6.66
9J23072-CALJ	50	337220	1.860	6.66

AVE RF **1.902** RF RSD **1.04** AVE RT **6.66**

TPHg (C6-C10)

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

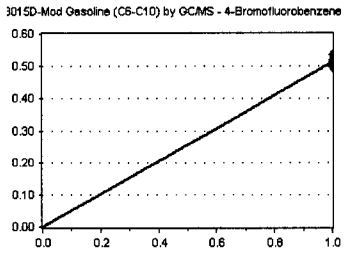


Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	631711	4.141	9.24
9J23072-CALD	100	1074809	3.503	9.24
9J23072-CALE	250	2339645	3.007	9.24
9J23072-CALF	500	4678414	2.939	9.24
9J23072-CALG	1000	9708618	2.904	9.24
9J23072-CALH	2500	2.471193E+07	2.990	9.24
9J23072-CALI	5000	4.881578E+07	2.805	9.24
9J23072-CALJ	10000	1.106875E+08	3.052	9.24

AVE RF **3.168** RF RSD **14.03** AVE RT **9.24**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J23072-CALC	50	77731	0.509	10.88
9J23072-CALD	50	77996	0.508	10.88
9J23072-CALE	50	79823	0.513	10.88
9J23072-CALF	50	82765	0.520	10.88
9J23072-CALG	50	85756	0.513	10.88
9J23072-CALH	50	88206	0.534	10.88
9J23072-CALI	50	88041	0.506	10.88
9J23072-CALJ	50	90011	0.496	10.88

AVE RF **0.512** RF RSD **2.12** AVE RT **10.88**

Injection Log

Directory: w:\data\2019-10\9J23072

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Vj19102315.d	1.	BLK	1X 5mL DI+MeOH	23 Oct 2019 18:43
2	2	Vj19102316.d	1.	BLK	1X 5mL DI+MeOH	23 Oct 2019 19:10
3	3	Vj19102317.d	1.	BLK	1X 5mL DI+MeOH	23 Oct 2019 19:37
4	4	Vj19102318.d	1.	BLK	1X 5mL DI+MeOH	23 Oct 2019 20:04
5	5	Vj19102319.d	1.	BLK	1X 5mL DI+MeOH	23 Oct 2019 20:31
6	6	Vj19102320.d	1.	9J23072-IBL1	1X 5mL DI+MeOH	23 Oct 2019 20:57
7	7	Vj19102321.d	1.	9J23072-TUN1	A19G118 BFB (IS/...	23 Oct 2019 21:24
8	8	Vj19102322.d	1.	9J23072-ICB1	1X 5mL DI+MeOH	23 Oct 2019 21:51
9	9	Vj19102323.d	1.	9J23072-CAL1	1X 5mL 0.1/0....	23 Oct 2019 22:18
10	10	Vj19102324.d	1.	9J23072-CAL2	1X 5mL 0.2/0....	23 Oct 2019 22:45
11	11	Vj19102325.d	1.	9J23072-CAL3	1X 5mL 0.4/0....	23 Oct 2019 23:12
12	12	Vj19102326.d	1.	9J23072-CAL4	1X 5mL 1/2PPB...	23 Oct 2019 23:38
13	13	Vj19102327.d	1.	9J23072-CAL5	1X 5mL 2/4PPB...	24 Oct 2019 00:05
14	14	Vj19102328.d	1.	9J23072-CAL6	1X 5mL 5/10PP...	24 Oct 2019 00:32
15	15	Vj19102329.d	1.	9J23072-CAL7	1X 5mL 10/20P...	24 Oct 2019 00:59
16	16	Vj19102330.d	1.	9J23072-CAL8	1X 5mL 20/40P...	24 Oct 2019 01:26
17	17	Vj19102331.d	1.	9J23072-CAL9	1X 5mL 50/100...	24 Oct 2019 01:53
18	18	Vj19102332.d	1.	9J23072-IBL2	1X 5mL DI+MeOH	24 Oct 2019 02:19
19	19	Vj19102333.d	1.	9J23072-CALA	1X 5mL 100/20...	24 Oct 2019 02:46
20	20	Vj19102334.d	1.	9J23072-IBL3	1X 5mL DI+MeOH	24 Oct 2019 03:13
21	21	Vj19102335.d	1.	9J23072-CALB	1X 5mL 200/40...	24 Oct 2019 03:40
22	22	Vj19102336.d	1.	9J23072-IBL4	1X 5mL DI+MeOH	24 Oct 2019 04:07
23	23	Vj19102337.d	1.	9J23072-IBL5	1X 5mL DI+MeOH	24 Oct 2019 04:34
24	24	Vj19102338.d	1.	9J23072-ICV1	1X 5mL 20/40P...	24 Oct 2019 05:00
25	25	Vj19102339.d	1.	9J23072-ICV2	1X 5mL 5/1250...	24 Oct 2019 05:27
26	26	Vj19102340.d	1.	9J23072-IBL6	1X 5mL DI+MeOH	24 Oct 2019 05:54
27	27	Vj19102341.d	1.	9J23072-TUN2	A19G118 BFB (IS/...	24 Oct 2019 06:21
28	28	Vj19102342.d	1.	9J23072-RT1	A19A167 VPH RT STD	24 Oct 2019 06:48
29	29	Vj19102343.d	1.	9J23072-IBL7	1X 5mL DI+MeOH	24 Oct 2019 07:14
30	30	Vj19102344.d	1.	9J23072-ICB2	1X 5mL DI+MeOH	24 Oct 2019 07:41
31	31	Vj19102345.d	1.	9J23072-CALC	1X 5mL 50PPB ...	24 Oct 2019 08:08
32	32	Vj19102346.d	1.	9J23072-CALD	1X 5mL 100PPB...	24 Oct 2019 08:35
33	33	Vj19102347.d	1.	9J23072-CALE	1X 5mL 250PPB...	24 Oct 2019 09:02
34	34	Vj19102348.d	1.	9J23072-CALF	1X 5mL 500PPB...	24 Oct 2019 09:29
35	35	Vj19102349.d	1.	9J23072-CALG	1X 5mL 1000PP...	24 Oct 2019 09:56
36	36	Vj19102350.d	1.	9J23072-CALH	1X 5mL 2500PP...	24 Oct 2019 10:23
37	37	Vj19102351.d	1.	9J23072-CALI	1X 5mL 5000PP...	24 Oct 2019 10:50
38	38	Vj19102352.d	1.	9J23072-CALJ	1X 5mL 10000P...	24 Oct 2019 11:16
39	39	Vj19102353.d	1.	9J23072-IBL8	1X 5mL DI+MeOH	24 Oct 2019 11:43
40	40	Vj19102354.d	1.	9J23072-IBL9	1X 5mL DI+MeOH	24 Oct 2019 12:10
41	41	Vj19102355.d	1.	9J23072-ICV3	1X 5mL 500PPB...	24 Oct 2019 12:37
42		Vj19102356.d	1.	No MS or GC data present		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102320.D
Acq On : 23 Oct 2019 8:57 pm
Operator : MM
Sample : 9J23072-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 09:40:43 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

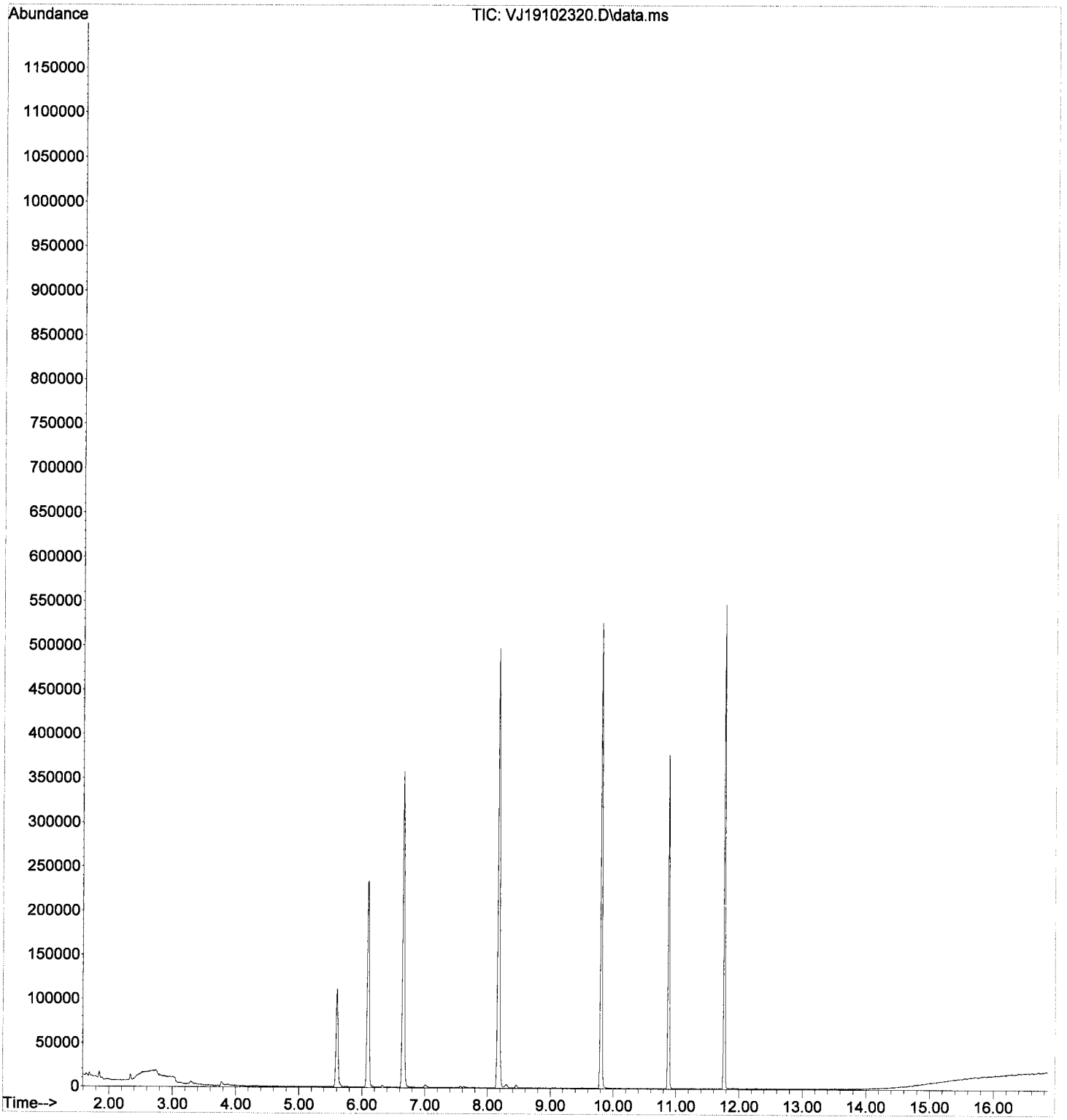
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	101329	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	279302	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	115194	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.602	111	78729	49.16	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.655	114	312975	50.21	ug/L	0.00
45) Toluene-d8 (S)	8.170	98	386001	49.56	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.883	174	85642	51.49	ug/L	0.00
Target Compounds						Qvalue
3) Chloromethane	1.898	50	2352	0.59	ug/L	96
5) Bromomethane	2.342	96	2897	Below Cal		98
6) Chloroethane	2.463	64	112	1.49	ug/L #	47
8) Ethanol	3.303	45	6241	Below Cal		91
12) Iodomethane	3.291	142	1333	1.74	ug/L	80
13) Methylene Chloride	3.777	84	2244	0.09	ug/L	93
14) Acetone	3.875	43	1706	1.10	ug/L	100
18) tert-Butanol (TBA)	4.258	59	142	0.18	ug/L #	13
28) Tetrahydrofuran	5.596	42	323	0.16	ug/L #	56
32) 2-Butanone (MEK)	5.736	43	1116	0.41	ug/L	52
36) iso-Butyl Alcohol	6.326	43	748	2.40	ug/L	69

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102320.D
Acq On : 23 Oct 2019 8:57 pm
Operator : MM
Sample : 9J23072-IBL1
Misc : 1X 5mL DI+MeOH
ALS Vial : 6 Sample Multiplier: 1

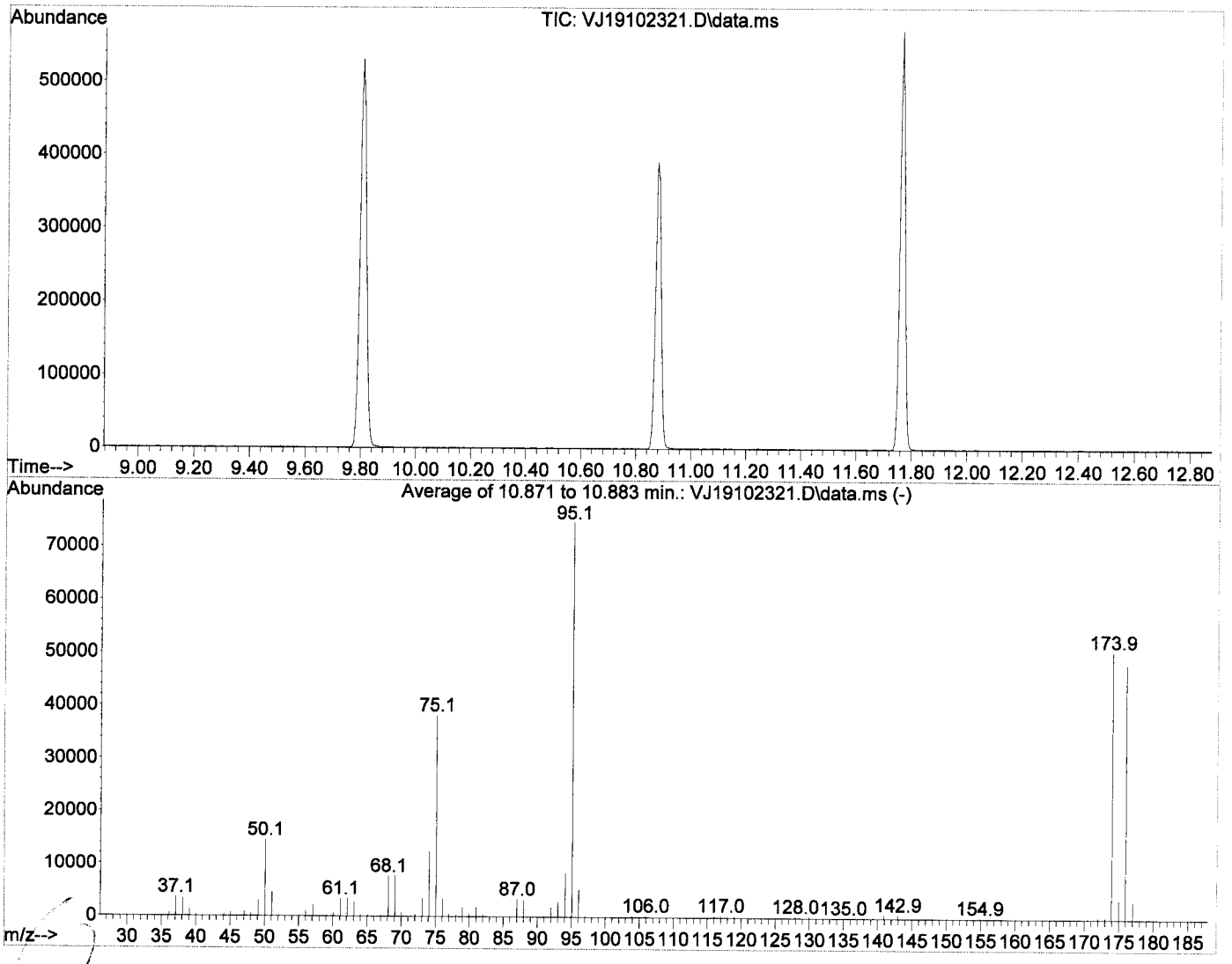
Quant Time: Oct 24 09:40:43 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102321.D
Acq On : 23 Oct 2019 9:24 pm
Operator : MM
Sample : 9J23072-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 7 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VJ191024S.M
Title : EPA 8260C: Volatile Organic Compounds
Last Update : Thu Oct 24 08:55:09 2019



AutoFind: Scans 1527, 1528, 1529; Background Corrected with Scan 1521

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	147.8	74819	PASS
96	95	5	9	7.2	5353	PASS
173	174	0.00	2	0.7	373	PASS
174	95	50	200	67.7	50627	PASS
175	174	5	9	7.1	3612	PASS
176	174	95	105	95.3	48248	PASS
177	176	5	10	6.8	3284	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102321.D
Acq On : 23 Oct 2019 9:24 pm
Operator : MM
Sample : 9J23072-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 09:40:47 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

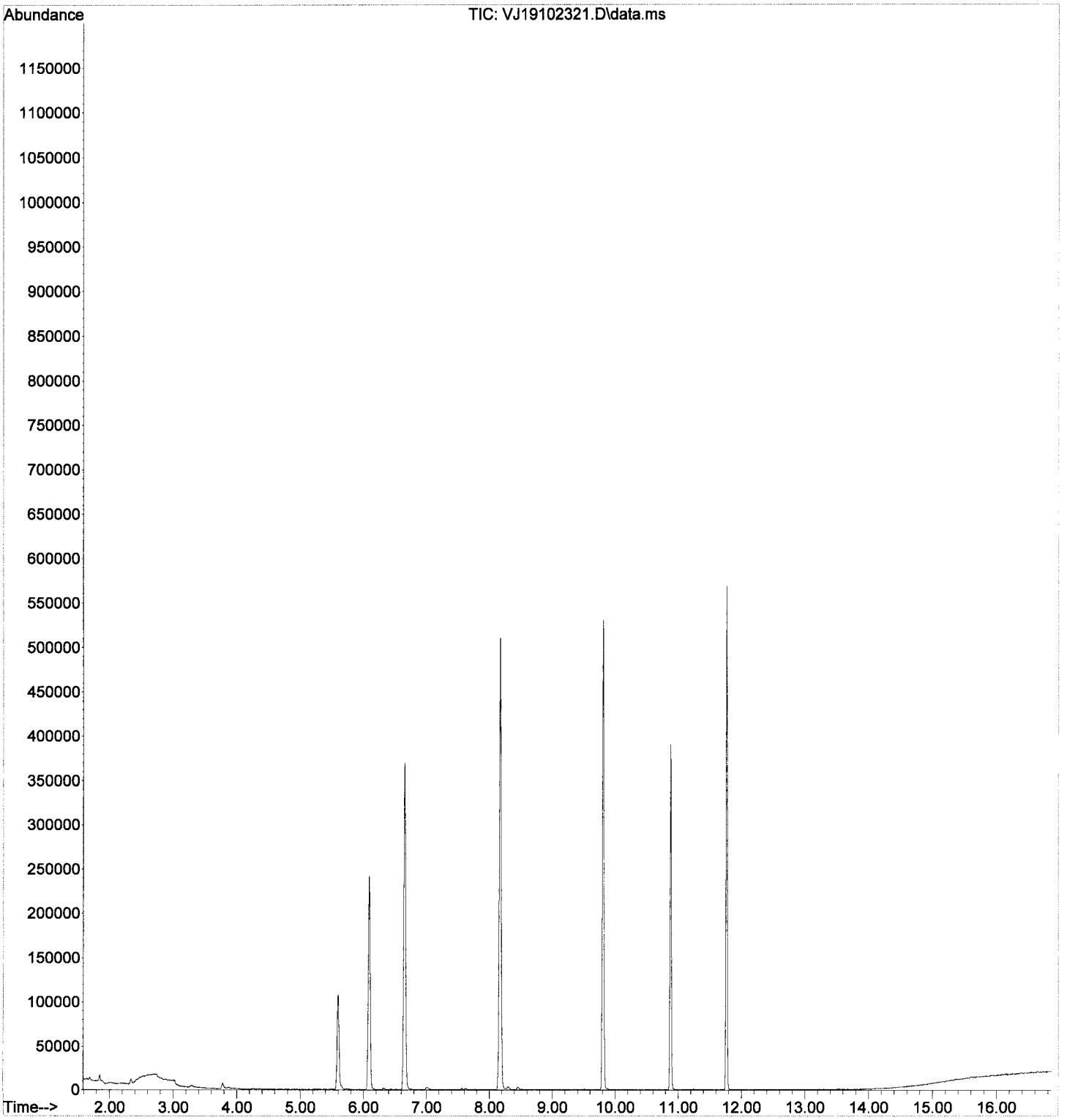
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	102916	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	281718	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	115749	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.597	111	77404	47.58	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.655	114	318896	50.37	ug/L	0.00
45) Toluene-d8 (S)	8.170	98	393275	50.06	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.883	174	86338	51.66	ug/L	0.00
Target Compounds						Qvalue
3) Chloromethane	1.892	50	2074	0.51	ug/L	82
5) Bromomethane	2.342	96	2659	Below Cal		98
6) Chloroethane	2.530	64	57	1.36	ug/L #	47
8) Ethanol	3.303	45	4154	Below Cal		98
12) Iodomethane	3.291	142	916	1.17	ug/L	74
13) Methylene Chloride	3.778	84	3230	0.49	ug/L	90
14) Acetone	3.869	43	1979	1.26	ug/L	99
18) tert-Butanol (TBA)	4.252	59	718	0.89	ug/L #	61
28) Tetrahydrofuran	5.584	42	367	0.18	ug/L #	30
32) 2-Butanone (MEK)	5.743	43	1068	0.39	ug/L	52
36) iso-Butyl Alcohol	6.320	43	727	2.30	ug/L	83

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102321.D
Acq On : 23 Oct 2019 9:24 pm
Operator : MM
Sample : 9J23072-TUN1
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 09:40:47 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102322.D
Acq On : 23 Oct 2019 9:51 pm
Operator : MM
Sample : 9J23072-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 09:40:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

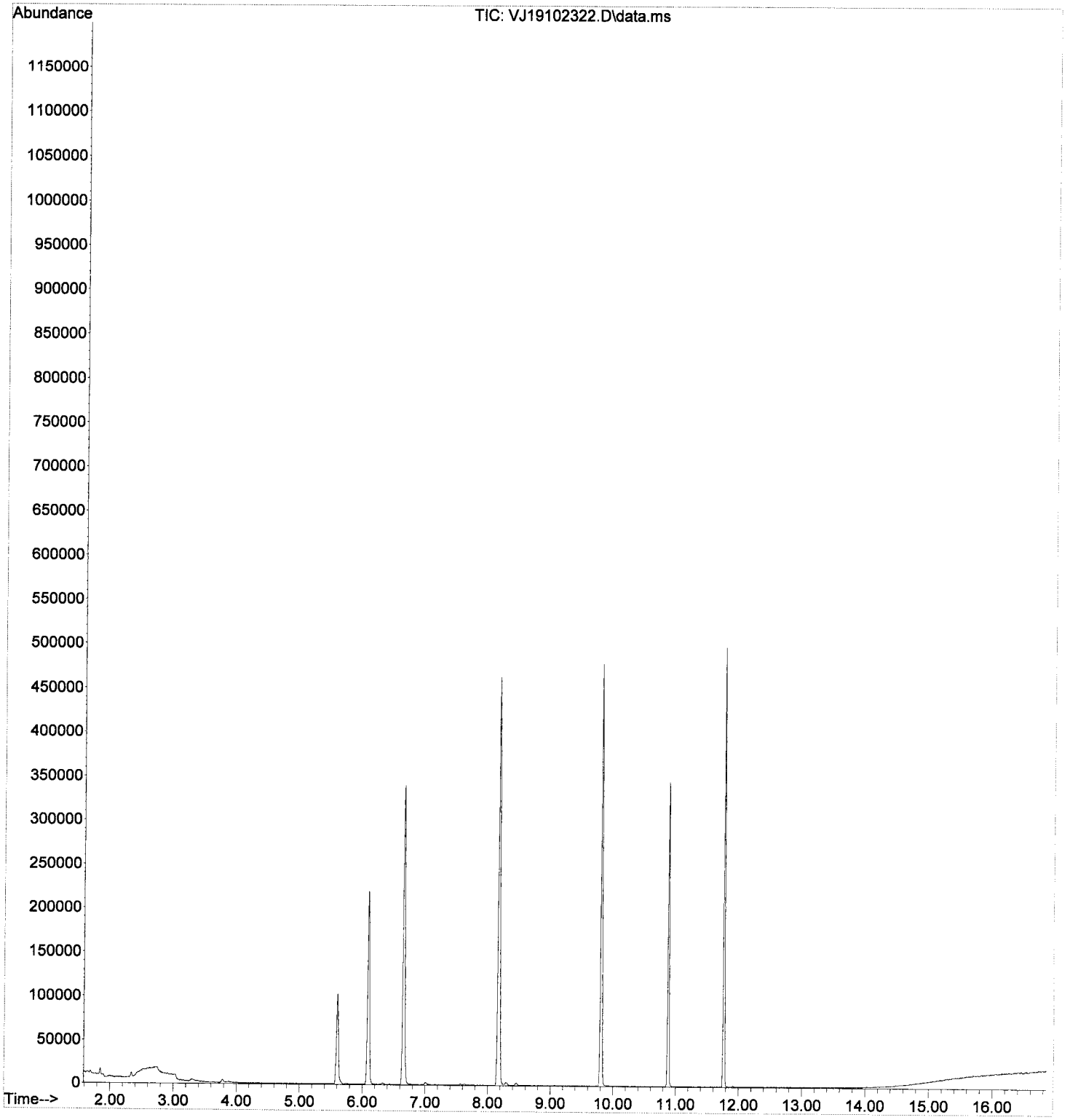
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	96423	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	253840	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	104143	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	75130	49.29	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	294467	49.64	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	358880	50.70	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	79007	52.54	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.898	50	2050	0.54	ug/L		91
5) Bromomethane	2.342	96	3056	0.13	ug/L		98
6) Chloroethane	2.543	64	59	1.37	ug/L	#	47
8) Ethanol	3.315	45	4637	Below Cal			80
12) Iodomethane	3.285	142	957	1.31	ug/L		80
14) Acetone	3.869	43	1766	1.20	ug/L	#	42
18) tert-Butanol (TBA)	4.258	59	117	0.15	ug/L	#	1
28) Tetrahydrofuran	5.609	42	384	0.20	ug/L	#	40
32) 2-Butanone (MEK)	5.743	43	1018	0.39	ug/L		52
36) iso-Butyl Alcohol	6.320	43	626	2.11	ug/L	#	65

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102322.D
Acq On : 23 Oct 2019 9:51 pm
Operator : MM
Sample : 9J23072-ICB1
Misc : 1X 5mL DI+MeOH
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 09:40:58 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102323.D
Acq On : 23 Oct 2019 10:18 pm
Operator : MM
Sample : 9J23072-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOC+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 24 08:19:44 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	98175	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	262966	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	109763	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.596	111	76023	57.28 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.655	114	299782	70.51 ug/L	0.00
45) Toluene-d8 (S)	8.170	98	367697	51.50 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.883	174	81163	48.19 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	1.891	50	2383	0.91 ug/L	98
4) Vinyl Chloride	0.000		0	N.D. d	
5) Bromomethane	2.336	96	2899	0.34 ug/L	96
6) Chloroethane	0.000		0	N.D. d	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethanol	0.000		0	N.D. d	
9) 1,1-Dichloroethene	0.000		0	N.D. d	
10) Carbon Disulfide	3.145	76	947	0.25 ug/L	64
11) Freon 113	0.000		0	N.D.	
12) Iodomethane	3.285	142	851	0.28 ug/L	82
13) Methylene Chloride	3.771	84	2211	Below Cal	94
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. 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. d	
28) Tetrahydrofuran	0.000		0	N.D. d	
29) 1,1,1-Trichloroethane	0.000		0	N.D. d	
31) 1,1-Dichloropropene	0.000		0	N.D. d	
32) 2-Butanone (MEK)	0.000		0	N.D. d	
33) Benzene	6.004	78	1432	0.19 ug/L	82
34) tert-Amyl methyl ether...	0.000		0	N.D. d	
35) 1,2-Dichloroethane (EDC)	0.000		0	N.D. d	
36) iso-Butyl Alcohol	0.000		0	N.D. d	
38) Trichloroethene (TCE)	0.000		0	N.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	8.231	91	1352	0.12 ug/L	87
47) Tetrachloroethene (PCE)	0.000		0	N.D.	
48) 4-Methyl-2-Pentanone (...	0.000		0	N.D. d	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102323.D
Acq On : 23 Oct 2019 10:18 pm
Operator : MM
Sample : 9J23072-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOC+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 24 08:19:44 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) t-1,3-Dichloropropene	0.000		0	N.D. d	
50) 1,1,2-Trichloroethane	0.000		0	N.D. d	
51) Dibromochloromethane	0.000		0	N.D.	
52) 1,3-Dichloropropane	0.000		0	N.D. d	
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.	
54) 2-Hexanone	0.000		0	N.D. d	
55) Chlorobenzene	9.818	112	695	0.11 ug/L #	1
56) Ethylbenzene	9.861	91	1105	0.09 ug/L	84
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	
58) m,p-Xylenes (2)	9.995	91	1531	0.16 ug/L	86
59) o-Xylene	10.378	91	723	0.08 ug/L	87
60) Styrene	0.000		0	N.D. d	
61) Bromoform	0.000		0	N.D.	
62) Isopropylbenzene	10.646	105	797	0.07 ug/L	86
65) Bromobenzene	0.000		0	N.D. d	
66) n-Propylbenzene	10.993	91	1106	0.09 ug/L	84
67) 1,1,2,2-Tetrachloroethane	11.041	83	305	0.12 ug/L	91
68) 2-Chlorotoluene	0.000		0	N.D. d	
69) 1,3,5-Trimethylbenzene	11.157	105	562	0.07 ug/L	73
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	11.461	105	694	0.08 ug/L	90
75) sec-Butylbenzene	0.000		0	N.D. d	
76) 4-Isopropyltoluene	0.000		0	N.D. d	
77) 1,3-Dichlorobenzene	11.716	146	347	0.09 ug/L #	25
78) 1,4-Dichlorobenzene	11.777	146	478	0.12 ug/L #	1
79) n-Butylbenzene	0.000		0	N.D. d	
80) 1,2-Dichlorobenzene	12.094	146	333	0.09 ug/L	87
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	0.000		0	N.D. d	
85) 1,2,3-Trichlorobenzene	0.000		0	N.D. d	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102323.D
Acq On : 23 Oct 2019 10:18 pm
Operator : MM
Sample : 9J23072-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOC+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 24 08:13:42 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	98175	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	262966	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	109763	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	76023	57.28	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	299782	70.51	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	367697	51.50	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	81163	48.19	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.			
3) Chloromethane	1.891	50	2383	0.91	ug/L		98
4) Vinyl Chloride	2.007	62	73	0.14	ug/L	#	46
5) Bromomethane	2.336	96	2899	0.34	ug/L		96
6) Chloroethane	2.482	64	59	0.06	ug/L	#	27
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.449	45	392	7.26	ug/L	#	29
9) 1,1-Dichloroethene	3.133	61	330	0.11	ug/L	#	25
10) Carbon Disulfide	3.145	76	947	0.25	ug/L		64
11) Freon 113	0.000		0	N.D.			
12) Iodomethane	3.285	142	851	0.28	ug/L		82
13) Methylene Chloride	3.771	84	2211	Below Cal			94
14) Acetone	3.863	43	1911	1.76	ug/L		97
15) t-1,2-Dichloroethene	3.942	61	294	0.11	ug/L	#	53
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.112	73	1500	0.21	ug/L		91
18) tert-Butanol (TBA)	4.307	59	141	6.76	ug/L	#	58
19) Diisopropyl ether (DIPE)	4.507	45	64	0.01	ug/L	#	33
20) 1,1-Dichloroethane	4.580	63	197	0.06	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	295	0.10	ug/L	#	70
24) 2,2-Dichloropropane	5.237	77	361	0.11	ug/L	#	53
25) Bromochloromethane	0.000		0	N.D.			
26) Chloroform	5.414	83	325	0.09	ug/L	#	25
27) Carbon Tetrachloride	5.554	117	56	0.02	ug/L	#	13
28) Tetrahydrofuran	5.584	42	484	0.47	ug/L	#	41
29) 1,1,1-Trichloroethane	5.615	97	320	0.09	ug/L	#	25
31) 1,1-Dichloropropene	5.755	75	137	0.05	ug/L	#	39
32) 2-Butanone (MEK)	5.736	43	1371	0.88	ug/L		52
33) Benzene	6.004	78	1432	0.19	ug/L		82
34) tert-Amyl methyl ether...	6.150	73	135	0.02	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.199	62	184	0.04	ug/L	#	49
36) iso-Butyl Alcohol	6.314	43	1117	6.95	ug/L		94
38) Trichloroethene (TCE)	0.000		0	N.D.			
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	0.000		0	N.D.			
41) 1,2-Dichloropropane	7.178	63	189	0.10	ug/L	#	40
42) Bromodichloromethane	0.000		0	N.D.			
44) c-1,3-Dichloropropene	7.951	75	194	0.05	ug/L	#	46
46) Toluene	8.231	91	1352	0.12	ug/L		87
47) Tetrachloroethene (PCE)	0.000		0	N.D.			
48) 4-Methyl-2-Pentanone (...	8.675	43	484	0.14	ug/L	#	43

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102323.D
Acq On : 23 Oct 2019 10:18 pm
Operator : MM
Sample : 9J23072-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOC+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 24 08:13:42 2019
Quant Method : C:\msdchem\1\methods\V~~J191024~~S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

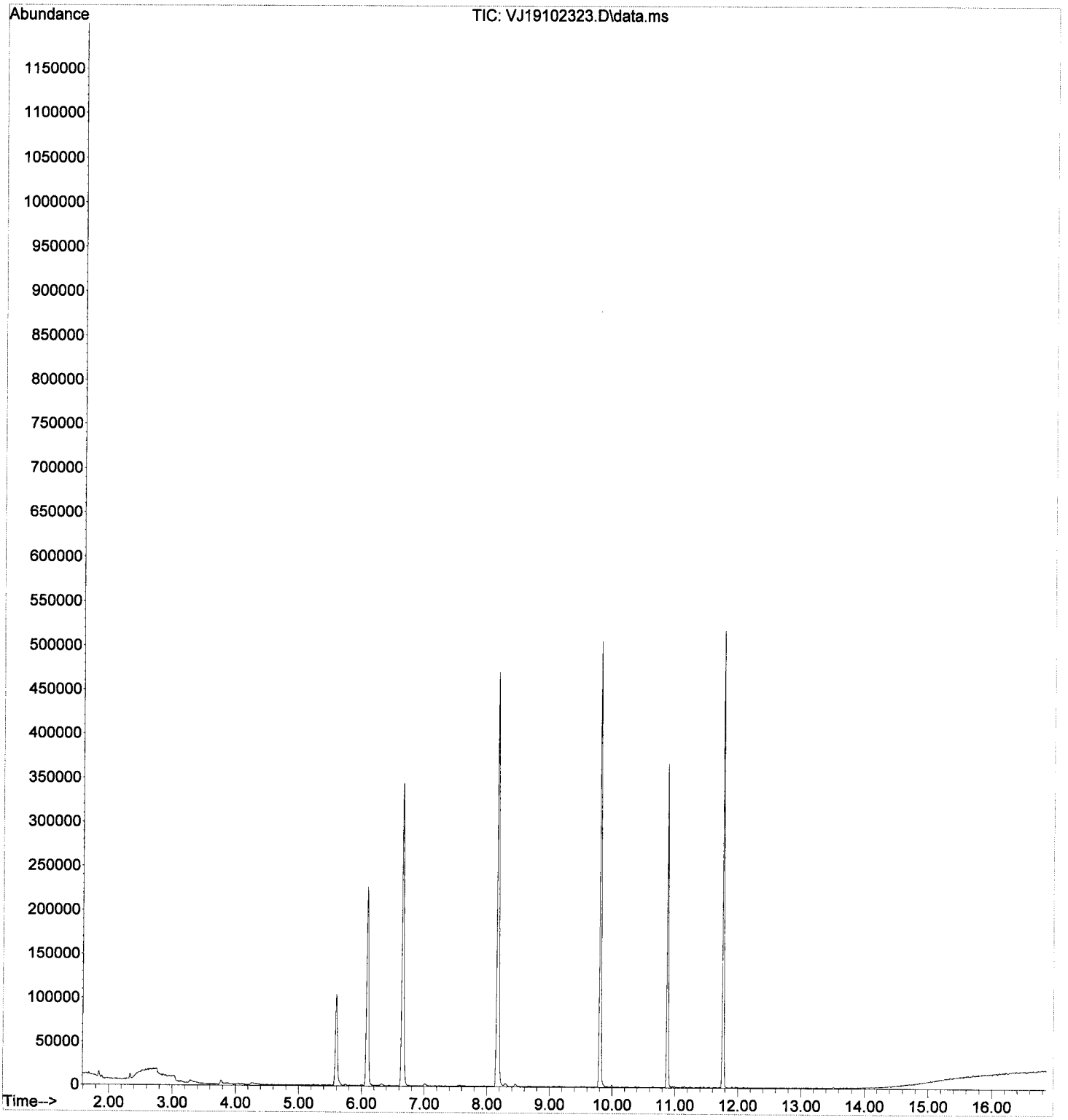
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	149	0.03	ug/L #	45
50) 1,1,2-Trichloroethane	8.869	97	69	0.14	ug/L #	64
51) Dibromochloromethane	0.000		0	N.D.		
52) 1,3-Dichloropropane	9.161	76	315	0.07	ug/L #	56
53) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
54) 2-Hexanone	9.551	43	303	0.11	ug/L #	32
55) Chlorobenzene	9.818	112	695	0.11	ug/L #	1
56) Ethylbenzene	9.861	91	1105	0.09	ug/L	84
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
58) m,p-Xylenes (2)	9.995	91	1531	0.16	ug/L	86
59) o-Xylene	10.378	91	723	0.08	ug/L	87
60) Styrene	10.427	104	335	0.06	ug/L #	40
61) Bromoform	0.000		0	N.D.		
62) Isopropylbenzene	10.646	105	797	0.07	ug/L	86
65) Bromobenzene	10.968	156	143	0.07	ug/L #	42
66) n-Propylbenzene	10.993	91	1106	0.09	ug/L	84
67) 1,1,2,2-Tetrachloroethane	11.041	83	305	0.12	ug/L	91
68) 2-Chlorotoluene	11.120	126	58	0.03	ug/L #	89
69) 1,3,5-Trimethylbenzene	11.157	105	562	0.07	ug/L	73
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	11.254	91	697	0.09	ug/L #	46
73) tert-Butylbenzene	11.406	91	324	0.06	ug/L #	59
74) 1,2,4-Trimethylbenzene	11.461	105	694	0.08	ug/L	90
75) sec-Butylbenzene	11.546	105	799	0.08	ug/L	58
76) 4-Isopropyltoluene	11.656	119	616	0.08	ug/L	51
77) 1,3-Dichlorobenzene	11.716	146	347	0.09	ug/L #	25
78) 1,4-Dichlorobenzene	11.777	146	478	0.12	ug/L #	1
79) n-Butylbenzene	11.972	91	741	0.10	ug/L	68
80) 1,2-Dichlorobenzene	12.094	146	333	0.09	ug/L	87
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
82) Hexachlorobutadiene	0.000		0	N.D		
83) 1,2,4-Trichlorobenzene	13.243	180	141	0.06	ug/L	87
84) Naphthalene	13.517	128	1002	0.13	ug/L	79
85) 1,2,3-Trichlorobenzene	13.675	180	88	0.04	ug/L	78

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102323.D
Acq On : 23 Oct 2019 10:18 pm
Operator : MM
Sample : 9J23072-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOC+MeOH
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 24 08:13:42 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 08:22:17 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.089	99	95145	50.00	ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	262504	50.00	ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	110460	50.00	ug/L	0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.597	111	74426	57.87	ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.655	114	296071	71.86	ug/L	0.00
45) Toluene-d8 (S)	8.170	98	363461	50.99	ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.883	174	80374	47.42	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	1.898	50	2774	1.09	ug/L	96
4) Vinyl Chloride	0.000		0	N.D.	d	
5) Bromomethane	2.336	96	3184	0.76	ug/L	97
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethanol	0.000		0	N.D.	d	
9) 1,1-Dichloroethene	0.000		0	N.D.	d	
10) Carbon Disulfide	3.151	76	1499	0.42	ug/L	57
11) Freon 113	0.000		0	N.D.	d	
12) Iodomethane	3.285	142	823	0.27	ug/L	86
13) Methylene Chloride	3.778	84	2377	Below Cal		97
14) Acetone	0.000		0	N.D.	d	
15) t-1,2-Dichloroethene	3.942	61	714	0.27	ug/L	90
16) n-Hexane	0.000		0	N.D.	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.	d	
20) 1,1-Dichloroethane	4.581	63	720	0.24	ug/L #	50
21) Acrylonitrile	0.000		0	N.D.	d	
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d	
23) c-1,2-Dichloroethene	0.000		0	N.D.	d	
24) 2,2-Dichloropropane	5.238	77	761	0.23	ug/L	60
25) Bromochloromethane	0.000		0	N.D.	d	
26) Chloroform	5.414	83	740	0.20	ug/L	81
27) Carbon Tetrachloride	5.554	117	367	0.12	ug/L	69
28) Tetrahydrofuran	0.000		0	N.D.	d	
29) 1,1,1-Trichloroethane	5.627	97	686	0.19	ug/L	86
31) 1,1-Dichloropropene	0.000		0	N.D.	d	
32) 2-Butanone (MEK)	0.000		0	N.D.	d	
33) Benzene	6.004	78	2559	0.35	ug/L	95
34) tert-Amyl methyl ether...	0.000		0	N.D.	d	
35) 1,2-Dichloroethane (EDC)	6.205	62	709	0.17	ug/L	83
36) iso-Butyl Alcohol	0.000		0	N.D.	d	
38) Trichloroethene (TCE)	6.619	130	381	0.37	ug/L #	71
39) tert-Amyl ethyl ether ...	0.000		0	N.D.	d	
40) Dibromomethane	0.000		0	N.D.	d	
41) 1,2-Dichloropropane	0.000		0	N.D.	d	
42) Bromodichloromethane	7.251	83	437	0.16	ug/L	94
44) c-1,3-Dichloropropene	7.951	75	596	0.15	ug/L	81
46) Toluene	8.237	91	2544	0.24	ug/L	80
47) Tetrachloroethene (PCE)	8.681	166	350	0.16	ug/L	75
48) 4-Methyl-2-Pentanone (...	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 08:22:17 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	580	0.13	ug/L		70
50) 1,1,2-Trichloroethane	8.876	97	417	0.29	ug/L	#	63
51) Dibromochloromethane	0.000		0	N.D.	d		
52) 1,3-Dichloropropane	9.162	76	851	0.18	ug/L		69
53) 1,2-Dibromoethane (EDB)	9.302	107	426	0.18	ug/L		87
54) 2-Hexanone	0.000		0	N.D.	d		
55) Chlorobenzene	9.825	112	1422	0.22	ug/L		80
56) Ethylbenzene	9.861	91	2188	0.18	ug/L		90
57) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d		
58) m,p-Xylenes (2)	9.995	91	3071	0.32	ug/L		96
59) o-Xylene	10.378	91	1440	0.15	ug/L		72
60) Styrene	10.421	104	892	0.15	ug/L		88
61) Bromoform	0.000		0	N.D.	d		
62) Isopropylbenzene	10.652	105	1688	0.16	ug/L		90
65) Bromobenzene	10.968	156	420	0.20	ug/L		85
66) n-Propylbenzene	10.993	91	2321	0.19	ug/L		84
67) 1,1,2,2-Tetrachloroethane	11.041	83	669	0.26	ug/L		80
68) 2-Chlorotoluene	11.114	126	366	0.18	ug/L	#	92
69) 1,3,5-Trimethylbenzene	11.157	105	1298	0.16	ug/L		84
70) 1,2,3-Trichloropropane	11.151	110	133	0.12	ug/L	#	81
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.254	91	1325	0.18	ug/L		80
73) tert-Butylbenzene	11.400	91	795	0.15	ug/L	#	60
74) 1,2,4-Trimethylbenzene	11.461	105	1248	0.15	ug/L		94
75) sec-Butylbenzene	11.546	105	1629	0.17	ug/L		97
76) 4-Isopropyltoluene	11.656	119	1231	0.15	ug/L		98
77) 1,3-Dichlorobenzene	11.711	146	806	0.20	ug/L		95
78) 1,4-Dichlorobenzene	11.771	146	866	0.22	ug/L	#	16
79) n-Butylbenzene	11.972	91	1325	0.18	ug/L		87
80) 1,2-Dichlorobenzene	12.094	146	725	0.19	ug/L		90
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
82) Hexachlorobutadiene	0.000		0	N.D.			
83) 1,2,4-Trichlorobenzene	13.244	180	416	0.18	ug/L		87
84) Naphthalene	13.517	128	1558	0.20	ug/L		85
85) 1,2,3-Trichlorobenzene	13.676	180	435	0.19	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 08:13:45 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	95145	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	262504	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	110460	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	74426	57.87	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	296071	71.86	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	363461	50.99	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	80374	47.42	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	391	0.17	ug/L	#	51
3) Chloromethane	1.898	50	2774	1.09	ug/L		96
4) Vinyl Chloride	2.013	62	623	0.39	ug/L	#	46
5) Bromomethane	2.336	96	3184	0.76	ug/L		97
6) Chloroethane	2.457	64	122	0.12	ug/L	#	66
7) Trichlorofluoromethane	0.000		0	N.D.			
8) Ethanol	3.388	45	1179	22.53	ug/L		83
9) 1,1-Dichloroethene	3.139	61	739	0.26	ug/L	#	56
10) Carbon Disulfide	3.151	76	1499	0.42	ug/L		57
11) Freon 113	3.194	101	296	0.23	ug/L	#	64
12) Iodomethane	3.285	142	823	0.27	ug/L		86
13) Methylene Chloride	3.778	84	2377	Below Cal			97
14) Acetone	3.863	43	1997	1.90	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	714	0.27	ug/L		90
16) n-Hexane	0.000		0	N.D.			
17) Methyl-tert-butyl-ether	4.106	73	2159	0.30	ug/L		97
18) tert-Butanol (TBA)	4.343	59	3209	13.15	ug/L	#	42
19) Diisopropyl ether (DIPE)	4.508	45	436	0.06	ug/L		59
20) 1,1-Dichloroethane	4.581	63	720	0.24	ug/L	#	50
21) Acrylonitrile	4.629	53	116	0.14	ug/L	#	14
22) Ethyl-tert-butyl ether...	4.867	59	322	0.05	ug/L	#	38
23) c-1,2-Dichloroethene	5.134	61	1002	0.36	ug/L		92
24) 2,2-Dichloropropane	5.238	77	761	0.23	ug/L		60
25) Bromochloromethane	5.335	49	345	0.22	ug/L	#	57
26) Chloroform	5.414	83	740	0.20	ug/L		81
27) Carbon Tetrachloride	5.554	117	367	0.12	ug/L		69
28) Tetrahydrofuran	5.597	42	719	0.72	ug/L	#	55
29) 1,1,1-Trichloroethane	5.627	97	686	0.19	ug/L		86
31) 1,1-Dichloropropene	5.749	75	827	0.30	ug/L	#	60
32) 2-Butanone (MEK)	5.730	43	1859	1.24	ug/L		93
33) Benzene	6.004	78	2559	0.35	ug/L		95
34) tert-Amyl methyl ether...	6.144	73	653	0.10	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.205	62	709	0.17	ug/L		83
36) iso-Butyl Alcohol	6.321	43	1986	12.74	ug/L		96
38) Trichloroethene (TCE)	6.619	130	381	0.37	ug/L	#	71
39) tert-Amyl ethyl ether ...	6.917	59	71	0.01	ug/L	#	19
40) Dibromomethane	7.063	93	69	0.06	ug/L	#	38
41) 1,2-Dichloropropane	7.172	63	579	0.31	ug/L	#	40
42) Bromodichloromethane	7.251	83	437	0.16	ug/L		94
44) c-1,3-Dichloropropene	7.951	75	596	0.15	ug/L		81
46) Toluene	8.237	91	2544	0.24	ug/L		80
47) Tetrachloroethene (PCE)	8.681	166	350	0.16	ug/L		75
48) 4-Methyl-2-Pentanone (...	8.669	43	1391	0.40	ug/L		88

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 08:13:45 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024~~S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

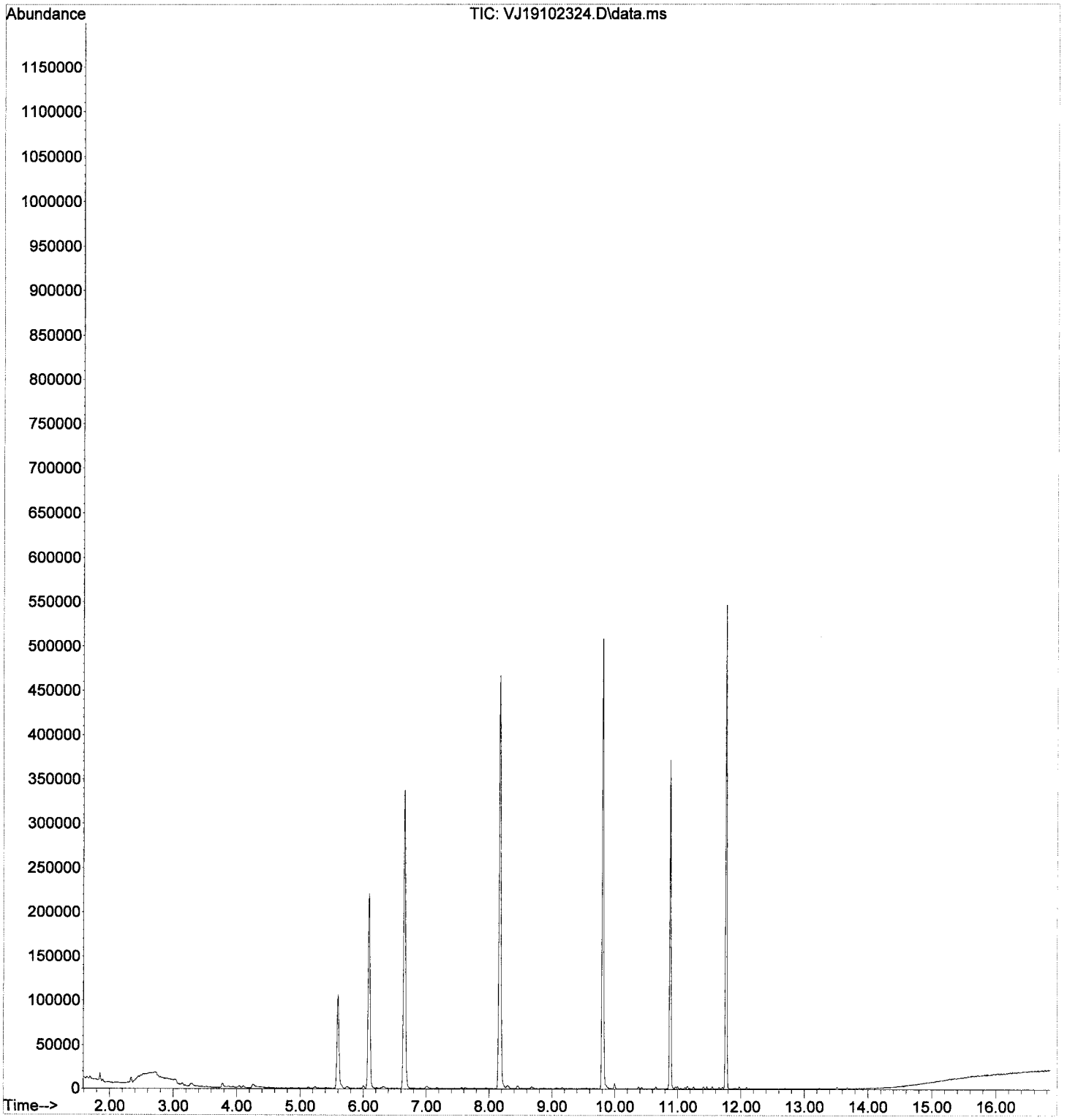
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	580	0.13	ug/L		70
50) 1,1,2-Trichloroethane	8.876	97	417	0.29	ug/L	#	63
51) Dibromochloromethane	9.058	129	61	0.03	ug/L	#	17
52) 1,3-Dichloropropane	9.162	76	851	0.18	ug/L		69
53) 1,2-Dibromoethane (EDB)	9.302	107	426	0.18	ug/L		87
54) 2-Hexanone	9.551	43	725	0.27	ug/L		86
55) Chlorobenzene	9.825	112	1422	0.22	ug/L		80
56) Ethylbenzene	9.861	91	2188	0.18	ug/L		90
57) 1,1,1,2-Tetrachloroethane	9.886	131	216	0.09	ug/L	#	79
58) m,p-Xylenes (2)	9.995	91	3071	0.32	ug/L		96
59) o-Xylene	10.378	91	1440	0.15	ug/L		72
60) Styrene	10.421	104	892	0.15	ug/L		88
61) Bromoform	10.433	173	55	0.59	ug/L	#	37
62) Isopropylbenzene	10.652	105	1688	0.15	ug/L		90
65) Bromobenzene	10.968	156	420	0.20	ug/L		85
66) n-Propylbenzene	10.993	91	2321	0.19	ug/L		84
67) 1,1,2,2-Tetrachloroethane	11.041	83	669	0.26	ug/L		80
68) 2-Chlorotoluene	11.114	126	366	0.18	ug/L	#	92
69) 1,3,5-Trimethylbenzene	11.157	105	1298	0.16	ug/L		84
70) 1,2,3-Trichloropropane	11.151	110	133	0.12	ug/L	#	81
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
72) 4-Chlorotoluene	11.254	91	1325	0.18	ug/L		80
73) tert-Butylbenzene	11.400	91	795	0.15	ug/L	#	60
74) 1,2,4-Trimethylbenzene	11.461	105	1248	0.15	ug/L		94
75) sec-Butylbenzene	11.546	105	1629	0.17	ug/L		97
76) 4-Isopropyltoluene	11.656	119	1231	0.15	ug/L		98
77) 1,3-Dichlorobenzene	11.711	146	806	0.20	ug/L		95
78) 1,4-Dichlorobenzene	11.771	146	866	0.22	ug/L	#	16
79) n-Butylbenzene	11.972	91	1325	0.18	ug/L		87
80) 1,2-Dichlorobenzene	12.094	146	725	0.19	ug/L		90
81) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
82) Hexachlorobutadiene	0.000		0	N.D.			
83) 1,2,4-Trichlorobenzene	13.244	180	416	0.18	ug/L		87
84) Naphthalene	13.517	128	1558	0.20	ug/L		85
85) 1,2,3-Trichlorobenzene	13.676	180	435	0.19	ug/L		79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102324.D
Acq On : 23 Oct 2019 10:45 pm
Operator : MM
Sample : 9J23072-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOC+MeOH
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 24 08:13:45 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102325.D
Acq On : 23 Oct 2019 11:12 pm
Operator : MM
Sample : 9J23072-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOC+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 24 08:24:41 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	93220	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	252875	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	105667	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.603	111	73589	58.40	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	285274	70.67	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	352756	51.38	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	77055	47.52	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d		
3) Chloromethane	1.898	50	3285	1.32	ug/L		97
4) Vinyl Chloride	2.007	62	1110	0.62	ug/L		94
5) Bromomethane	2.342	96	3378	1.05	ug/L		91
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	3.139	61	1510	0.53	ug/L		81
10) Carbon Disulfide	3.151	76	2496	0.71	ug/L		76
11) Freon 113	3.194	101	761	0.60	ug/L	#	66
12) Iodomethane	3.297	142	849	0.52	ug/L		82
13) Methylene Chloride	3.778	84	2718	Below Cal			86
14) Acetone	0.000		0	N.D.	d		
15) t-1,2-Dichloroethene	3.954	61	1485	0.58	ug/L		87
16) n-Hexane	0.000		0	N.D.	d		
17) Methyl-tert-butyl-ether	0.000		0	N.D.	d		
18) tert-Butanol (TBA)	4.258	59	17903	44.38	ug/L	#	87
19) Diisopropyl ether (DIPE)	4.508	45	894	0.13	ug/L		80
20) 1,1-Dichloroethane	4.581	63	1458	0.50	ug/L		89
21) Acrylonitrile	4.641	53	409	0.51	ug/L		86
22) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
23) c-1,2-Dichloroethene	5.134	61	1499	0.54	ug/L		92
24) 2,2-Dichloropropane	5.238	77	1640	0.51	ug/L		69
25) Bromochloromethane	5.329	49	807	0.53	ug/L		80
26) Chloroform	5.420	83	1517	0.42	ug/L		91
27) Carbon Tetrachloride	5.554	117	934	0.31	ug/L		88
28) Tetrahydrofuran	0.000		0	N.D.	d		
29) 1,1,1-Trichloroethane	5.621	97	1334	0.38	ug/L		92
31) 1,1-Dichloropropene	5.749	75	1389	0.51	ug/L		94
32) 2-Butanone (MEK)	0.000		0	N.D.	d		
33) Benzene	6.004	78	4719	0.67	ug/L		98
34) tert-Amyl methyl ether...	0.000		0	N.D.	d		
35) 1,2-Dichloroethane (EDC)	6.211	62	1352	0.38	ug/L		80
36) iso-Butyl Alcohol	0.000		0	N.D.	d		
38) Trichloroethene (TCE)	6.619	130	944	0.70	ug/L		82
39) tert-Amyl ethyl ether ...	6.911	59	396	0.08	ug/L	#	30
40) Dibromomethane	7.057	93	565	0.47	ug/L	#	62
41) 1,2-Dichloropropane	7.172	63	1176	0.64	ug/L		94
42) Bromodichloromethane	7.251	83	1004	0.37	ug/L		95
44) c-1,3-Dichloropropene	7.957	75	1346	0.35	ug/L		91
46) Toluene	8.231	91	4766	0.46	ug/L		92
47) Tetrachloroethene (PCE)	8.675	166	805	0.38	ug/L		77
48) 4-Methyl-2-Pentanone (...	8.669	43	2938	0.87	ug/L		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102325.D
Acq On : 23 Oct 2019 11:12 pm
Operator : MM
Sample : 9J23072-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOC+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 24 08:24:41 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1392	0.33	ug/L	70
50) 1,1,2-Trichloroethane	8.876	97	933	0.53	ug/L	94
51) Dibromochloromethane	9.064	129	522	0.22	ug/L	88
52) 1,3-Dichloropropane	9.168	76	1718	0.38	ug/L	91
53) 1,2-Dibromoethane (EDB)	9.301	107	788	0.34	ug/L	90
54) 2-Hexanone	9.545	43	1510	0.59	ug/L	82
55) Chlorobenzene	9.825	112	2767	0.44	ug/L	94
56) Ethylbenzene	9.861	91	4399	0.37	ug/L	98
57) 1,1,1,2-Tetrachloroethane	9.892	131	712	0.30	ug/L	85
58) m,p-Xylenes (2)	9.995	91	5672	0.62	ug/L	90
59) o-Xylene	10.378	91	2627	0.29	ug/L	90
60) Styrene	10.421	104	1570	0.27	ug/L	92
61) Bromoform	10.433	173	307	0.75	ug/L #	37
62) Isopropylbenzene	10.652	105	3200	0.30	ug/L	95
65) Bromobenzene	10.962	156	848	0.42	ug/L #	75
66) n-Propylbenzene	10.999	91	4342	0.37	ug/L	92
67) 1,1,2,2-Tetrachloroethane	11.047	83	1189	0.49	ug/L	81
68) 2-Chlorotoluene	11.114	126	805	0.41	ug/L	99
69) 1,3,5-Trimethylbenzene	11.157	105	2457	0.31	ug/L	87
70) 1,2,3-Trichloropropane	11.151	110	377	0.36	ug/L #	82
71) t-1,4-Dichloro-2-butene	0.000		0	N.D.	d	
72) 4-Chlorotoluene	11.248	91	2330	0.33	ug/L	99
73) tert-Butylbenzene	11.406	91	1388	0.27	ug/L	92
74) 1,2,4-Trimethylbenzene	11.461	105	2375	0.30	ug/L	87
75) sec-Butylbenzene	11.546	105	3021	0.33	ug/L	92
76) 4-Isopropyltoluene	11.656	119	2242	0.29	ug/L	93
77) 1,3-Dichlorobenzene	11.711	146	1573	0.40	ug/L	96
78) 1,4-Dichlorobenzene	11.777	146	1787	0.47	ug/L	82
79) n-Butylbenzene	11.972	91	2427	0.34	ug/L	92
80) 1,2-Dichlorobenzene	12.094	146	1421	0.39	ug/L	93
81) 1,2-Dibromo-3-Chloropr...	12.690	157	70	0.12	ug/L #	38
82) Hexachlorobutadiene	13.219	223	139	0.25	ug/L #	76
83) 1,2,4-Trichlorobenzene	13.244	180	804	0.35	ug/L	82
84) Naphthalene	13.517	128	2847	0.38	ug/L	94
85) 1,2,3-Trichlorobenzene	13.676	180	736	0.34	ug/L	88

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102325.D
Acq On : 23 Oct 2019 11:12 pm
Operator : MM
Sample : 9J23072-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOC+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 24 08:13:48 2019
Quant Method : C:\msdchem\1\methods\VJ~~191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	93220	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	252875	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	105667	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.603	111	73589	58.40	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	285274	70.67	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	352756	51.38	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	77055	47.52	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	707	0.31	ug/L	#	51
3) Chloromethane	1.898	50	3285	1.32	ug/L		97
4) Vinyl Chloride	2.007	62	1110	0.62	ug/L		94
5) Bromomethane	2.342	96	3378	1.05	ug/L		91
6) Chloroethane	2.463	64	144	0.14	ug/L	#	47
7) Trichlorofluoromethane	2.603	101	57	0.02	ug/L	#	35
8) Ethanol	3.388	45	906	17.67	ug/L	#	29
9) 1,1-Dichloroethene	3.139	61	1510	0.53	ug/L		81
10) Carbon Disulfide	3.151	76	2496	0.71	ug/L		76
11) Freon 113	3.194	101	761	0.60	ug/L	#	66
12) Iodomethane	3.297	142	849	0.52	ug/L		82
13) Methylene Chloride	3.778	84	2718	Below Cal			86
14) Acetone	3.869	43	2417	2.35	ug/L		100
15) t-1,2-Dichloroethene	3.954	61	1485	0.58	ug/L		87
16) n-Hexane	4.051	86	65	1.09	ug/L	#	1
17) Methyl-tert-butyl-ether	4.100	73	4119	0.59	ug/L		86
18) tert-Butanol (TBA)	4.258	59	17903	44.38	ug/L	#	87
19) Diisopropyl ether (DIPE)	4.508	45	894	0.13	ug/L		80
20) 1,1-Dichloroethane	4.581	63	1458	0.50	ug/L		89
21) Acrylonitrile	4.641	53	409	0.51	ug/L		86
22) Ethyl-tert-butyl ether...	4.879	59	826	0.12	ug/L	#	55
23) c-1,2-Dichloroethene	5.134	61	1499	0.54	ug/L		92
24) 2,2-Dichloropropane	5.238	77	1640	0.51	ug/L		69
25) Bromochloromethane	5.329	49	807	0.53	ug/L		80
26) Chloroform	5.420	83	1517	0.42	ug/L		91
27) Carbon Tetrachloride	5.554	117	934	0.31	ug/L		88
28) Tetrahydrofuran	5.597	42	990	1.01	ug/L	#	65
29) 1,1,1-Trichloroethane	5.621	97	1334	0.38	ug/L		92
31) 1,1-Dichloropropene	5.749	75	1389	0.51	ug/L		94
32) 2-Butanone (MEK)	5.736	43	2181	1.48	ug/L		88
33) Benzene	6.004	78	4719	0.67	ug/L		98
34) tert-Amyl methyl ether...	6.150	73	1028	0.16	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.211	62	1352	0.33	ug/L		80
36) iso-Butyl Alcohol	6.327	43	2217	14.52	ug/L		74
38) Trichloroethene (TCE)	6.619	130	944	0.70	ug/L		82
39) tert-Amyl ethyl ether ...	6.911	59	396	0.08	ug/L	#	30
40) Dibromomethane	7.057	93	565	0.47	ug/L	#	62
41) 1,2-Dichloropropane	7.172	63	1176	0.64	ug/L		94
42) Bromodichloromethane	7.251	83	1004	0.37	ug/L		95
44) c-1,3-Dichloropropene	7.957	75	1346	0.35	ug/L		91
46) Toluene	8.231	91	4766	0.45	ug/L		92
47) Tetrachloroethene (PCE)	8.675	166	805	0.38	ug/L		77
48) 4-Methyl-2-Pentanone (...	8.669	43	2938	0.87	ug/L		88

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102325.D
Acq On : 23 Oct 2019 11:12 pm
Operator : MM
Sample : 9J23072-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOC+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 24 08:13:48 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

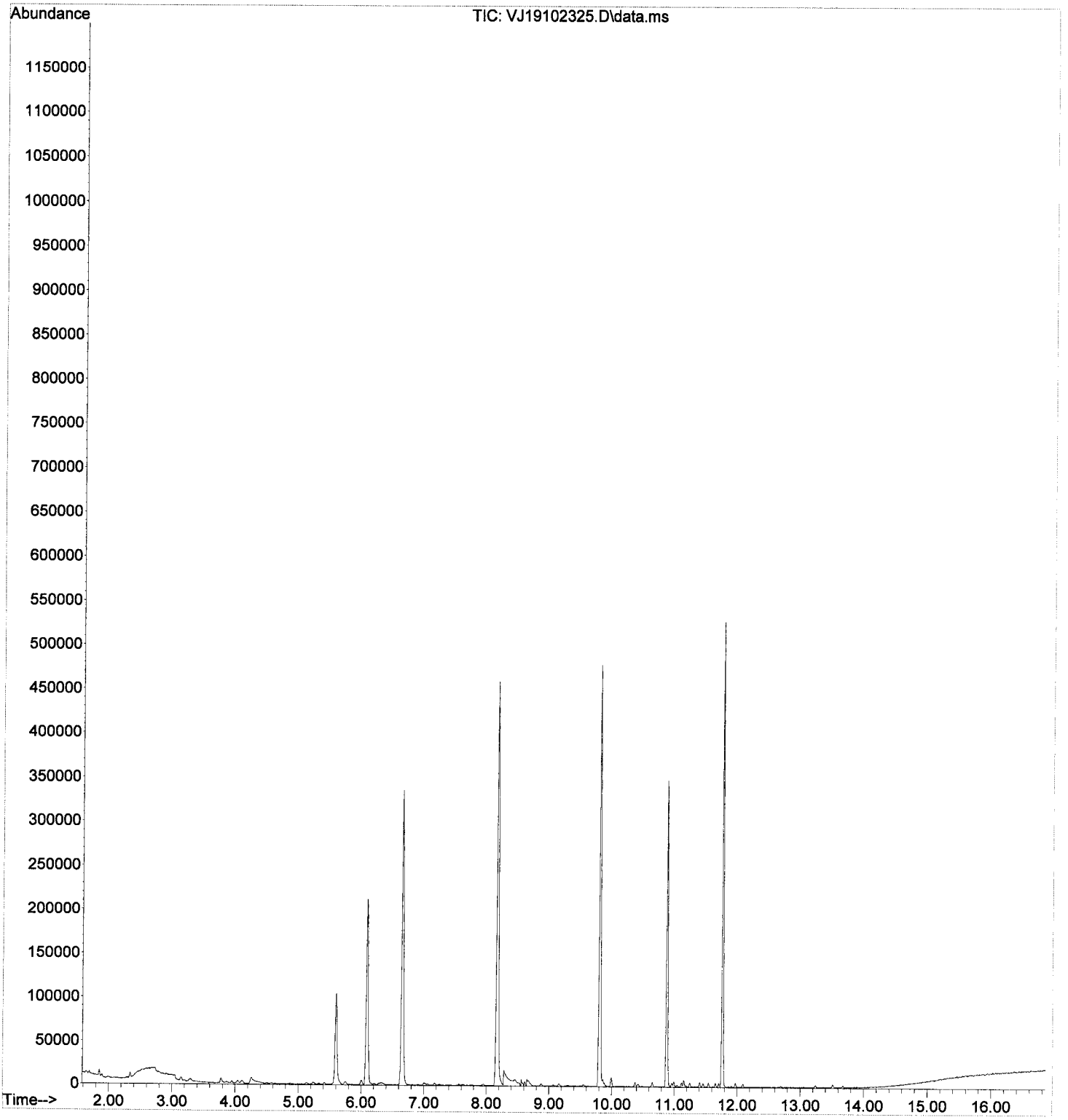
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	1392	0.33	ug/L	70
50) 1,1,2-Trichloroethane	8.876	97	933	0.53	ug/L	94
51) Dibromochloromethane	9.064	129	522	0.22	ug/L	88
52) 1,3-Dichloropropane	9.168	76	1718	0.38	ug/L	91
53) 1,2-Dibromoethane (EDB)	9.301	107	788	0.34	ug/L	90
54) 2-Hexanone	9.545	43	1510	0.59	ug/L	82
55) Chlorobenzene	9.825	112	2767	0.44	ug/L	94
56) Ethylbenzene	9.861	91	4399	0.37	ug/L	98
57) 1,1,1,2-Tetrachloroethane	9.892	131	712	0.30	ug/L	85
58) m,p-Xylenes (2)	9.995	91	5672	0.62	ug/L	90
59) o-Xylene	10.378	91	2627	0.29	ug/L	90
60) Styrene	10.421	104	1570	0.27	ug/L	92
61) Bromoform	10.433	173	307	0.75	ug/L #	37
62) Isopropylbenzene	10.652	105	3200	0.30	ug/L	95
65) Bromobenzene	10.962	156	848	0.42	ug/L #	75
66) n-Propylbenzene	10.999	91	4342	0.37	ug/L	92
67) 1,1,2,2-Tetrachloroethane	11.047	83	1189	0.49	ug/L	81
68) 2-Chlorotoluene	11.114	126	805	0.41	ug/L	99
69) 1,3,5-Trimethylbenzene	11.157	105	2457	0.31	ug/L	87
70) 1,2,3-Trichloropropane	11.151	110	377	0.36	ug/L #	82
71) t-1,4-Dichloro-2-butene	11.187	88	62	0.12	ug/L #	63
72) 4-Chlorotoluene	11.248	91	2330	0.33	ug/L	99
73) tert-Butylbenzene	11.406	91	1388	0.27	ug/L	92
74) 1,2,4-Trimethylbenzene	11.461	105	2375	0.30	ug/L	87
75) sec-Butylbenzene	11.546	105	3021	0.33	ug/L	92
76) 4-Isopropyltoluene	11.656	119	2242	0.29	ug/L	93
77) 1,3-Dichlorobenzene	11.711	146	1573	0.40	ug/L	96
78) 1,4-Dichlorobenzene	11.777	146	1787	0.47	ug/L	82
79) n-Butylbenzene	11.972	91	2427	0.34	ug/L	92
80) 1,2-Dichlorobenzene	12.094	146	1421	0.39	ug/L	93
81) 1,2-Dibromo-3-Chloropr...	12.690	157	70	0.12	ug/L #	38
82) Hexachlorobutadiene	13.219	223	139	0.25	ug/L #	76
83) 1,2,4-Trichlorobenzene	13.244	180	804	0.35	ug/L	82
84) Naphthalene	13.517	128	2847	0.38	ug/L	94
85) 1,2,3-Trichlorobenzene	13.676	180	736	0.34	ug/L	88

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102325.D
Acq On : 23 Oct 2019 11:12 pm
Operator : MM
Sample : 9J23072-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOC+MeOH
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 24 08:13:48 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:25:31 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.095	99	92321	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	250210	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	103980	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.602	111	72858	58.38	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	284090	71.06	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	350128	51.54	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	75855	47.54	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	2035	0.90	ug/L		89
3) Chloromethane	1.904	50	5307	2.15	ug/L		96
4) Vinyl Chloride	2.001	62	3035	1.53	ug/L		90
5) Bromomethane	2.348	96	4613	2.49	ug/L		89
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.603	101	516	0.16	ug/L	#	62
8) Ethanol	3.327	45	12276m	241.79	ug/L		
9) 1,1-Dichloroethene	3.139	61	3558	1.27	ug/L		89
10) Carbon Disulfide	3.157	76	6000	1.72	ug/L		94
11) Freon 113	3.206	101	2153	1.71	ug/L		95
12) Iodomethane	3.297	142	1059	1.79	ug/L		87
13) Methylene Chloride	3.784	84	3788	0.62	ug/L		87
14) Acetone	3.875	43	5145	5.04	ug/L		93
15) t-1,2-Dichloroethene	3.948	61	3719	1.47	ug/L		95
16) n-Hexane	4.039	86	445	2.47	ug/L	#	84
17) Methyl-tert-butyl-ether	4.118	73	8793	1.28	ug/L		99
18) tert-Butanol (TBA)	4.276	59	43663	99.44	ug/L	#	98
19) Diisopropyl ether (DIPE)	4.507	45	2248	0.34	ug/L		97
20) 1,1-Dichloroethane	4.580	63	4012	1.38	ug/L		93
21) Acrylonitrile	4.641	53	1605	2.00	ug/L		95
22) Ethyl-tert-butyl ether...	4.879	59	2080	0.32	ug/L		90
23) c-1,2-Dichloroethene	5.134	61	3680	1.34	ug/L		97
24) 2,2-Dichloropropane	5.237	77	3688	1.15	ug/L		89
25) Bromochloromethane	5.335	49	2314	1.52	ug/L		76
26) Chloroform	5.420	83	4201	1.18	ug/L		92
27) Carbon Tetrachloride	5.560	117	2727	0.93	ug/L		92
28) Tetrahydrofuran	5.596	42	2396	2.47	ug/L		91
29) 1,1,1-Trichloroethane	5.621	97	3664	1.05	ug/L		91
31) 1,1-Dichloropropene	5.748	75	3601	1.32	ug/L		90
32) 2-Butanone (MEK)	5.736	43	5985	4.11	ug/L		88
33) Benzene	6.004	78	11702	1.67	ug/L		97
34) tert-Amyl methyl ether...	6.156	73	2154	0.33	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.211	62	3762	0.94	ug/L		96
36) iso-Butyl Alcohol	6.296	43	6214	41.09	ug/L		88
38) Trichloroethene (TCE)	6.631	130	2385	1.55	ug/L		90
39) tert-Amyl ethyl ether ...	6.910	59	1238	0.26	ug/L		86
40) Dibromomethane	7.069	93	1439	1.22	ug/L	#	78
41) 1,2-Dichloropropane	7.172	63	2881	1.57	ug/L		98
42) Bromodichloromethane	7.251	83	2597	0.97	ug/L		96
44) c-1,3-Dichloropropene	7.957	75	3342	0.87	ug/L		99
46) Toluene	8.231	91	11638	1.13	ug/L		98
47) Tetrachloroethene (PCE)	8.675	166	2158	1.04	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.669	43	5887	1.76	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:25:31 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	3091	0.75	ug/L		91
50) 1,1,2-Trichloroethane	8.875	97	2304	1.16	ug/L		94
51) Dibromochloromethane	9.070	129	1520	0.65	ug/L		87
52) 1,3-Dichloropropane	9.161	76	4392	0.99	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.301	107	2060	0.89	ug/L		98
54) 2-Hexanone	9.545	43	3832	1.52	ug/L		95
55) Chlorobenzene	9.824	112	6563	1.06	ug/L		88
56) Ethylbenzene	9.861	91	10768	0.91	ug/L		96
57) 1,1,1,2-Tetrachloroethane	9.885	131	1888	0.80	ug/L		88
58) m,p-Xylenes (2)	9.995	91	14581	1.61	ug/L		98
59) o-Xylene	10.378	91	7125	0.79	ug/L		93
60) Styrene	10.421	104	3854	0.68	ug/L		95
61) Bromoform	10.439	173	884	1.11	ug/L		75
62) Isopropylbenzene	10.652	105	8399	0.81	ug/L		94
65) Bromobenzene	10.962	156	2143	1.08	ug/L	#	65
66) n-Propylbenzene	10.999	91	10891	0.95	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	3210	1.33	ug/L		90
68) 2-Chlorotoluene	11.114	126	2013	1.03	ug/L		94
69) 1,3,5-Trimethylbenzene	11.157	105	6251	0.81	ug/L		86
70) 1,2,3-Trichloropropane	11.151	110	1017	0.98	ug/L	#	80
71) t-1,4-Dichloro-2-butene	11.187	88	335	0.67	ug/L	#	73
72) 4-Chlorotoluene	11.248	91	6138	0.87	ug/L		86
73) tert-Butylbenzene	11.406	91	3751	0.74	ug/L		87
74) 1,2,4-Trimethylbenzene	11.461	105	6195	0.79	ug/L		98
75) sec-Butylbenzene	11.546	105	7629	0.84	ug/L		90
76) 4-Isopropyltoluene	11.656	119	5514	0.72	ug/L		96
77) 1,3-Dichlorobenzene	11.710	146	3912	1.02	ug/L		93
78) 1,4-Dichlorobenzene	11.777	146	4198	1.13	ug/L		88
79) n-Butylbenzene	11.972	91	5940	0.84	ug/L		92
80) 1,2-Dichlorobenzene	12.094	146	3541	1.00	ug/L		93
81) 1,2-Dibromo-3-Chloropr...	12.696	157	497	0.88	ug/L	#	45
82) Hexachlorobutadiene	13.219	223	383	0.69	ug/L		92
83) 1,2,4-Trichlorobenzene	13.237	180	2063	0.93	ug/L		94
84) Naphthalene	13.517	128	6478	0.88	ug/L		96
85) 1,2,3-Trichlorobenzene	13.675	180	1857	0.87	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:13:51 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.095	99	92321	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	250210	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	103980	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.602	111	72858	58.38	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	284090	71.06	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	350128	51.54	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	75855	47.54	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	2035	0.90	ug/L		89
3) Chloromethane	1.904	50	5307	2.15	ug/L		96
4) Vinyl Chloride	2.001	62	3035	1.53	ug/L		90
5) Bromomethane	2.348	96	4613	2.49	ug/L		89
6) Chloroethane	2.463	64	266	0.27	ug/L	#	32
7) Trichlorofluoromethane	2.603	101	516	0.16	ug/L	#	62
8) Ethanol	3.455	45	~~369~~	7.27	ug/L	#	29
9) 1,1-Dichloroethene	3.139	61	3558	1.27	ug/L		89
10) Carbon Disulfide	3.157	76	6000	1.72	ug/L		94
11) Freon 113	3.206	101	2153	1.71	ug/L		95
12) Iodomethane	3.297	142	1059	1.79	ug/L		87
13) Methylene Chloride	3.784	84	3788	0.62	ug/L		87
14) Acetone	3.875	43	5145	5.04	ug/L		93
15) t-1,2-Dichloroethene	3.948	61	3719	1.47	ug/L		95
16) n-Hexane	4.039	86	445	2.47	ug/L	#	84
17) Methyl-tert-butyl-ether	4.118	73	8793	1.28	ug/L		99
18) tert-Butanol (TBA)	4.276	59	43663	99.44	ug/L	#	98
19) Diisopropyl ether (DIPE)	4.507	45	2248	0.34	ug/L		97
20) 1,1-Dichloroethane	4.580	63	4012	1.38	ug/L		93
21) Acrylonitrile	4.641	53	1605	2.00	ug/L		95
22) Ethyl-tert-butyl ether...	4.879	59	2080	0.32	ug/L		90
23) c-1,2-Dichloroethene	5.134	61	3680	1.34	ug/L		97
24) 2,2-Dichloropropane	5.237	77	3688	1.15	ug/L		89
25) Bromochloromethane	5.335	49	2314	1.52	ug/L		76
26) Chloroform	5.420	83	4201	1.18	ug/L		92
27) Carbon Tetrachloride	5.560	117	2727	0.93	ug/L		92
28) Tetrahydrofuran	5.596	42	2396	2.47	ug/L		91
29) 1,1,1-Trichloroethane	5.621	97	3664	1.05	ug/L		91
31) 1,1-Dichloropropene	5.748	75	3601	1.32	ug/L		90
32) 2-Butanone (MEK)	5.736	43	5985	4.11	ug/L		88
33) Benzene	6.004	78	11702	1.67	ug/L		97
34) tert-Amyl methyl ether...	6.156	73	2154	0.33	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.211	62	3762	0.94	ug/L		96
36) iso-Butyl Alcohol	6.296	43	6214	41.09	ug/L		88
38) Trichloroethene (TCE)	6.631	130	2385	1.55	ug/L		90
39) tert-Amyl ethyl ether ...	6.910	59	1238	0.26	ug/L		86
40) Dibromomethane	7.069	93	1439	1.22	ug/L	#	78
41) 1,2-Dichloropropane	7.172	63	2881	1.57	ug/L		98
42) Bromodichloromethane	7.251	83	2597	0.97	ug/L		96
44) c-1,3-Dichloropropene	7.957	75	3342	0.87	ug/L		99
46) Toluene	8.231	91	11638	1.13	ug/L		98
47) Tetrachloroethene (PCE)	8.675	166	2158	1.04	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.669	43	5887	1.76	ug/L		92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:13:51 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

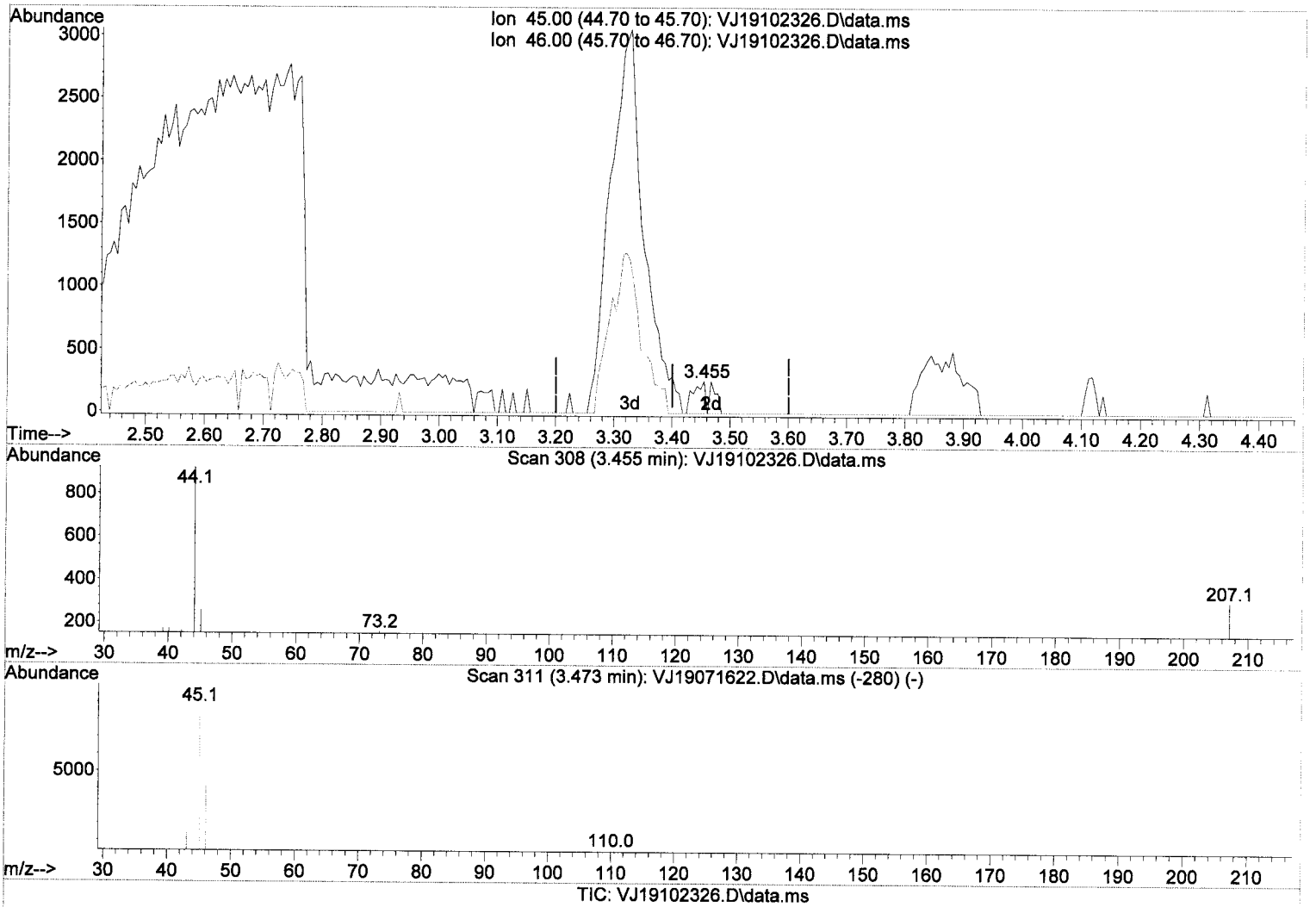
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	3091	0.75	ug/L	91
50) 1,1,2-Trichloroethane	8.875	97	2304	1.16	ug/L	94
51) Dibromochloromethane	9.070	129	1520	0.65	ug/L	87
52) 1,3-Dichloropropane	9.161	76	4392	0.99	ug/L	95
53) 1,2-Dibromoethane (EDB)	9.301	107	2060	0.89	ug/L	98
54) 2-Hexanone	9.545	43	3832	1.52	ug/L	95
55) Chlorobenzene	9.824	112	6563	1.06	ug/L	88
56) Ethylbenzene	9.861	91	10768	0.91	ug/L	96
57) 1,1,1,2-Tetrachloroethane	9.885	131	1888	0.80	ug/L	88
58) m,p-Xylenes (2)	9.995	91	14581	1.61	ug/L	98
59) o-Xylene	10.378	91	7125	0.79	ug/L	93
60) Styrene	10.421	104	3854	0.68	ug/L	95
61) Bromoform	10.439	173	884	1.11	ug/L	75
62) Isopropylbenzene	10.652	105	8399	0.81	ug/L	94
65) Bromobenzene	10.962	156	2143	1.08	ug/L #	65
66) n-Propylbenzene	10.999	91	10891	0.95	ug/L	94
67) 1,1,2,2-Tetrachloroethane	11.047	83	3210	1.33	ug/L	90
68) 2-Chlorotoluene	11.114	126	2013	1.03	ug/L	94
69) 1,3,5-Trimethylbenzene	11.157	105	6251	0.81	ug/L	86
70) 1,2,3-Trichloropropane	11.151	110	1017	0.98	ug/L #	80
71) t-1,4-Dichloro-2-butene	11.187	88	335	0.67	ug/L #	73
72) 4-Chlorotoluene	11.248	91	6138	0.87	ug/L	86
73) tert-Butylbenzene	11.406	91	3751	0.74	ug/L	87
74) 1,2,4-Trimethylbenzene	11.461	105	6195	0.79	ug/L	98
75) sec-Butylbenzene	11.546	105	7629	0.84	ug/L	90
76) 4-Isopropyltoluene	11.656	119	5514	0.72	ug/L	96
77) 1,3-Dichlorobenzene	11.710	146	3912	1.02	ug/L	93
78) 1,4-Dichlorobenzene	11.777	146	4198	1.13	ug/L	88
79) n-Butylbenzene	11.972	91	5940	0.84	ug/L	92
80) 1,2-Dichlorobenzene	12.094	146	3541	1.00	ug/L	93
81) 1,2-Dibromo-3-Chloropr...	12.696	157	497	0.88	ug/L #	45
82) Hexachlorobutadiene	13.219	223	383	0.69	ug/L	92
83) 1,2,4-Trichlorobenzene	13.237	180	2063	0.93	ug/L	94
84) Naphthalene	13.517	128	6478	0.88	ug/L	96
85) 1,2,3-Trichlorobenzene	13.675	180	1857	0.87	ug/L	98

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:13:51 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



TIC: VJ19102326.D\data.ms

(8) Ethanol

3.455min (+ 0.055) 7.27 ug/L

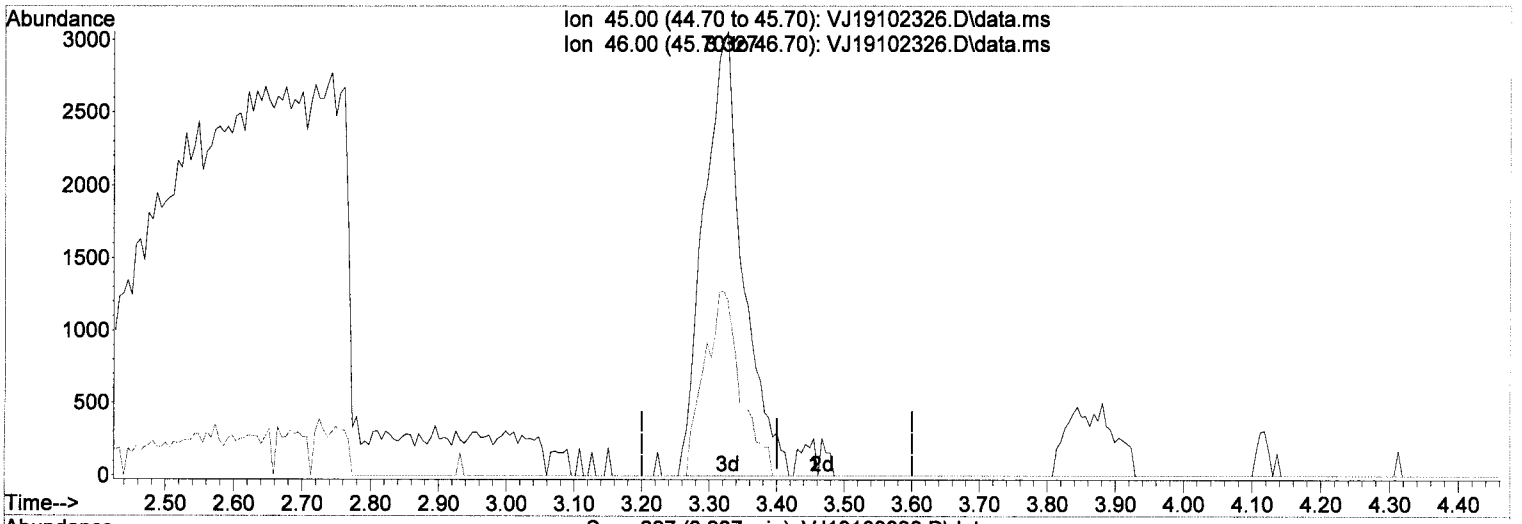
response 369

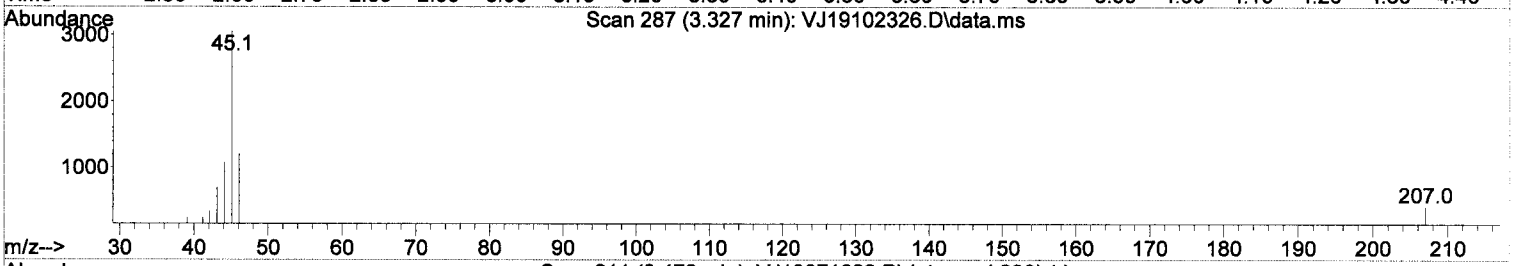
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

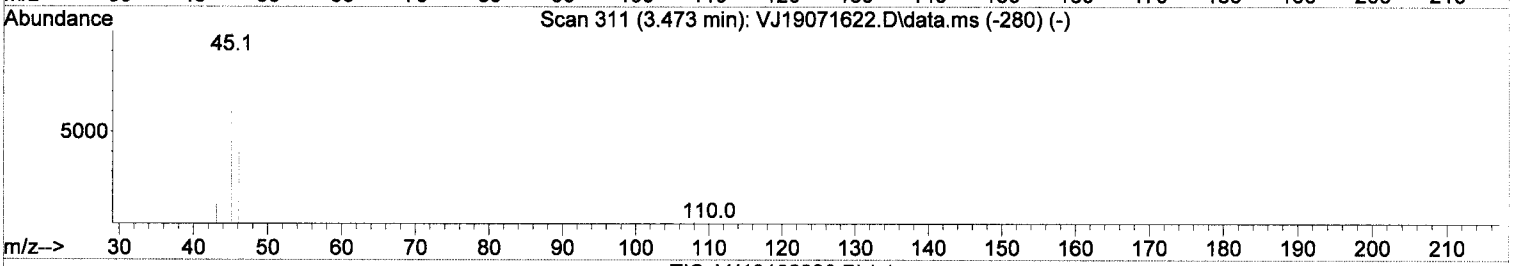
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:13:51 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102326.D\data.ms

(8) Ethanol

3.327min (-0.073) 241.79 ug/L m

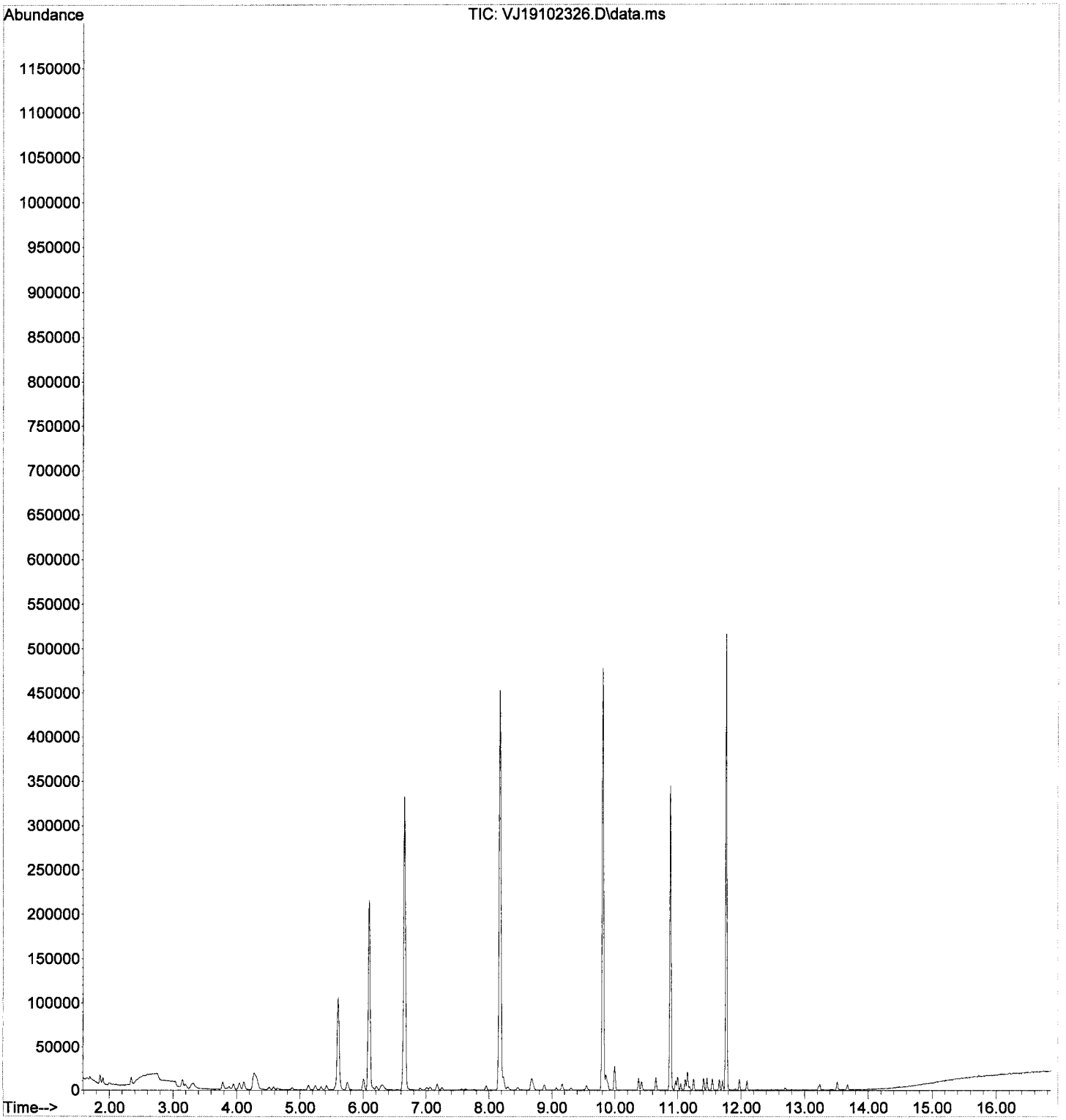
response 12276

Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	39.72
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102326.D
Acq On : 23 Oct 2019 11:38 pm
Operator : MM
Sample : 9J23072-CAL4
Misc : 1X 5mL 1/2PPB VOC+MeOH
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 24 08:13:51 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:27:45 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024~~S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	94791	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	254089	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	104689	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	73108	57.05	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	289317	70.48	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	358352	51.94	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	76386	47.55	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	4456m	1.91	ug/L		
3) Chloromethane	1.892	50	8944	3.53	ug/L		99
4) Vinyl Chloride	1.983	62	6249	2.96	ug/L		98
5) Bromomethane	2.336	96	5195	3.00	ug/L		94
6) Chloroethane	2.463	64	558	0.54	ug/L	#	14
7) Trichlorofluoromethane	2.603	101	1251	0.39	ug/L		72
8) Ethanol	3.352	45	19108	366.54	ug/L		97
9) 1,1-Dichloroethene	3.139	61	7400	2.57	ug/L		93
10) Carbon Disulfide	3.151	76	12853	3.58	ug/L		97
11) Freon 113	3.193	101	4614	3.57	ug/L		81
12) Iodomethane	3.285	142	1558	4.27	ug/L		78
13) Methylene Chloride	3.777	84	6212	2.37	ug/L		90
14) Acetone	0.000		0	N.D.	d		
15) t-1,2-Dichloroethene	3.948	61	7911	3.05	ug/L		95
16) n-Hexane	4.039	86	1139	4.87	ug/L	#	83
17) Methyl-tert-butyl-ether	4.100	73	18230	2.58	ug/L		96
18) tert-Butanol (TBA)	4.319	59	97251m	206.57	ug/L		
19) Diisopropyl ether (DIPE)	4.507	45	4580	0.68	ug/L		98
20) 1,1-Dichloroethane	4.580	63	8482	2.85	ug/L		97
21) Acrylonitrile	4.635	53	3497m	4.25	ug/L		
22) Ethyl-tert-butyl ether...	4.872	59	4172	0.62	ug/L		98
23) c-1,2-Dichloroethene	5.128	61	7651	2.72	ug/L		94
24) 2,2-Dichloropropane	5.237	77	7702	2.34	ug/L		92
25) Bromochloromethane	5.323	49	4784	3.06	ug/L		78
26) Chloroform	5.414	83	8976	2.46	ug/L		93
27) Carbon Tetrachloride	5.548	117	5728	1.90	ug/L		95
28) Tetrahydrofuran	5.596	42	4355	4.38	ug/L		91
29) 1,1,1-Trichloroethane	5.621	97	8216	2.29	ug/L		97
31) 1,1-Dichloropropene	5.748	75	7729	2.77	ug/L		93
32) 2-Butanone (MEK)	5.736	43	10911	7.29	ug/L		98
33) Benzene	5.998	78	25316	3.51	ug/L		97
34) tert-Amyl methyl ether...	6.150	73	4293	0.64	ug/L		90
35) 1,2-Dichloroethane (EDC)	6.205	62	8154	1.98	ug/L		96
36) iso-Butyl Alcohol	6.308	43	14927	96.13	ug/L		91
38) Trichloroethene (TCE)	6.618	130	5111	3.06	ug/L		88
39) tert-Amyl ethyl ether ...	6.898	59	3009	0.61	ug/L		77
40) Dibromomethane	7.063	93	3204	2.64	ug/L	#	75
41) 1,2-Dichloropropane	7.172	63	6237	3.32	ug/L		94
42) Bromodichloromethane	7.245	83	5797	2.10	ug/L		98
44) c-1,3-Dichloropropene	7.951	75	7516	1.92	ug/L		98
46) Toluene	8.231	91	24811	2.37	ug/L		96
47) Tetrachloroethene (PCE)	8.681	166	4654	2.20	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.669	43	13736	4.04	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:27:45 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	7062	1.69	ug/L		91
50) 1,1,2-Trichloroethane	8.875	97	5217	2.44	ug/L		94
51) Dibromochloromethane	9.064	129	3616	1.58	ug/L		96
52) 1,3-Dichloropropane	9.161	76	9958	2.22	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.301	107	4697	2.00	ug/L		92
54) 2-Hexanone	9.545	43	9451	3.69	ug/L		90
55) Chlorobenzene	9.824	112	14691	2.38	ug/L		97
56) Ethylbenzene	9.861	91	23566	1.96	ug/L		95
57) 1,1,1,2-Tetrachloroethane	9.885	131	4053	1.69	ug/L		96
58) m,p-Xylenes (2)	9.995	91	32148	3.49	ug/L		99
59) o-Xylene	10.378	91	15404	1.68	ug/L		94
60) Styrene	10.421	104	8686	1.51	ug/L		91
61) Bromoform	10.439	173	2069	1.83	ug/L		90
62) Isopropylbenzene	10.652	105	18251	1.72	ug/L		96
65) Bromobenzene	10.962	156	4789	2.40	ug/L	#	62
66) n-Propylbenzene	10.993	91	23478	2.04	ug/L		92
67) 1,1,2,2-Tetrachloroethane	11.047	83	7515	3.10	ug/L		99
68) 2-Chlorotoluene	11.114	126	4132	2.11	ug/L		90
69) 1,3,5-Trimethylbenzene	11.157	105	14119	1.81	ug/L		91
70) 1,2,3-Trichloropropane	11.151	110	2381	2.28	ug/L		96
71) t-1,4-Dichloro-2-butene	11.187	88	731	1.44	ug/L	#	62
72) 4-Chlorotoluene	11.248	91	13748	1.94	ug/L		95
73) tert-Butylbenzene	11.406	91	8173	1.61	ug/L		85
74) 1,2,4-Trimethylbenzene	11.461	105	14318	1.81	ug/L		97
75) sec-Butylbenzene	11.546	105	17439	1.90	ug/L		96
76) 4-Isopropyltoluene	11.656	119	12982	1.68	ug/L		93
77) 1,3-Dichlorobenzene	11.710	146	8614	2.22	ug/L		95
78) 1,4-Dichlorobenzene	11.777	146	9088	2.48	ug/L		95
79) n-Butylbenzene	11.972	91	12799	1.79	ug/L		93
80) 1,2-Dichlorobenzene	12.094	146	7821	2.19	ug/L		96
81) 1,2-Dibromo-3-Chloropr...	12.696	157	1147	2.02	ug/L	#	45
82) Hexachlorobutadiene	13.219	223	910	1.62	ug/L		85
83) 1,2,4-Trichlorobenzene	13.243	180	4581	2.04	ug/L		91
84) Naphthalene	13.517	128	14900	2.01	ug/L		98
85) 1,2,3-Trichlorobenzene	13.675	180	4683	2.18	ug/L		91

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S.M~~
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	94791	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	254089	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	104689	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	73108	57.05	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	289317	70.48	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	358352	51.94	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	76386	47.55	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	~~2909~~ 443	1.25	ug/L		91
3) Chloromethane	1.892	50	8944	3.53	ug/L		99
4) Vinyl Chloride	1.983	62	6249	2.96	ug/L		98
5) Bromomethane	2.336	96	5195	3.00	ug/L		94
6) Chloroethane	2.463	64	558	0.54	ug/L	#	14
7) Trichlorofluoromethane	2.603	101	1251	0.39	ug/L		72
8) Ethanol	3.352	45	19108	366.54	ug/L		97
9) 1,1-Dichloroethene	3.139	61	7400	2.57	ug/L		93
10) Carbon Disulfide	3.151	76	12853	3.58	ug/L		97
11) Freon 113	3.193	101	4614	3.57	ug/L		81
12) Iodomethane	3.285	142	1558	4.27	ug/L		78
13) Methylene Chloride	3.777	84	6212	2.37	ug/L		90
14) Acetone	3.869	43	6940	6.63	ug/L		95
15) t-1,2-Dichloroethene	3.948	61	7911	3.05	ug/L		95
16) n-Hexane	4.039	86	1139	4.87	ug/L	#	83
17) Methyl-tert-butyl-ether	4.100	73	18230	2.58	ug/L		96
18) tert-Butanol (TBA)	4.319	59	~~63582~~ 137.95		ug/L	#	100
19) Diisopropyl ether (DIPE)	4.507	45	4580	0.68	ug/L		98
20) 1,1-Dichloroethane	4.580	63	8482	2.85	ug/L		97
21) Acrylonitrile	4.635	53	~~2980~~ 947	3.63	ug/L		97
22) Ethyl-tert-butyl ether...	4.872	59	4172	0.62	ug/L		98
23) c-1,2-Dichloroethene	5.128	61	7651	2.72	ug/L		94
24) 2,2-Dichloropropane	5.237	77	7702	2.34	ug/L		92
25) Bromochloromethane	5.323	49	4784	3.06	ug/L		78
26) Chloroform	5.414	83	8976	2.46	ug/L		93
27) Carbon Tetrachloride	5.548	117	5728	1.90	ug/L		95
28) Tetrahydrofuran	5.596	42	4355	4.38	ug/L		91
29) 1,1,1-Trichloroethane	5.621	97	8216	2.29	ug/L		97
31) 1,1-Dichloropropene	5.748	75	7729	2.77	ug/L		93
32) 2-Butanone (MEK)	5.736	43	10911	7.29	ug/L		98
33) Benzene	5.998	78	25316	3.51	ug/L		97
34) tert-Amyl methyl ether...	6.150	73	4293	0.64	ug/L		90
35) 1,2-Dichloroethane (EDC)	6.205	62	8154	1.98	ug/L		96
36) iso-Butyl Alcohol	6.308	43	14927	96.13	ug/L		91
38) Trichloroethene (TCE)	6.618	130	5111	3.06	ug/L		88
39) tert-Amyl ethyl ether ...	6.898	59	3009	0.61	ug/L		77
40) Dibromomethane	7.063	93	3204	2.64	ug/L	#	75
41) 1,2-Dichloropropane	7.172	63	6237	3.32	ug/L		94
42) Bromodichloromethane	7.245	83	5797	2.10	ug/L		98
44) c-1,3-Dichloropropene	7.951	75	7516	1.92	ug/L		98
46) Toluene	8.231	91	24811	2.37	ug/L		96
47) Tetrachloroethene (PCE)	8.681	166	4654	2.20	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.669	43	13736	4.04	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

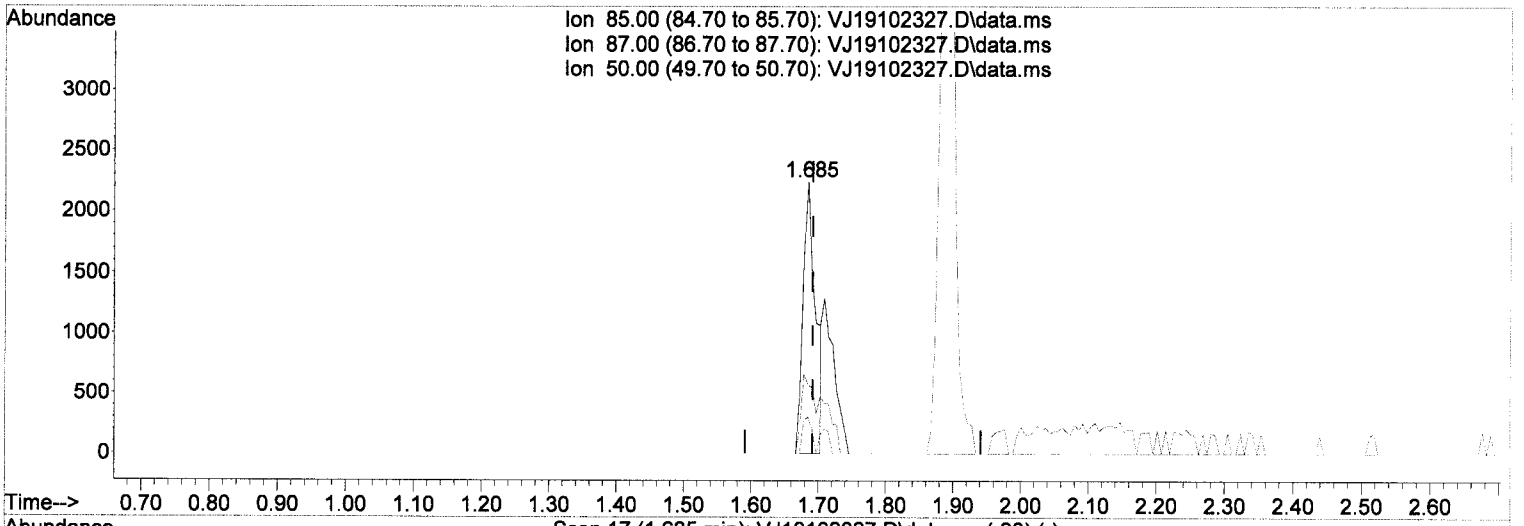
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	7062	1.69	ug/L		91
50) 1,1,2-Trichloroethane	8.875	97	5217	2.44	ug/L		94
51) Dibromochloromethane	9.064	129	3616	1.53	ug/L		96
52) 1,3-Dichloropropane	9.161	76	9958	2.22	ug/L		95
53) 1,2-Dibromoethane (EDB)	9.301	107	4697	2.00	ug/L		92
54) 2-Hexanone	9.545	43	9451	3.69	ug/L		90
55) Chlorobenzene	9.824	112	14691	2.33	ug/L		97
56) Ethylbenzene	9.861	91	23566	1.96	ug/L		95
57) 1,1,1,2-Tetrachloroethane	9.885	131	4053	1.69	ug/L		96
58) m,p-Xylenes (2)	9.995	91	32148	3.49	ug/L		99
59) o-Xylene	10.378	91	15404	1.68	ug/L		94
60) Styrene	10.421	104	8686	1.51	ug/L		91
61) Bromoform	10.439	173	2069	1.83	ug/L		90
62) Isopropylbenzene	10.652	105	18251	1.72	ug/L		96
65) Bromobenzene	10.962	156	4789	2.40	ug/L	#	62
66) n-Propylbenzene	10.993	91	23478	2.04	ug/L		92
67) 1,1,2,2-Tetrachloroethane	11.047	83	7515	3.10	ug/L		99
68) 2-Chlorotoluene	11.114	126	4132	2.11	ug/L		90
69) 1,3,5-Trimethylbenzene	11.157	105	14119	1.81	ug/L		91
70) 1,2,3-Trichloropropane	11.151	110	2381	2.28	ug/L		96
71) t-1,4-Dichloro-2-butene	11.187	88	731	1.44	ug/L	#	62
72) 4-Chlorotoluene	11.248	91	13748	1.94	ug/L		95
73) tert-Butylbenzene	11.406	91	8173	1.61	ug/L		85
74) 1,2,4-Trimethylbenzene	11.461	105	14318	1.81	ug/L		97
75) sec-Butylbenzene	11.546	105	17439	1.90	ug/L		96
76) 4-Isopropyltoluene	11.656	119	12982	1.68	ug/L		93
77) 1,3-Dichlorobenzene	11.710	146	8614	2.22	ug/L		95
78) 1,4-Dichlorobenzene	11.777	146	9088	2.43	ug/L		95
79) n-Butylbenzene	11.972	91	12799	1.79	ug/L		93
80) 1,2-Dichlorobenzene	12.094	146	7821	2.19	ug/L		96
81) 1,2-Dibromo-3-Chloropr...	12.696	157	1147	2.02	ug/L	#	45
82) Hexachlorobutadiene	13.219	223	910	1.62	ug/L		85
83) 1,2,4-Trichlorobenzene	13.243	180	4581	2.04	ug/L		91
84) Naphthalene	13.517	128	14900	2.01	ug/L		98
85) 1,2,3-Trichlorobenzene	13.675	180	4683	2.18	ug/L		91

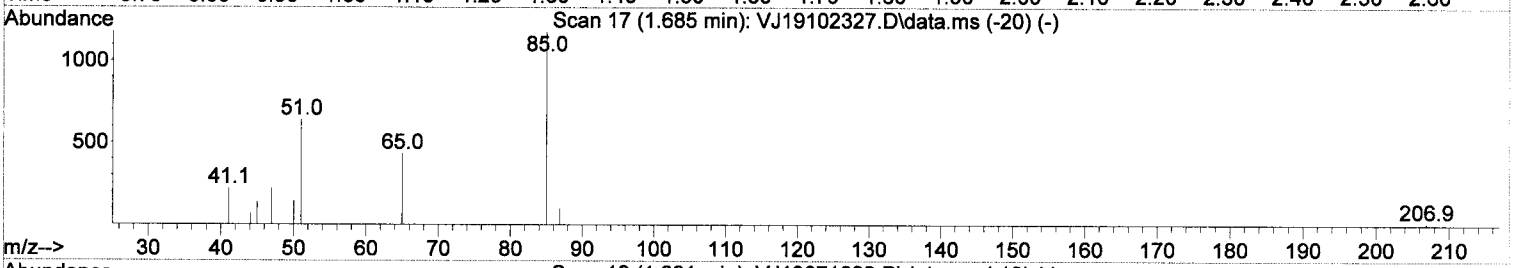
(#) = qualifier out of range (m) = manual integration (+) = signals summed

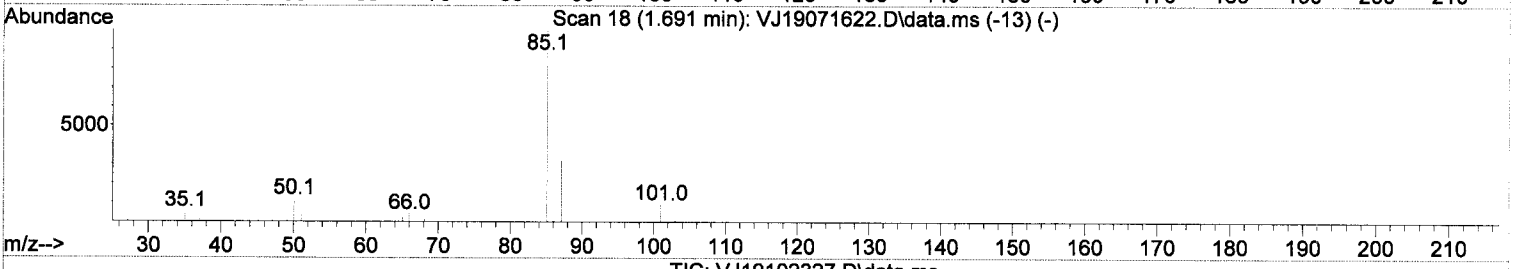
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(2) Dichlorodifluoromethane

1.685min (-0.006) 1.25 ug/L

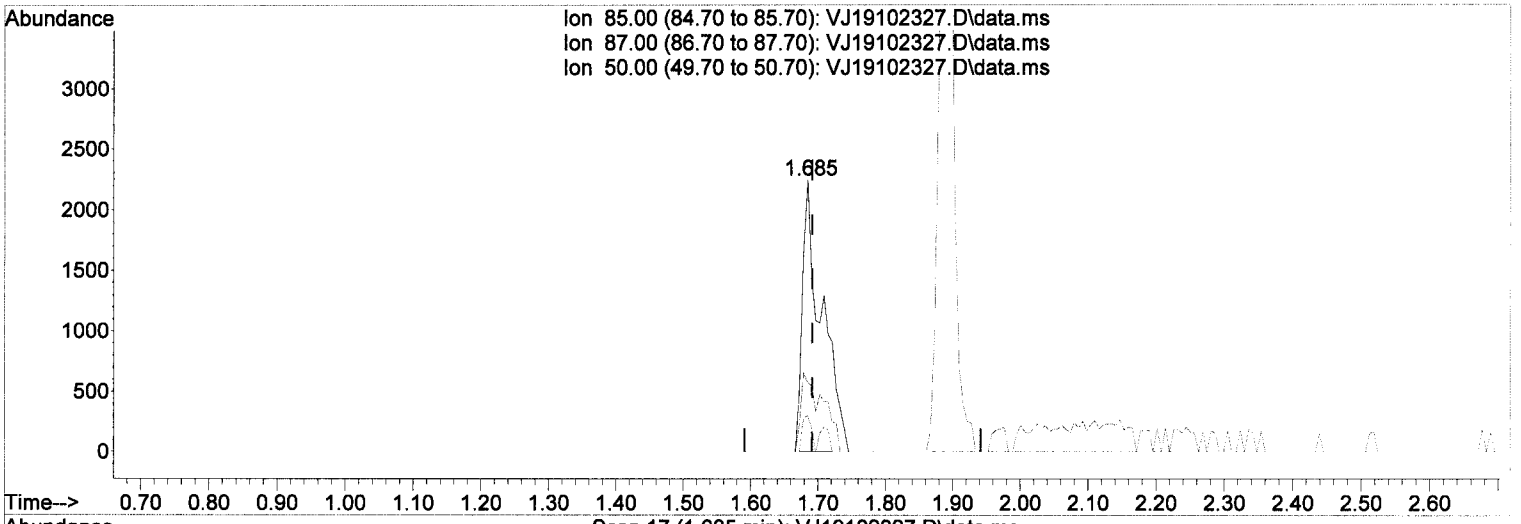
response 2909

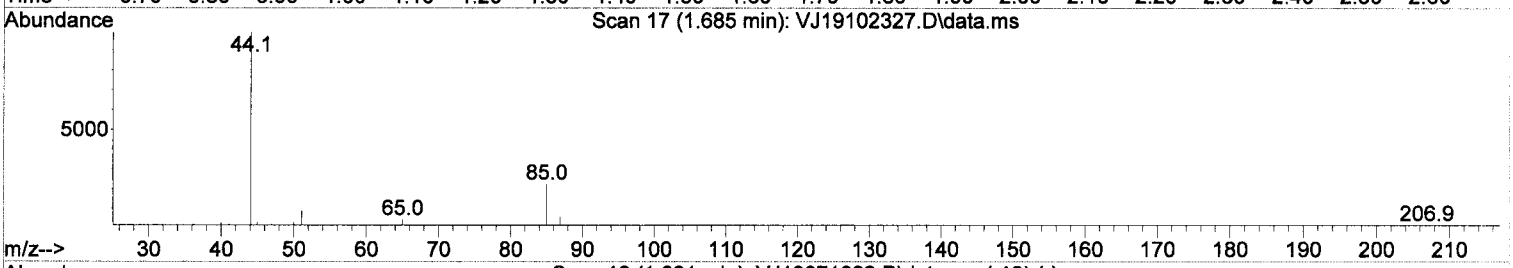
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	31.10	25.45
50.00	11.20	13.41
0.00	0.00	0.00

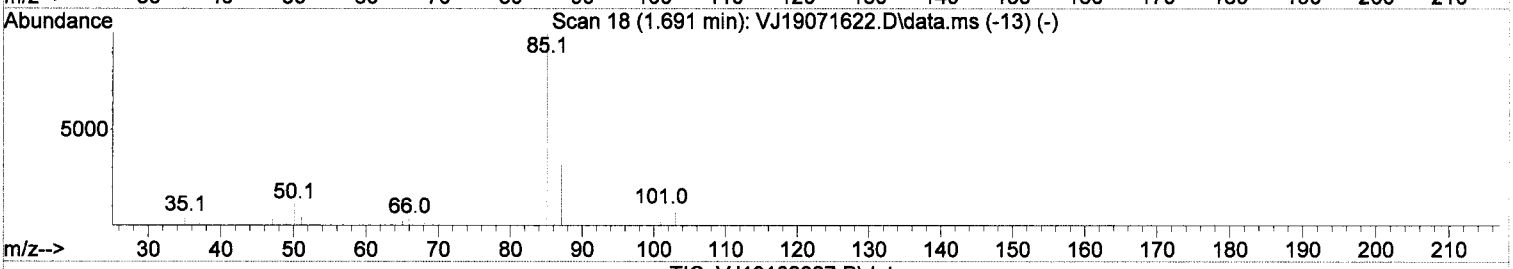
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(2) Dichlorodifluoromethane

1.685min (-0.006) 1.91 ug/L m

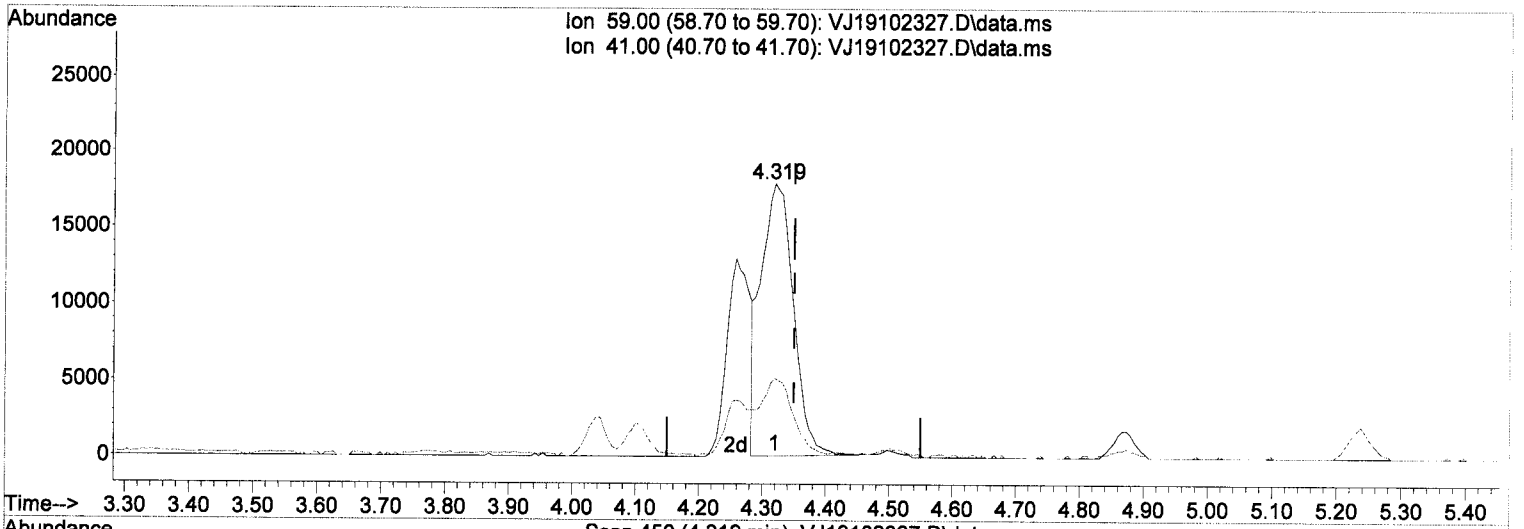
response 4456

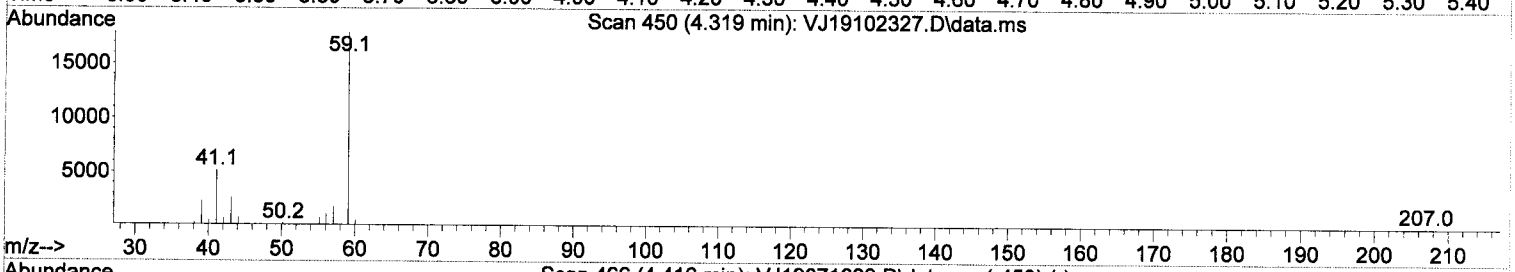
Ion	Exp%	Act%
85.00	100.00	100.00
87.00	31.10	25.45
50.00	11.20	13.41
0.00	0.00	0.00

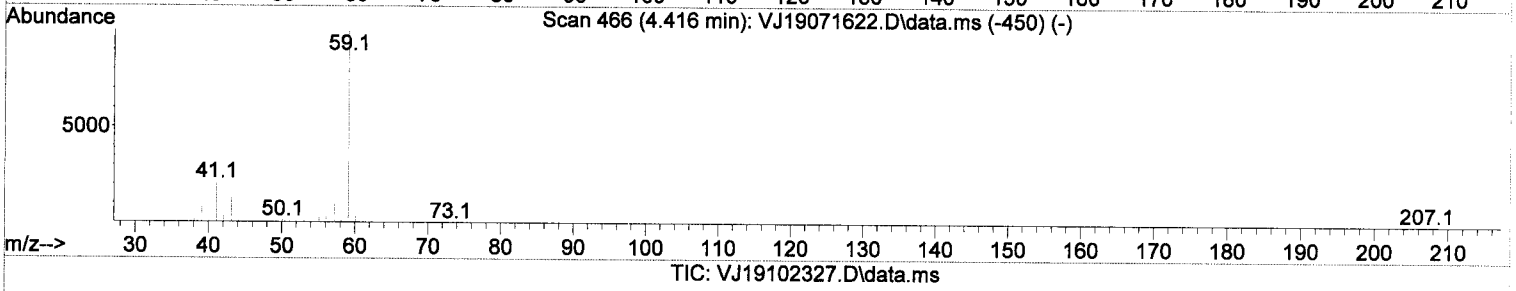
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(18) tert-Butanol (TBA)

4.319min (-0.030) 137.95 ug/L

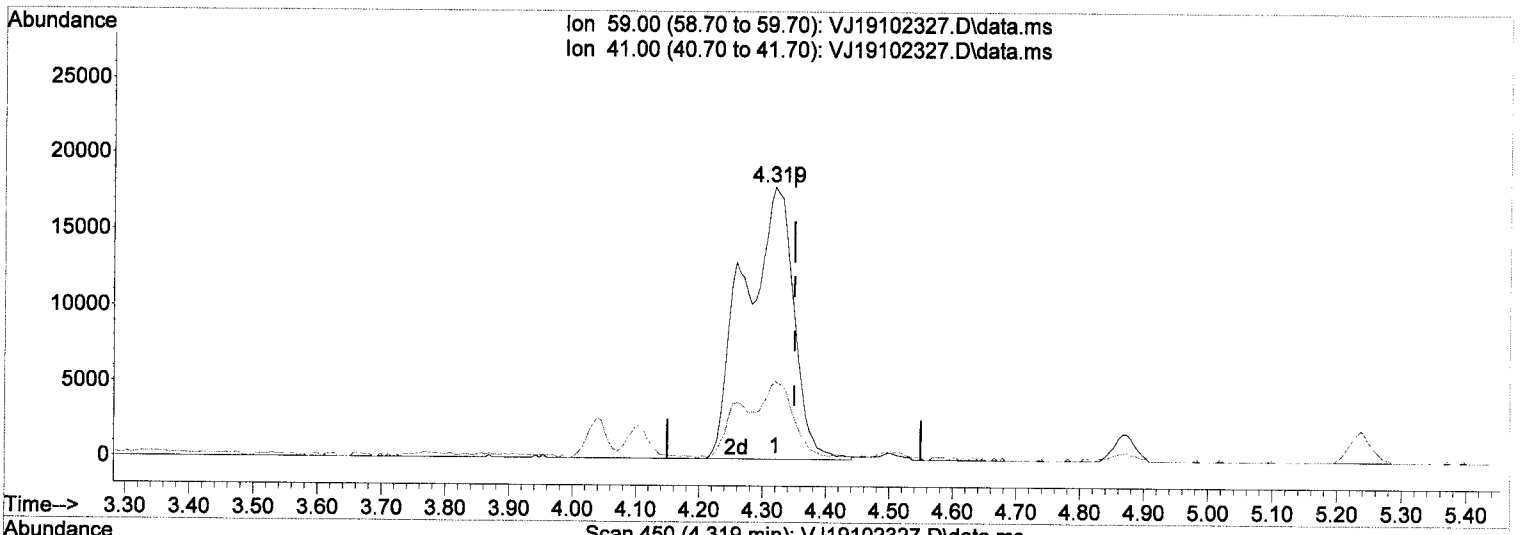
response 63582

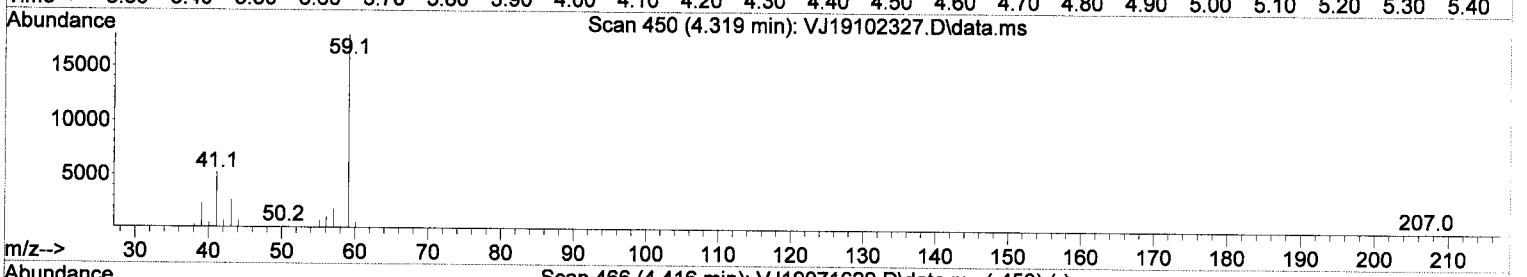
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	28.95#
0.00	0.00	0.00
0.00	0.00	0.00

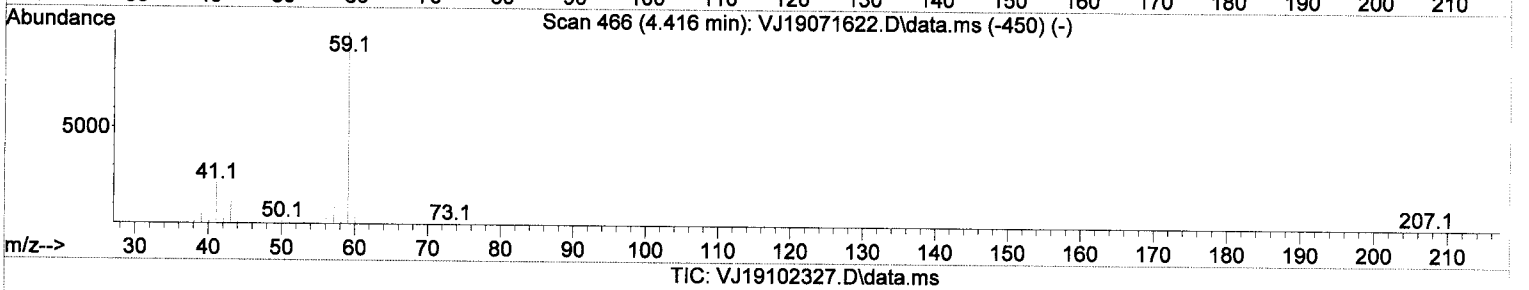
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(18) tert-Butanol (TBA)

4.319min (-0.030) 206.57 ug/L m

response 97251

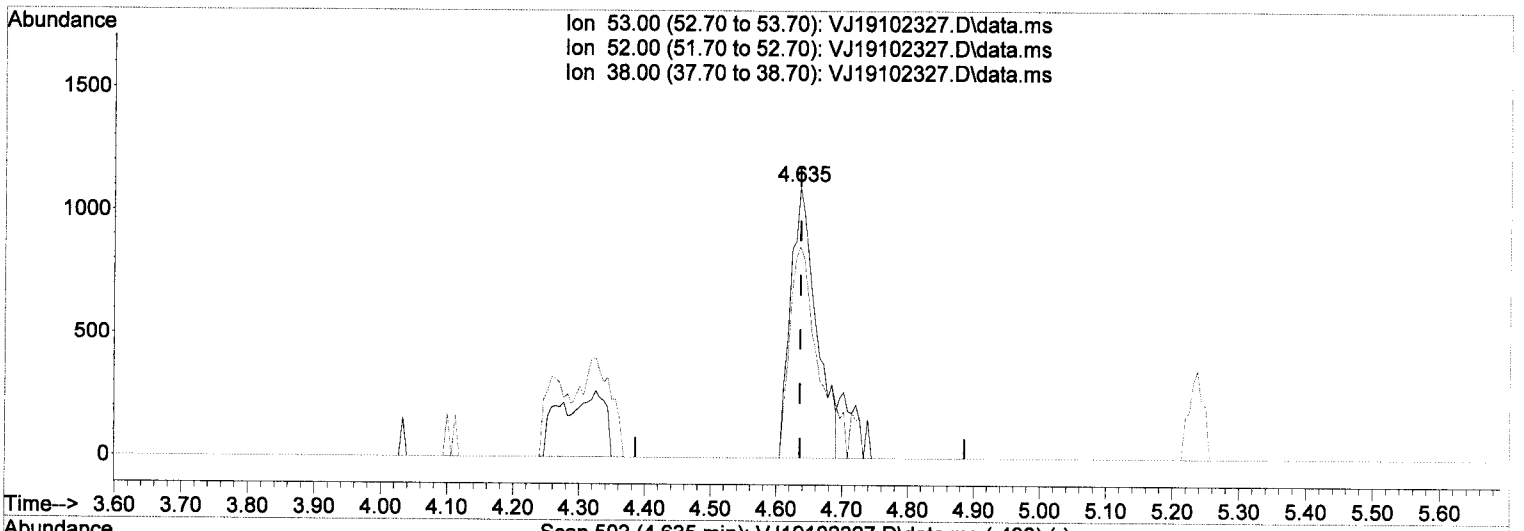
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	28.95#
0.00	0.00	0.00
0.00	0.00	0.00

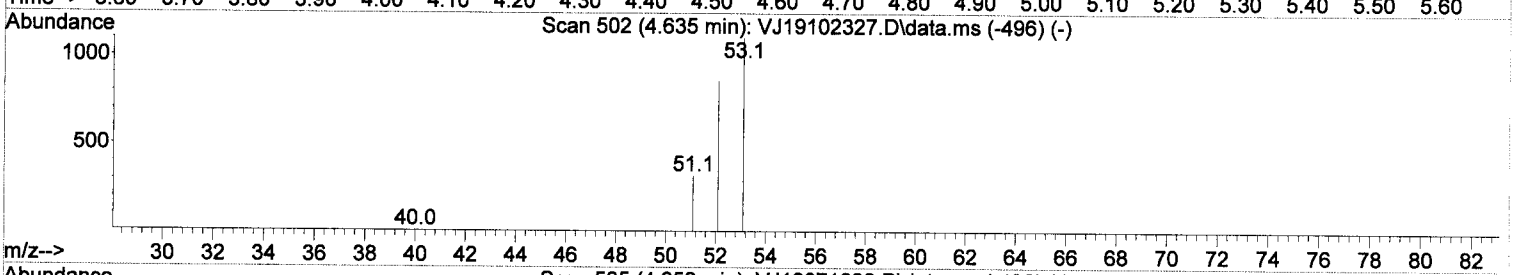
10/24/19

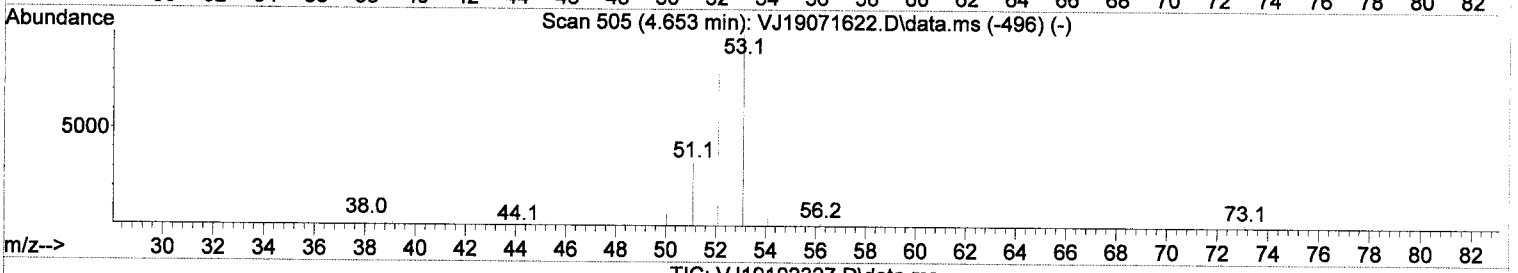
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 3.63 ug/L

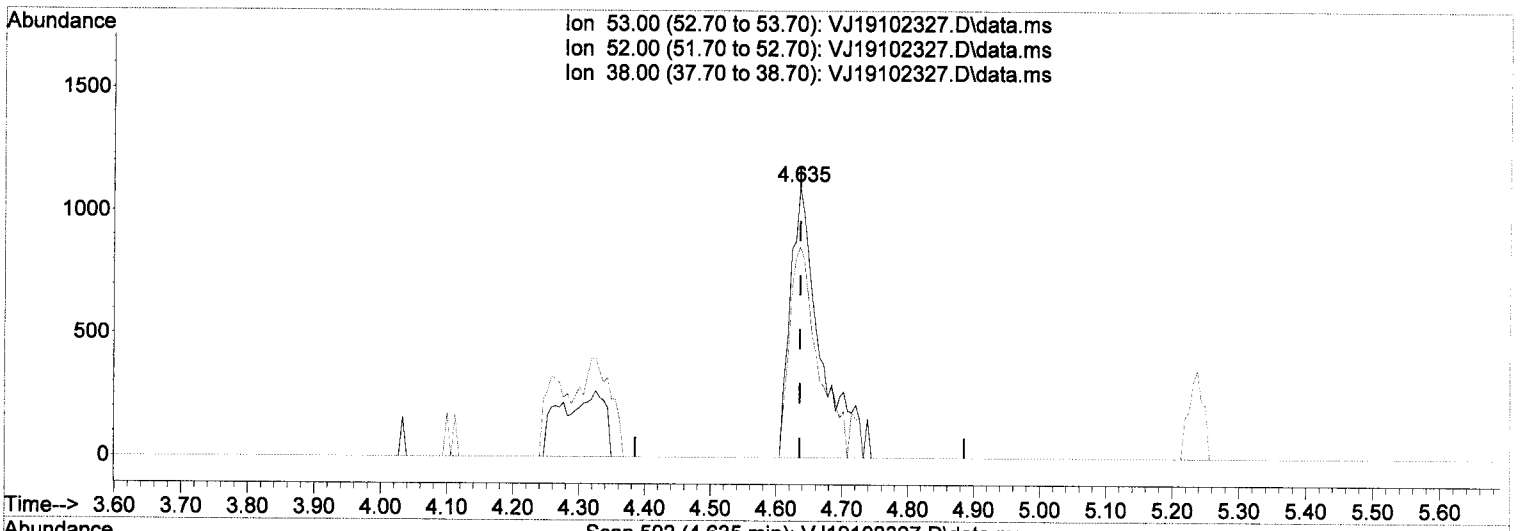
response 2980

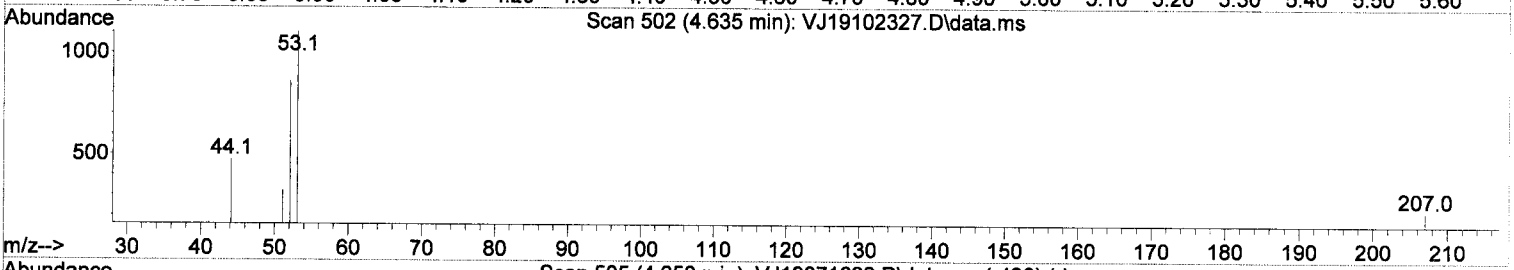
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.79
38.00	5.50	0.00
0.00	0.00	0.00

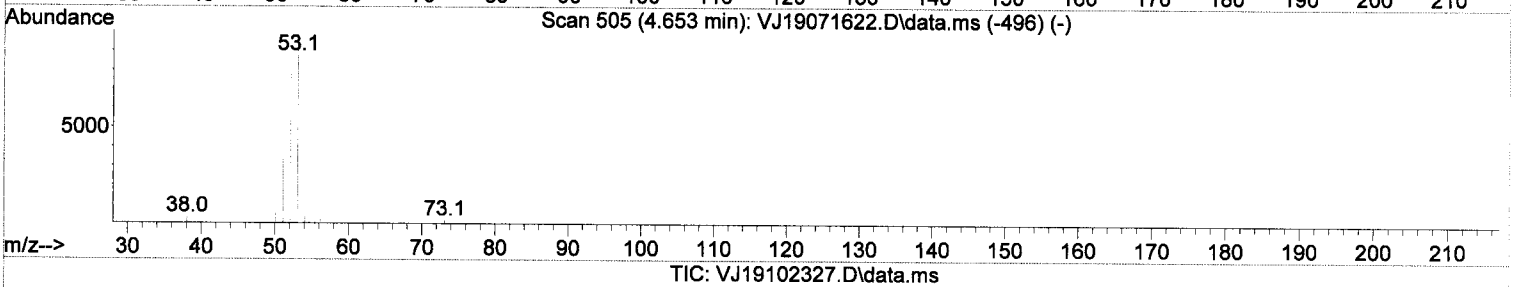
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102327.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 4.25 ug/L m

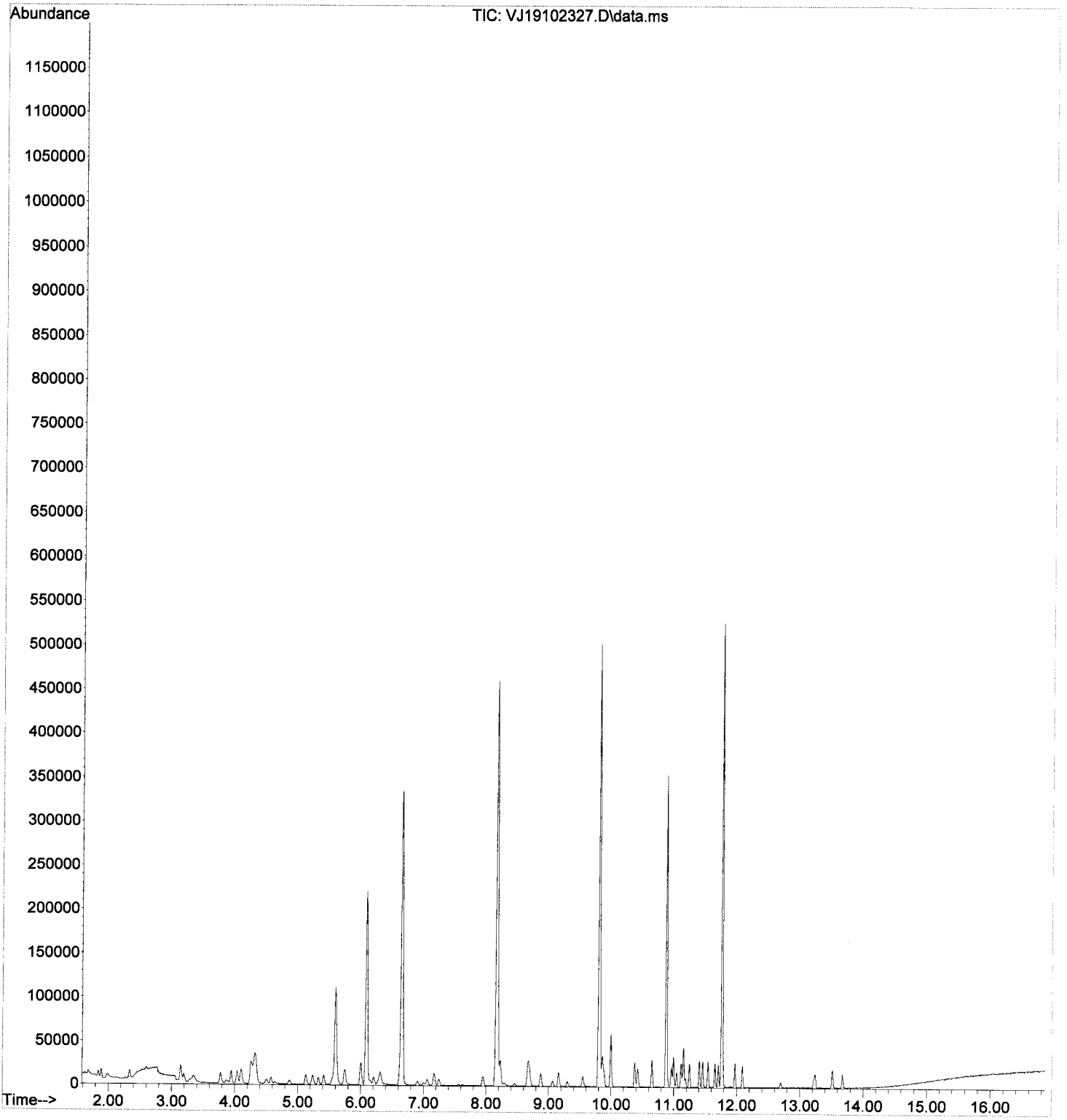
response 3497

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.79
38.00	5.50	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102327.D
Acq On : 24 Oct 2019 12:05 am
Operator : MM
Sample : 9J23072-CAL5
Misc : 1X 5mL 2/4PPB VOC+MeOH
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 24 08:13:54 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

10/24/19

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	98978	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	265619	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	112071	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.603	111	77095	57.62	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	303595	70.83	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	369631	51.25	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	81641	47.47	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	11145	4.57	ug/L		96
3) Chloromethane	1.904	50	20037	7.57	ug/L		100
4) Vinyl Chloride	1.995	62	14616	6.49	ug/L		95
5) Bromomethane	2.348	96	9360	7.17	ug/L		95
6) Chloroethane	2.476	64	1384	1.29	ug/L	#	54
7) Trichlorofluoromethane	2.615	101	3402	1.01	ug/L		94
8) Ethanol	3.376	45	35634	654.64	ug/L		88
9) 1,1-Dichloroethene	3.151	61	18097	6.02	ug/L		93
10) Carbon Disulfide	3.163	76	30469	8.14	ug/L		99
11) Freon 113	3.206	101	11080	8.22	ug/L		87
12) Iodomethane	3.297	142	3207	11.14	ug/L		86
13) Methylene Chloride	3.784	84	12998	7.07	ug/L		90
14) Acetone	3.875	43	~~13457~~ 16748	12.31	ug/L		100
15) t-1,2-Dichloroethene	3.948	61	19492	7.19	ug/L		93
16) n-Hexane	4.045	86	2790	10.24	ug/L	#	54
17) Methyl-tert-butyl-ether	4.106	73	45549	6.18	ug/L		89
18) tert-Butanol (TBA)	4.343	59	~~154829~~ 28821	309.30	ug/L	#	93
19) Diisopropyl ether (DIPE)	4.507	45	11435	1.61	ug/L		96
20) 1,1-Dichloroethane	4.587	63	21122	6.79	ug/L		98
21) Acrylonitrile	4.641	53	~~7128~~ 8805	8.30	ug/L		98
22) Ethyl-tert-butyl ether...	4.872	59	10218	1.45	ug/L		89
23) c-1,2-Dichloroethene	5.134	61	18773	6.40	ug/L		99
24) 2,2-Dichloropropane	5.244	77	18540	5.39	ug/L		92
25) Bromochloromethane	5.335	49	11641	7.14	ug/L		83
26) Chloroform	5.420	83	22188	5.83	ug/L		97
27) Carbon Tetrachloride	5.554	117	14343	4.56	ug/L		95
28) Tetrahydrofuran	5.596	42	9562	9.21	ug/L		94
29) 1,1,1-Trichloroethane	5.621	97	20044	5.35	ug/L		98
31) 1,1-Dichloropropene	5.749	75	18701	6.41	ug/L		95
32) 2-Butanone (MEK)	5.736	43	~~19029~~ 25302	12.17	ug/L		97
33) Benzene	6.004	78	62213	8.27	ug/L		99
34) tert-Amyl methyl ether...	6.156	73	10184	1.46	ug/L		91
35) 1,2-Dichloroethane (EDC)	6.211	62	19717	4.58	ug/L		96
36) iso-Butyl Alcohol	6.314	43	33987	209.61	ug/L		93
38) Trichloroethene (TCE)	6.625	130	12809	7.12	ug/L		93
39) tert-Amyl ethyl ether ...	6.910	59	7162	1.39	ug/L		89
40) Dibromomethane	7.063	93	8013	6.32	ug/L	#	81
41) 1,2-Dichloropropane	7.178	63	15592	7.94	ug/L		99
42) Bromodichloromethane	7.245	83	14894	5.16	ug/L		97
44) c-1,3-Dichloropropene	7.951	75	19353	4.74	ug/L		98
46) Toluene	8.231	91	59671	5.46	ug/L		98
47) Tetrachloroethene (PCE)	8.681	166	11684	5.29	ug/L		88
48) 4-Methyl-2-Pentanone (...	8.675	43	35142	9.89	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

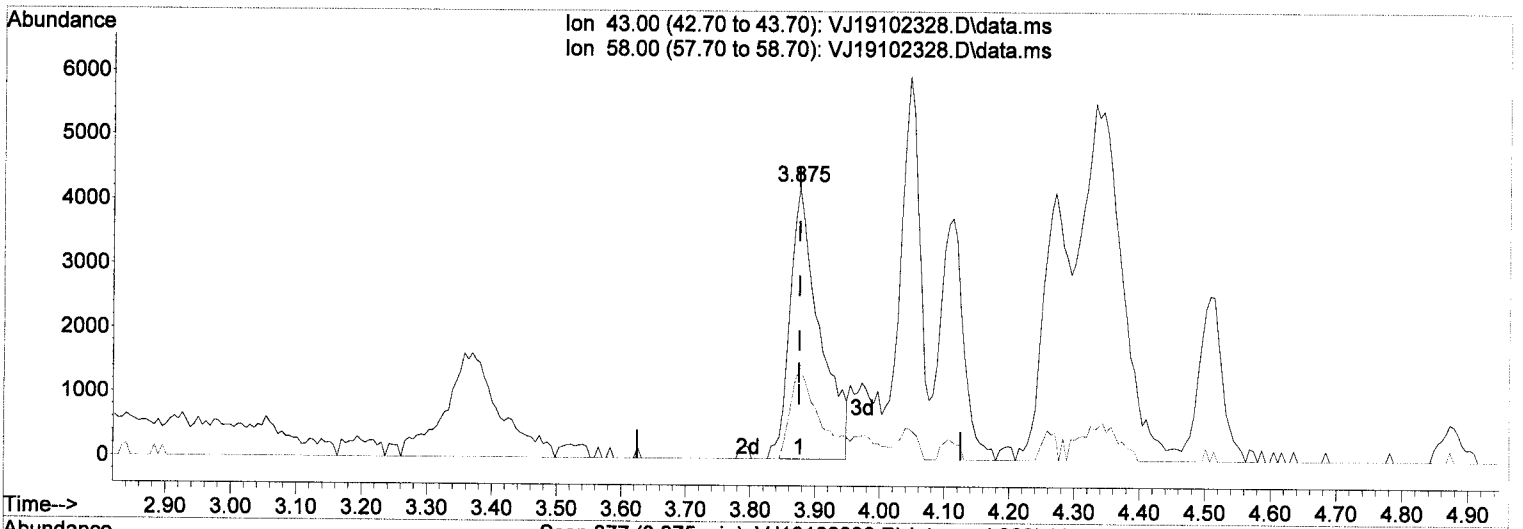
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	18504	4.24	ug/L		97
50) 1,1,2-Trichloroethane	8.876	97	13046	5.68	ug/L		95
51) Dibromochloromethane	9.064	129	9350	3.79	ug/L		90
52) 1,3-Dichloropropane	9.161	76	24045	5.12	ug/L		96
53) 1,2-Dibromoethane (EDB)	9.301	107	12041	4.89	ug/L		95
54) 2-Hexanone	9.551	43	23467	8.77	ug/L		99
55) Chlorobenzene	9.825	112	35206	5.34	ug/L		92
56) Ethylbenzene	9.861	91	59905	4.76	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.885	131	10760	4.30	ug/L		98
58) m,p-Xylenes (2)	9.995	91	85048	8.82	ug/L		96
59) o-Xylene	10.378	91	39703	4.14	ug/L		97
60) Styrene	10.421	104	24248	4.04	ug/L		95
61) Bromoform	10.439	173	5470	3.78	ug/L		96
62) Isopropylbenzene	10.652	105	47833	4.32	ug/L		96
65) Bromobenzene	10.962	156	11698	5.48	ug/L	#	69
66) n-Propylbenzene	10.999	91	60466	4.92	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	17963	6.92	ug/L		96
68) 2-Chlorotoluene	11.114	126	10583	5.04	ug/L	#	80
69) 1,3,5-Trimethylbenzene	11.157	105	37585	4.49	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	5563	4.98	ug/L		91
71) t-1,4-Dichloro-2-butene	11.187	88	2176	4.02	ug/L	#	81
72) 4-Chlorotoluene	11.248	91	35148	4.63	ug/L		92
73) tert-Butylbenzene	11.406	91	22268	4.09	ug/L		84
74) 1,2,4-Trimethylbenzene	11.461	105	37661	4.45	ug/L		99
75) sec-Butylbenzene	11.546	105	47859	4.87	ug/L		95
76) 4-Isopropyltoluene	11.656	119	35139	4.25	ug/L		96
77) 1,3-Dichlorobenzene	11.710	146	21435	5.17	ug/L		95
78) 1,4-Dichlorobenzene	11.777	146	21770	5.43	ug/L		96
79) n-Butylbenzene	11.972	91	33924	4.44	ug/L		96
80) 1,2-Dichlorobenzene	12.094	146	19542	5.10	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.696	157	2712	4.46	ug/L	#	38
82) Hexachlorobutadiene	13.213	223	2682	4.47	ug/L		80
83) 1,2,4-Trichlorobenzene	13.244	180	11011	4.58	ug/L		97
84) Naphthalene	13.517	128	36533	4.60	ug/L		99
85) 1,2,3-Trichlorobenzene	13.675	180	10716	4.66	ug/L		99

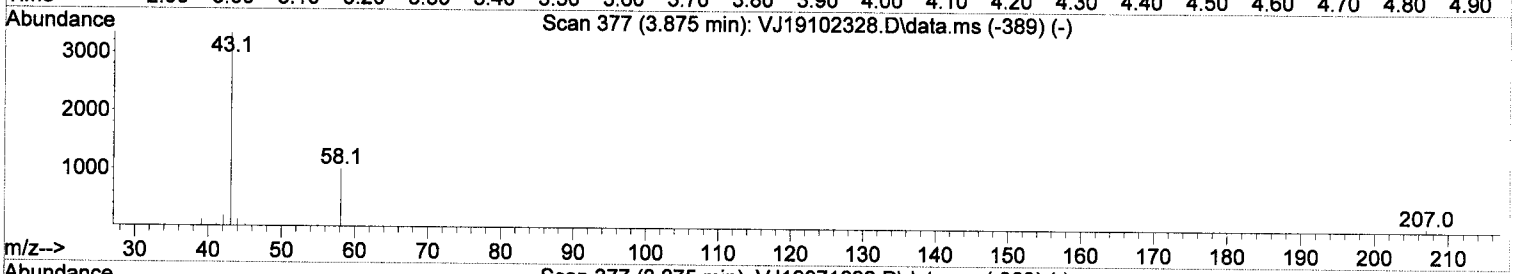
(#) = qualifier out of range (m) = manual integration (+) = signals summed

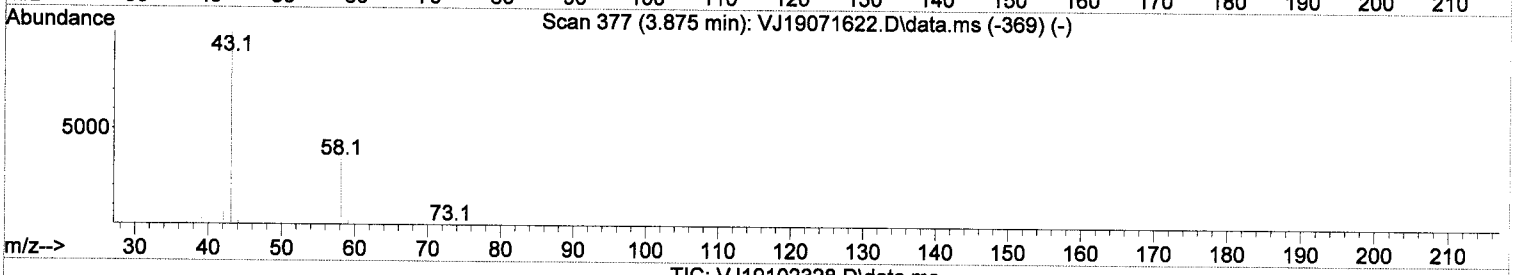
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(14) Acetone

3.875min (+ 0.001) 12.31 ug/L

response 13457

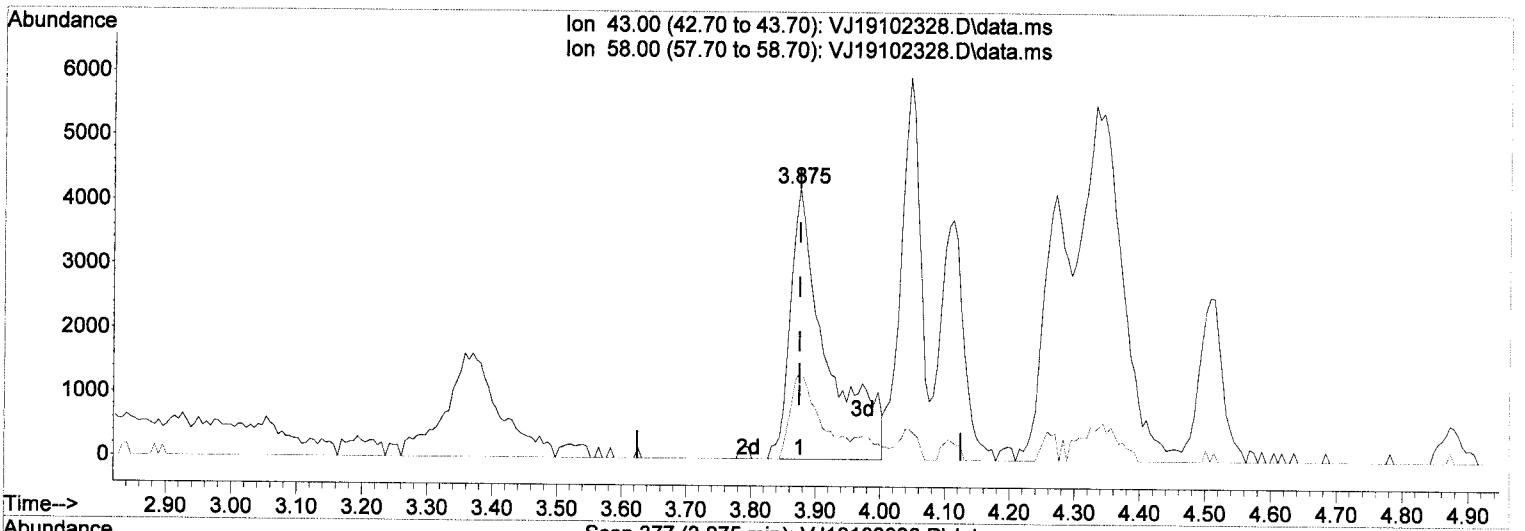
M.2.

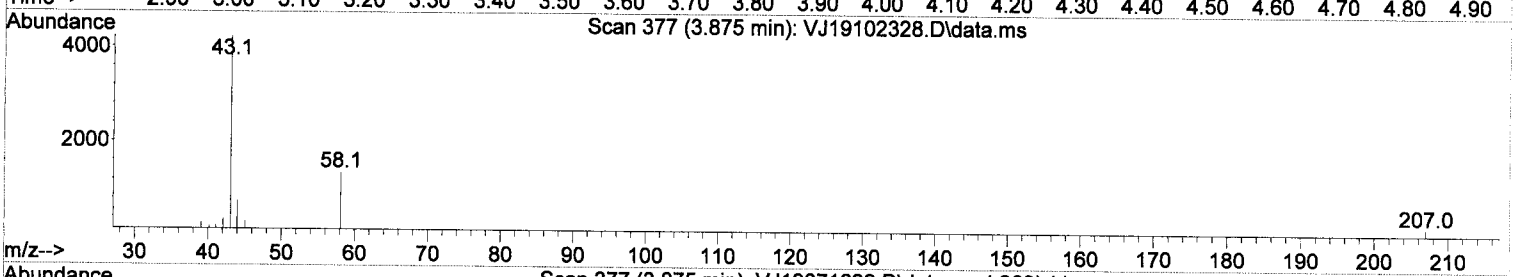
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.99
0.00	0.00	0.00
0.00	0.00	0.00

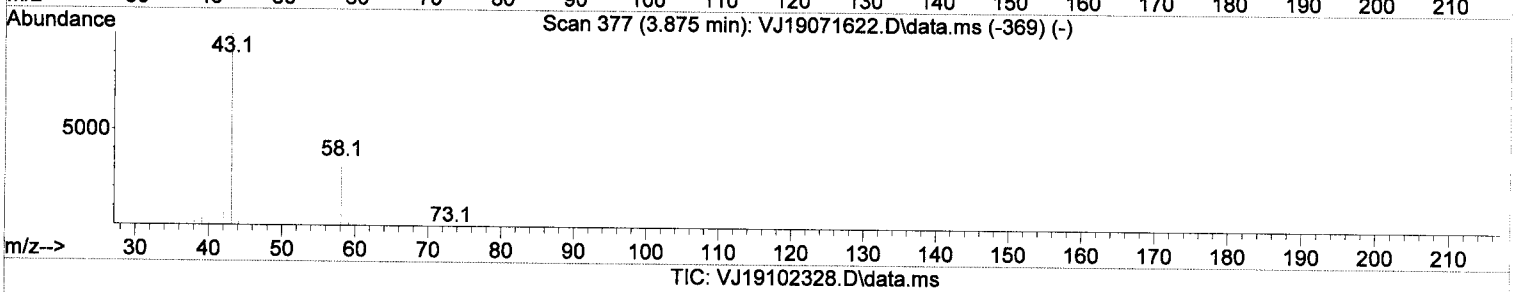
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(14) Acetone

3.875min (+ 0.001) 15.31 ug/L m

response 16748

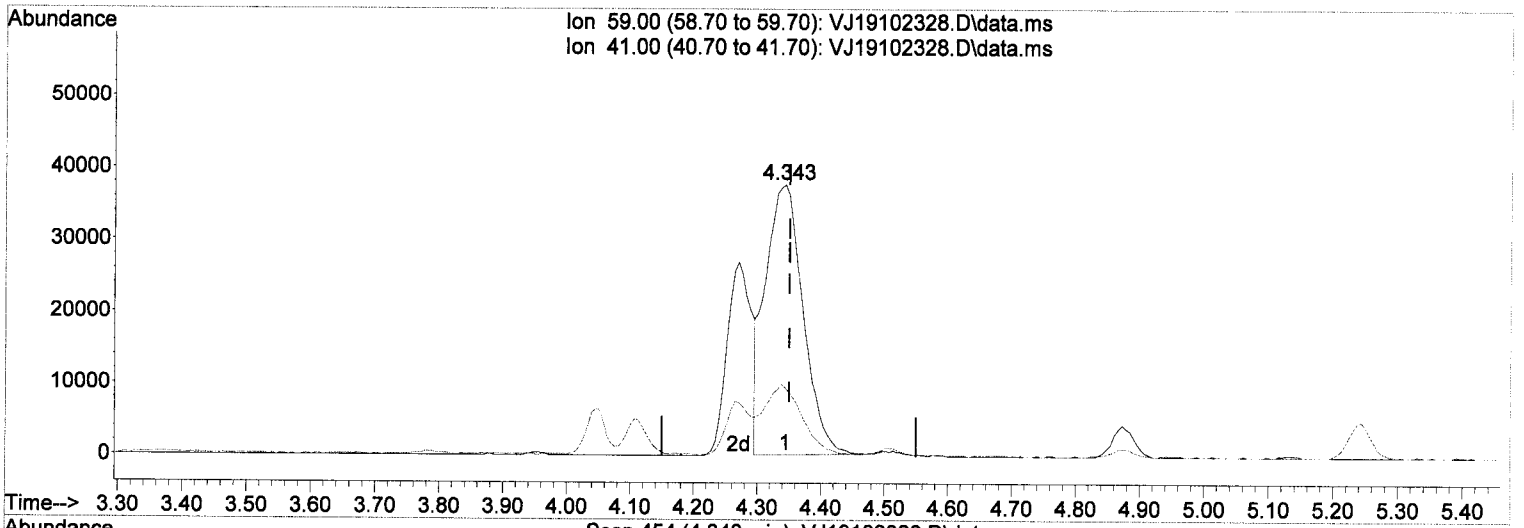
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	31.99
0.00	0.00	0.00
0.00	0.00	0.00

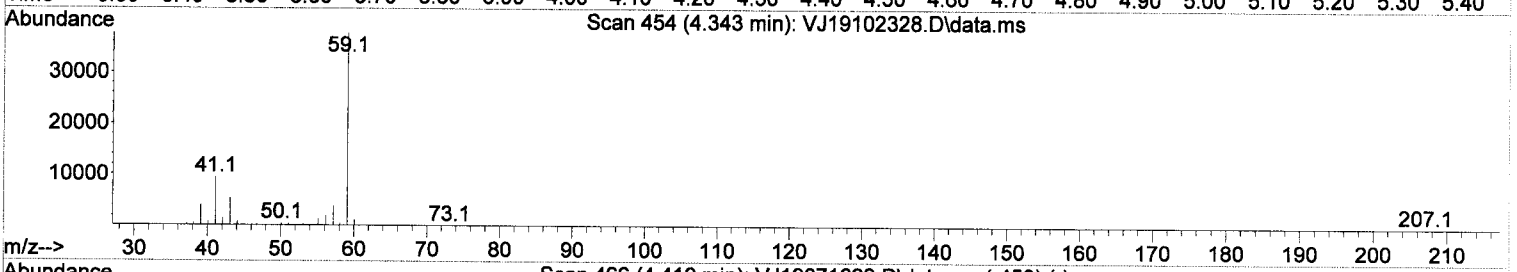
M
10/24/19

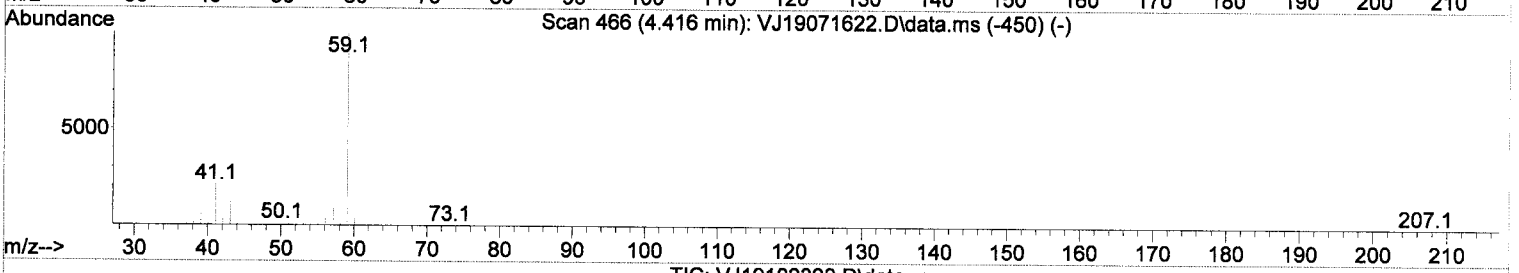
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(18) tert-Butanol (TBA)

4.343min (-0.006) 309.30 ug/L

response 154829

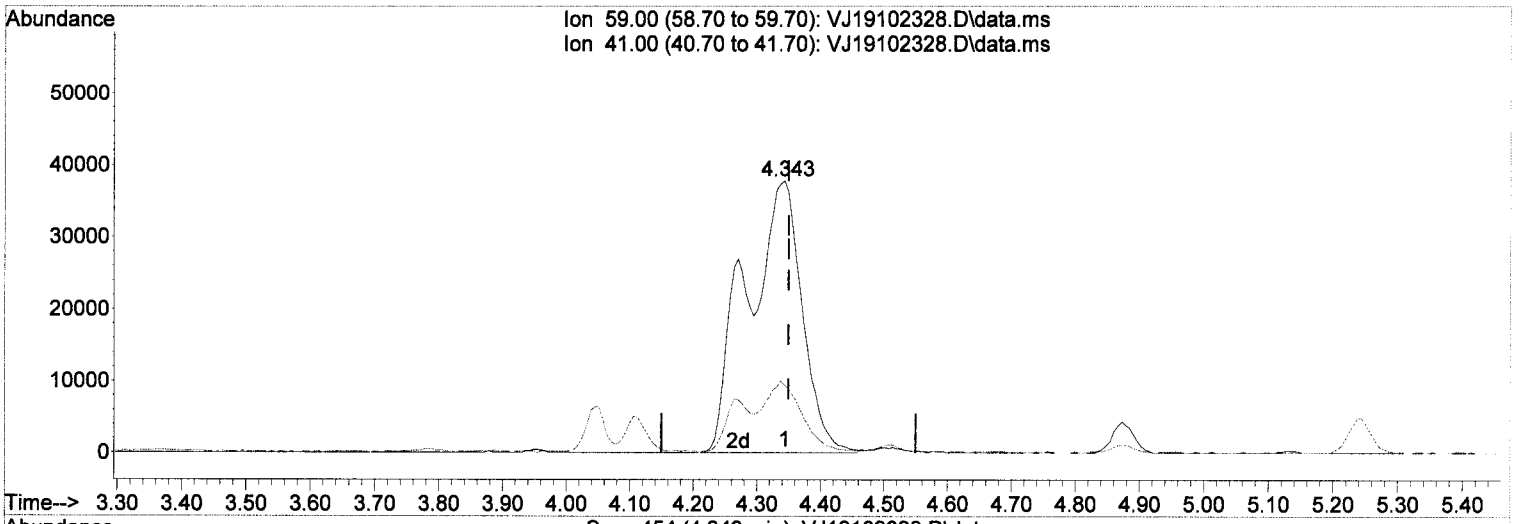
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	25.04#
0.00	0.00	0.00
0.00	0.00	0.00

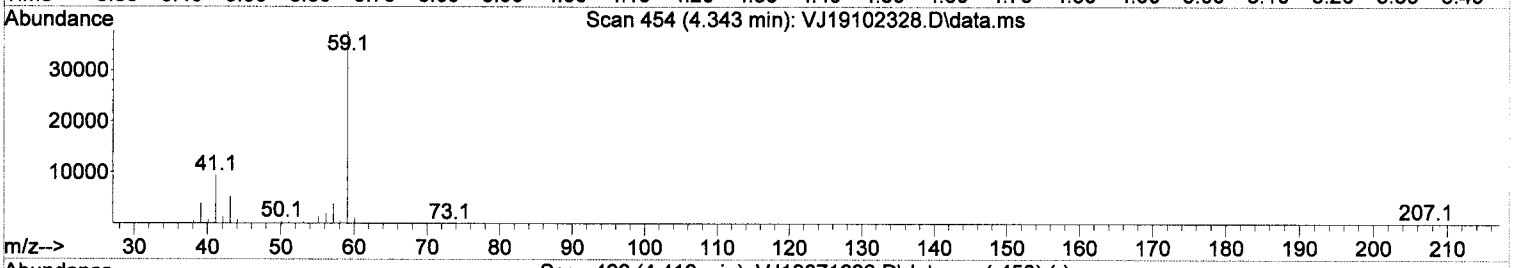
M2

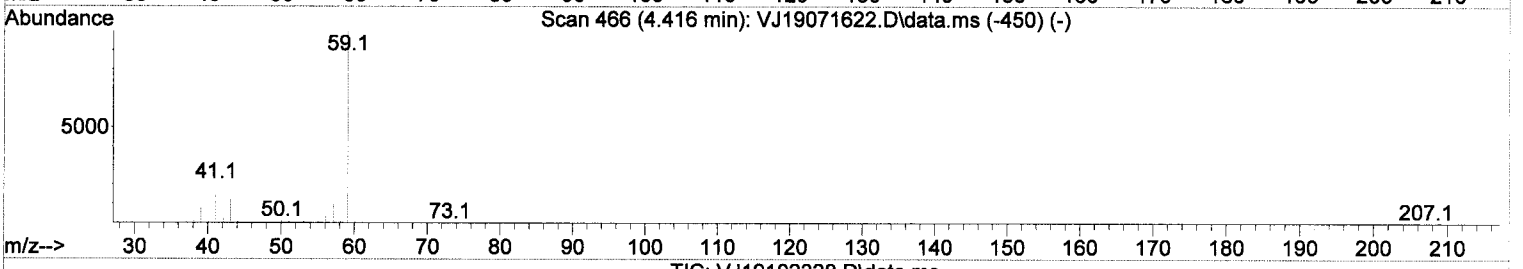
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(18) tert-Butanol (TBA)

4.343min (-0.006) 449.53 ug/L m

response 228821

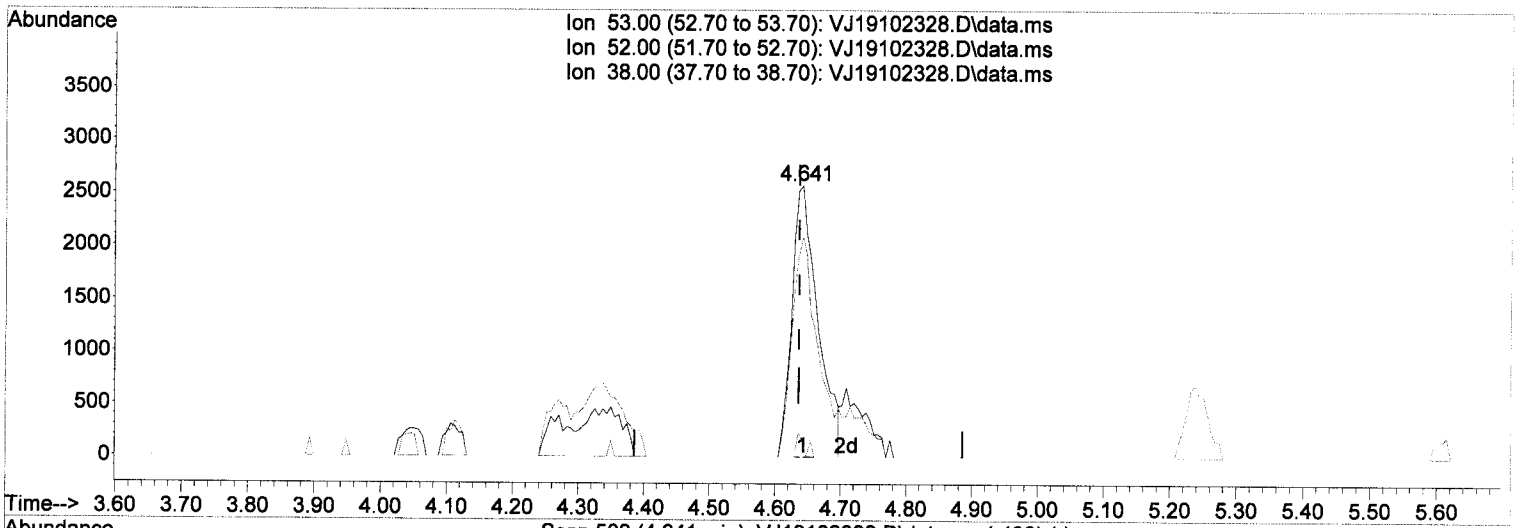
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	25.04#
0.00	0.00	0.00
0.00	0.00	0.00

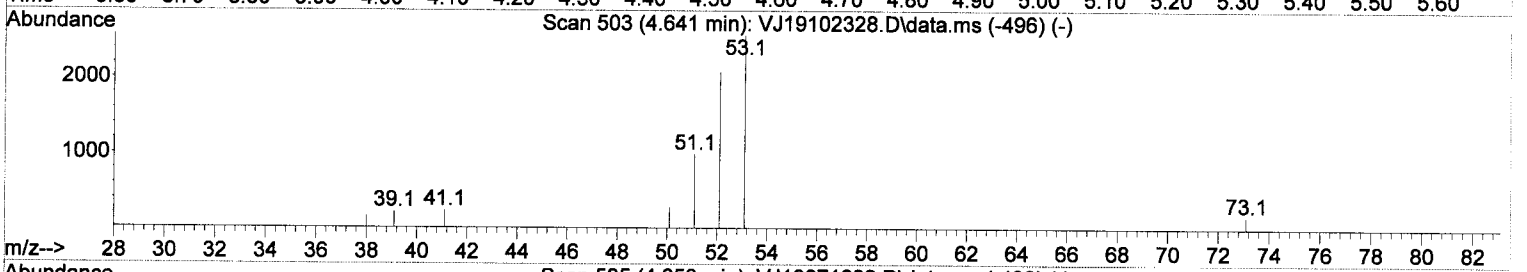
M 10/24/19

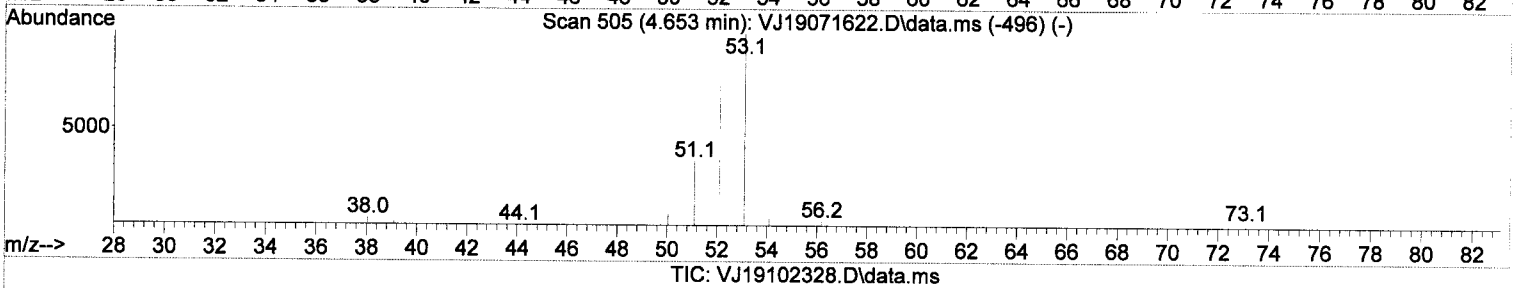
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(21) Acrylonitrile

4.641min (+ 0.006) 8.30 ug/L

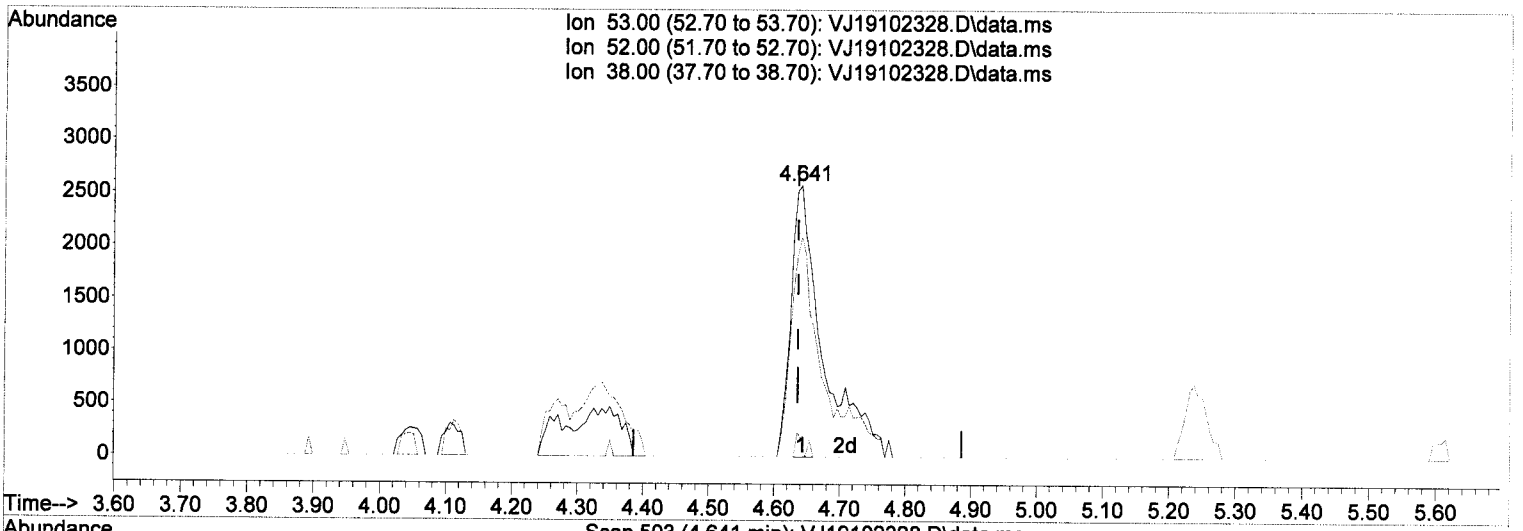
response 7128

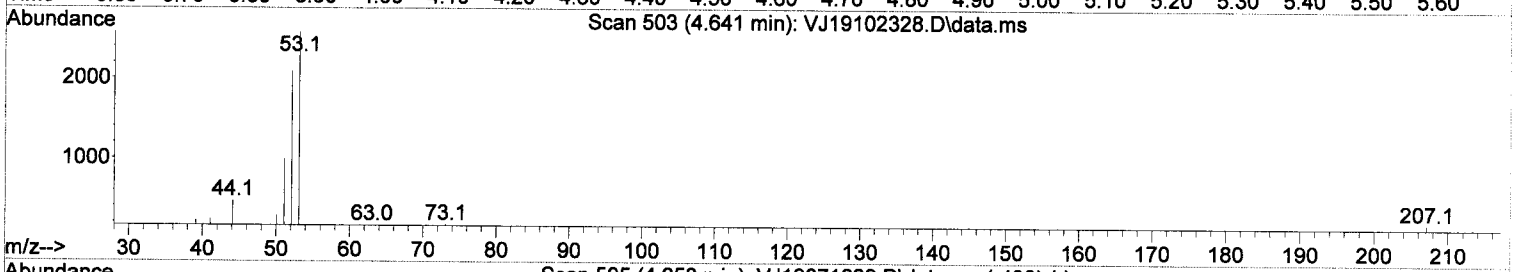
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.98
38.00	5.50	6.25
0.00	0.00	0.00

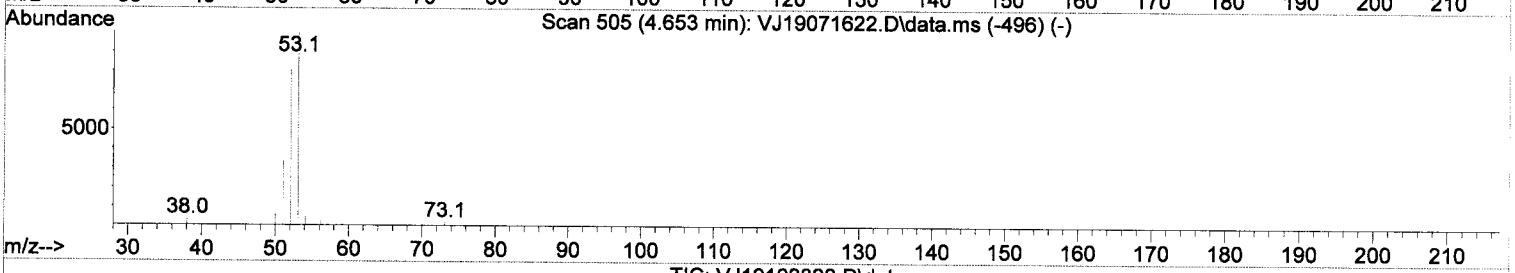
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(21) Acrylonitrile

4.641min (+ 0.006) 10.26 ug/L m

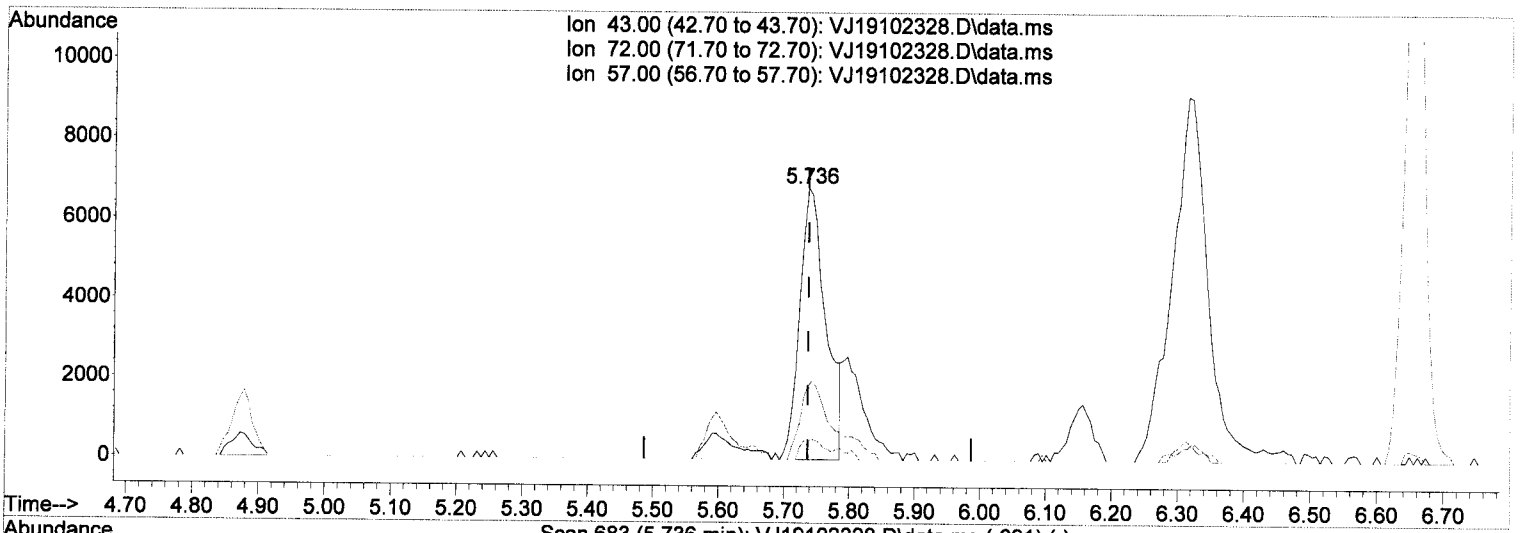
response 8805

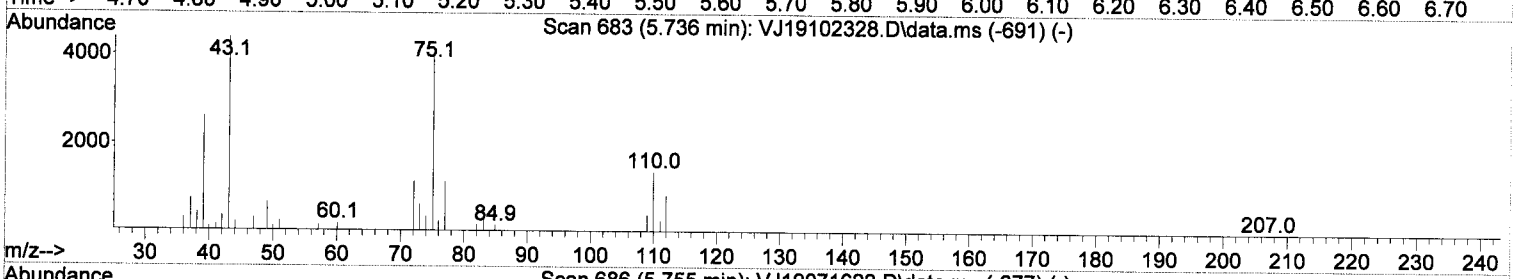
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.98
38.00	5.50	6.25
0.00	0.00	0.00

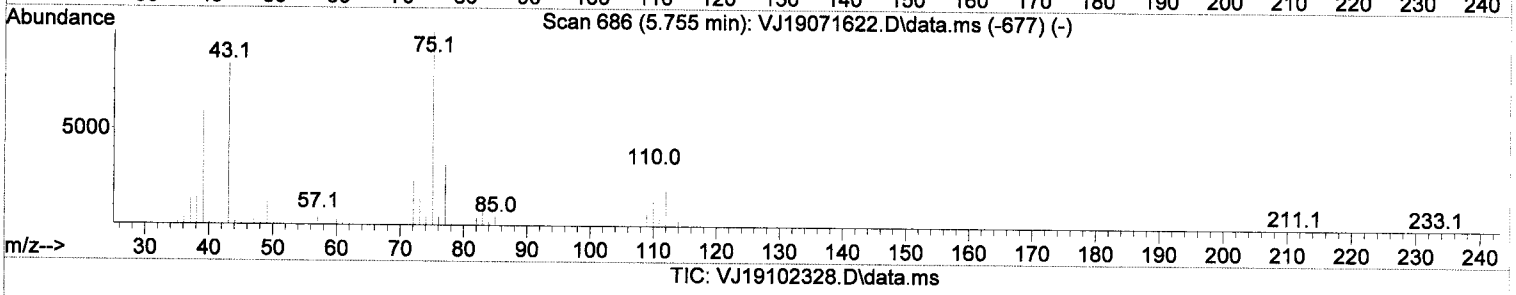
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(32) 2-Butanone (MEK)

5.736min (+ 0.000) 12.17 ug/L

response 19029

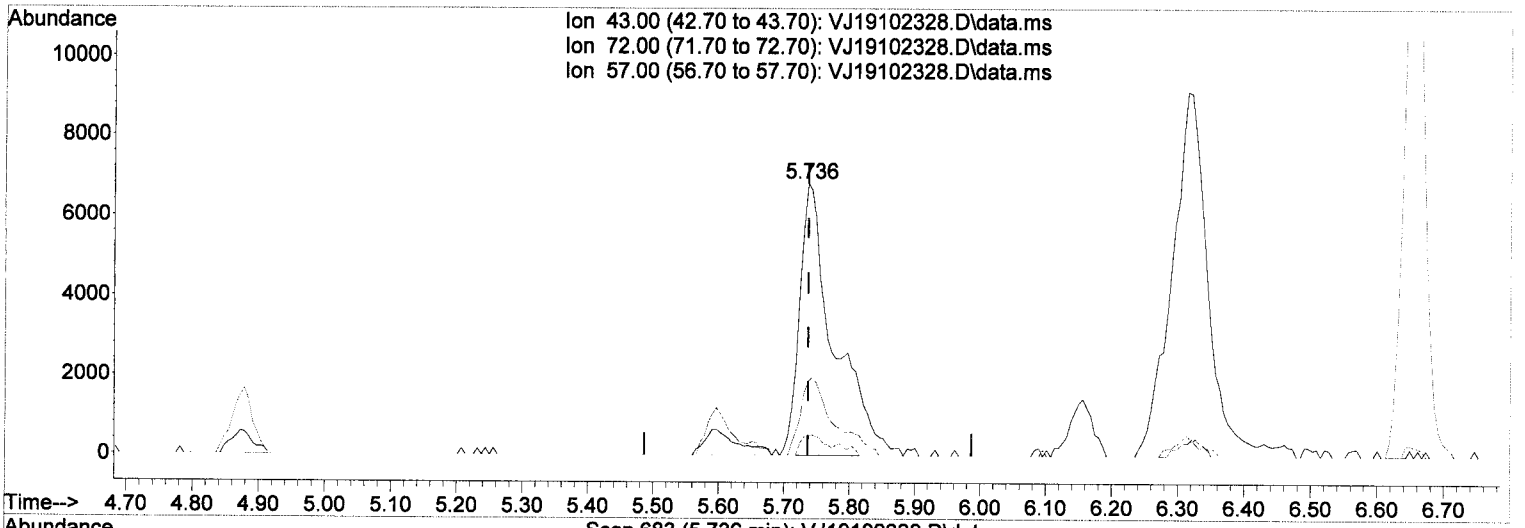
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	27.10
57.00	7.20	6.96
0.00	0.00	0.00

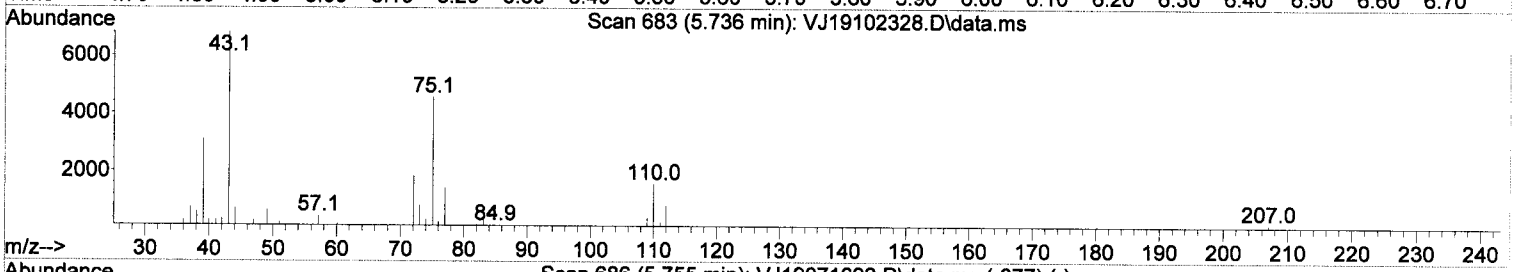
M.2.

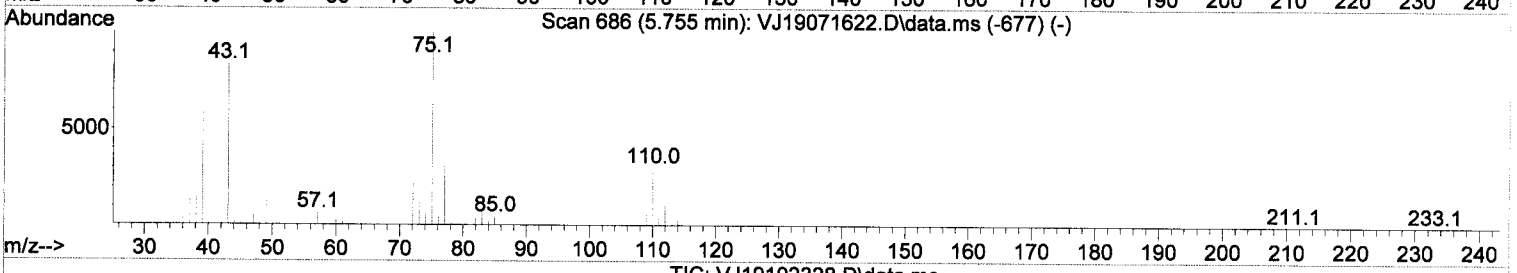
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102328.D\data.ms

(32) 2-Butanone (MEK)

5.736min (+ 0.000) 16.13 ug/L

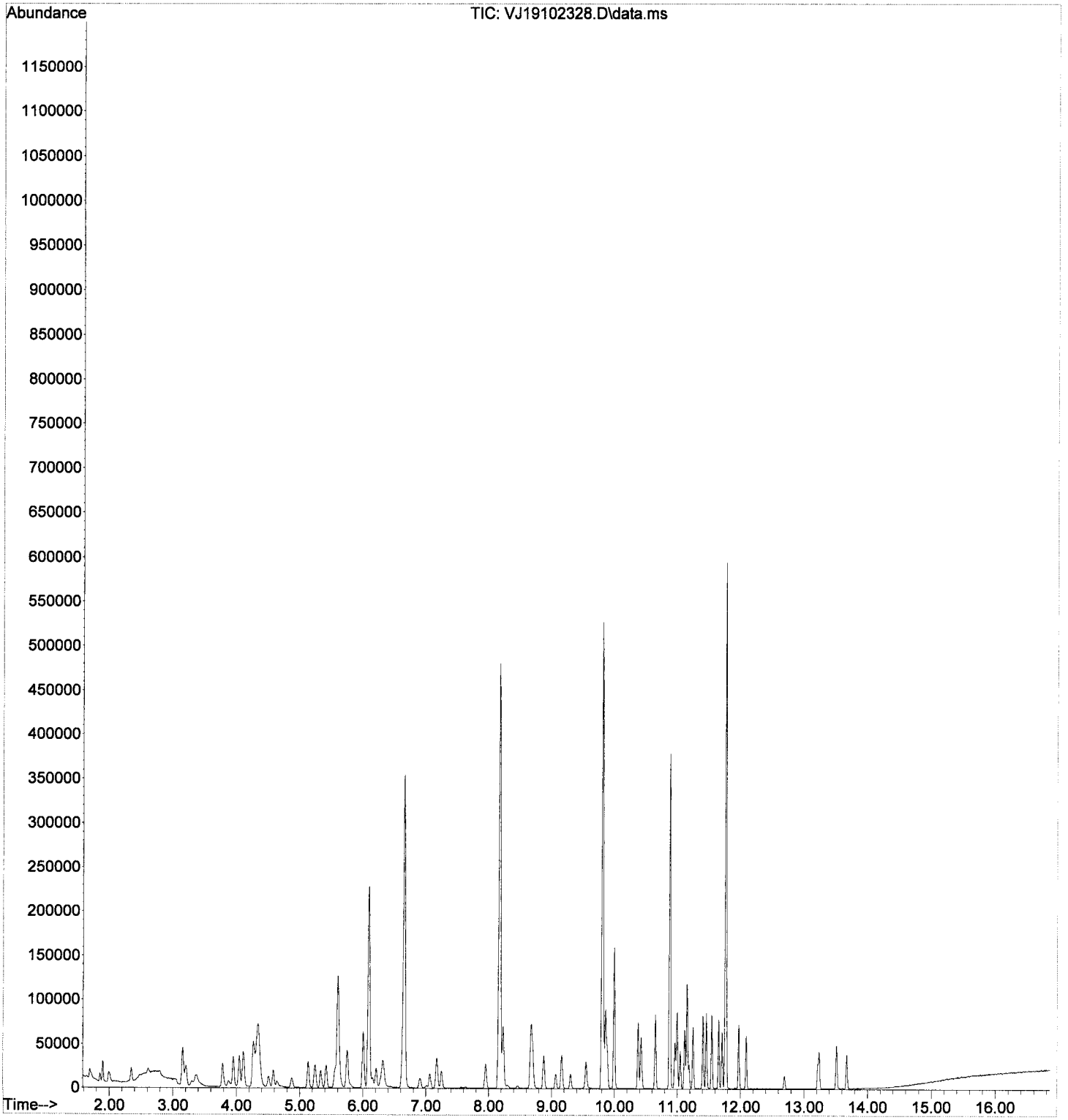
response 25206

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	27.10
57.00	7.20	6.96
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102328.D
Acq On : 24 Oct 2019 12:32 am
Operator : MM
Sample : 9J23072-CAL6
Misc : 1X 5mL 5/10PPB VOC+MeOH
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 24 08:13:57 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\V~~J191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.095	99	102360	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	273877	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	114313	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.603	111	80977	58.52	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	313300	70.68	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	383154	51.52	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	84648	48.26	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	22844	9.07	ug/L		98
3) Chloromethane	1.904	50	38733	14.14	ug/L		99
4) Vinyl Chloride	1.995	62	29953	12.73	ug/L		97
5) Bromomethane	2.354	96	15471	13.11	ug/L		94
6) Chloroethane	2.476	64	2873	2.58	ug/L		89
7) Trichlorofluoromethane	2.610	101	7278	2.09	ug/L		94
8) Ethanol	3.352	45	63621	1130.18	ug/L		92
9) 1,1-Dichloroethene	3.151	61	37595	12.09	ug/L		92
10) Carbon Disulfide	3.163	76	63760	16.46	ug/L		99
11) Freon 113	3.212	101	23337	16.73	ug/L		83
12) Iodomethane	3.297	142	6769	22.54	ug/L		98
13) Methylene Chloride	3.784	84	24987	15.10	ug/L		89
14) Acetone	3.875	43	~~23103~~	20.43	ug/L		98
15) t-1,2-Dichloroethene	3.954	61	40127	14.31	ug/L		97
16) n-Hexane	4.051	86	6208	20.93	ug/L	#	78
17) Methyl-tert-butyl-ether	4.112	73	90735	11.90	ug/L		97
18) tert-Butanol (TBA)	4.319	59	~~30102~~	66.45	ug/L	#	92
19) Diisopropyl ether (DIPE)	4.508	45	23966	3.27	ug/L		95
20) 1,1-Dichloroethane	4.587	63	42318	13.14	ug/L		96
21) Acrylonitrile	4.641	53	~~13627~~	15.35	ug/L		98
22) Ethyl-tert-butyl ether...	4.879	59	21616	2.97	ug/L		91
23) c-1,2-Dichloroethene	5.134	61	38569	12.71	ug/L		98
24) 2,2-Dichloropropane	5.244	77	38645	10.87	ug/L		97
25) Bromochloromethane	5.329	49	23752	14.09	ug/L		77
26) Chloroform	5.420	83	46150	11.73	ug/L		97
27) Carbon Tetrachloride	5.560	117	30244	9.29	ug/L		97
28) Tetrahydrofuran	5.590	42	18946	17.65	ug/L		99
29) 1,1,1-Trichloroethane	5.627	97	41348	10.67	ug/L		91
31) 1,1-Dichloropropene	5.749	75	39421	13.07	ug/L		91
32) 2-Butanone (MEK)	5.737	43	~~37992~~	23.50	ug/L		98
33) Benzene	6.004	78	128327	16.49	ug/L		98
34) tert-Amyl methyl ether...	6.156	73	20102	2.79	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.211	62	40742	9.16	ug/L		98
36) iso-Butyl Alcohol	6.308	43	72797	434.13	ug/L		88
38) Trichloroethene (TCE)	6.625	130	26231	13.92	ug/L		92
39) tert-Amyl ethyl ether ...	6.905	59	14950	2.81	ug/L		88
40) Dibromomethane	7.063	93	16435	12.53	ug/L	#	82
41) 1,2-Dichloropropane	7.172	63	32431	15.97	ug/L		98
42) Bromodichloromethane	7.251	83	31433	10.53	ug/L		100
44) c-1,3-Dichloropropene	7.951	75	40620	9.65	ug/L		97
46) Toluene	8.231	91	124843	11.07	ug/L		96
47) Tetrachloroethene (PCE)	8.681	166	24512	10.76	ug/L		88
48) 4-Methyl-2-Pentanone (...	8.669	43	77248	21.09	ug/L		100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

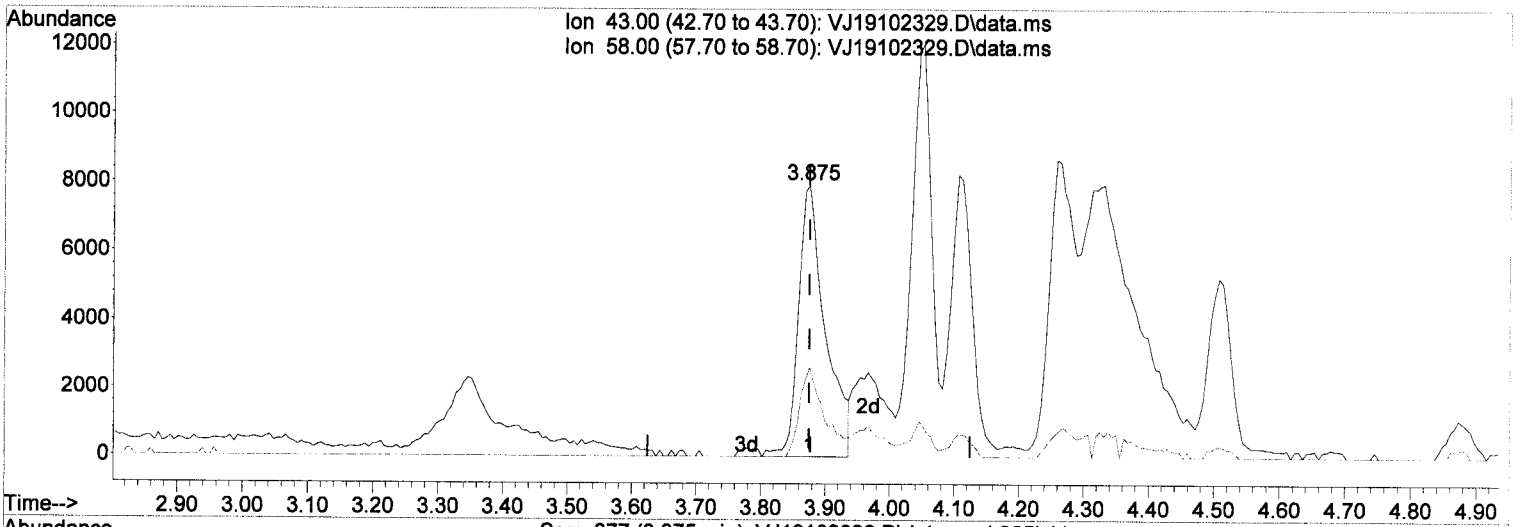
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	t-1,3-Dichloropropene	8.705	75	41087	9.13	ug/L		94
50)	1,1,2-Trichloroethane	8.876	97	26718	11.18	ug/L		95
51)	Dibromochloromethane	9.064	129	19925	7.84	ug/L		98
52)	1,3-Dichloropropane	9.162	76	49530	10.23	ug/L		98
53)	1,2-Dibromoethane (EDB)	9.301	107	25458	10.03	ug/L		99
54)	2-Hexanone	9.545	43	53666	19.46	ug/L		100
55)	Chlorobenzene	9.819	112	72570	10.67	ug/L		93
56)	Ethylbenzene	9.861	91	127729	9.84	ug/L		98
57)	1,1,1,2-Tetrachloroethane	9.886	131	22448	8.70	ug/L		97
58)	m,p-Xylenes (2)	9.995	91	185431	18.65	ug/L		96
59)	o-Xylene	10.378	91	86841	8.79	ug/L		95
60)	Styrene	10.421	104	55991	9.04	ug/L		95
61)	Bromoform	10.439	173	12367	7.61	ug/L		98
62)	Isopropylbenzene	10.652	105	107252	9.40	ug/L		98
65)	Bromobenzene	10.962	156	24784	11.39	ug/L	#	71
66)	n-Propylbenzene	10.999	91	131143	10.46	ug/L		96
67)	1,1,2,2-Tetrachloroethane	11.047	83	37925	14.32	ug/L		95
68)	2-Chlorotoluene	11.120	126	23286	10.88	ug/L		92
69)	1,3,5-Trimethylbenzene	11.157	105	83861	9.83	ug/L		95
70)	1,2,3-Trichloropropane	11.151	110	12228	10.73	ug/L		98
71)	t-1,4-Dichloro-2-butene	11.187	88	4566	8.26	ug/L	#	78
72)	4-Chlorotoluene	11.248	91	76302	9.85	ug/L		92
73)	tert-Butylbenzene	11.406	91	48165	8.67	ug/L		91
74)	1,2,4-Trimethylbenzene	11.461	105	85499	9.91	ug/L		95
75)	sec-Butylbenzene	11.546	105	107745	10.74	ug/L		95
76)	4-Isopropyltoluene	11.656	119	80264	9.51	ug/L		97
77)	1,3-Dichlorobenzene	11.711	146	45072	10.66	ug/L		96
78)	1,4-Dichlorobenzene	11.777	146	45209	11.06	ug/L		92
79)	n-Butylbenzene	11.972	91	74888	9.62	ug/L		94
80)	1,2-Dichlorobenzene	12.094	146	41072	10.52	ug/L		95
81)	1,2-Dibromo-3-Chloropr...	12.696	157	6225	10.03	ug/L	#	50
82)	Hexachlorobutadiene	13.219	223	5408	8.83	ug/L		95
83)	1,2,4-Trichlorobenzene	13.244	180	24214	9.88	ug/L		95
84)	Naphthalene	13.517	128	83341	10.29	ug/L		99
85)	1,2,3-Trichlorobenzene	13.676	180	23691	10.11	ug/L		96

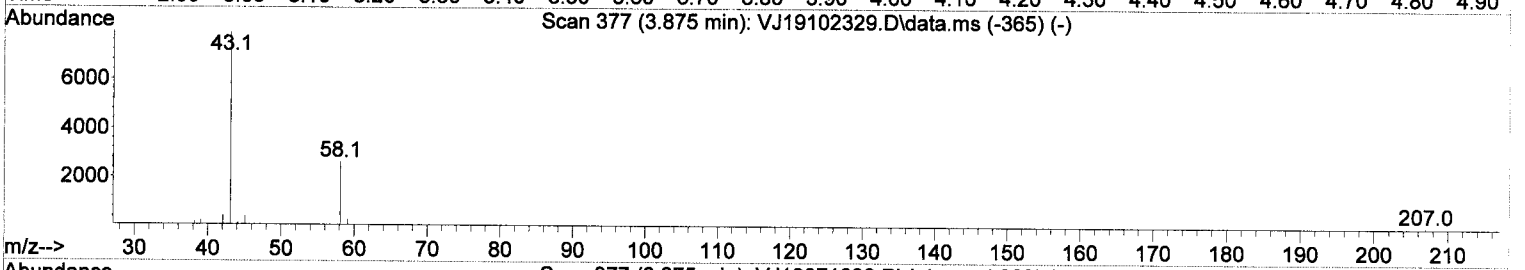
(#) = qualifier out of range (m) = manual integration (+) = signals summed

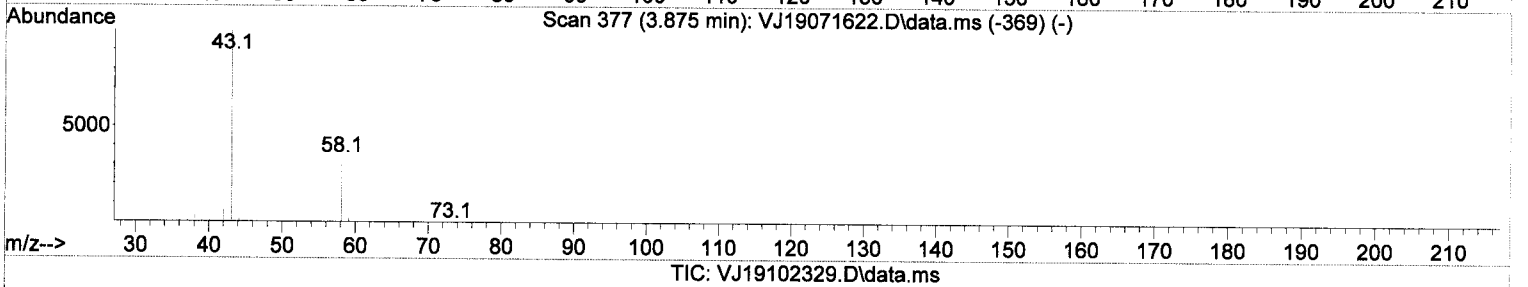
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(14) Acetone

3.875min (+ 0.001) 20.43 ug/L

response 23103

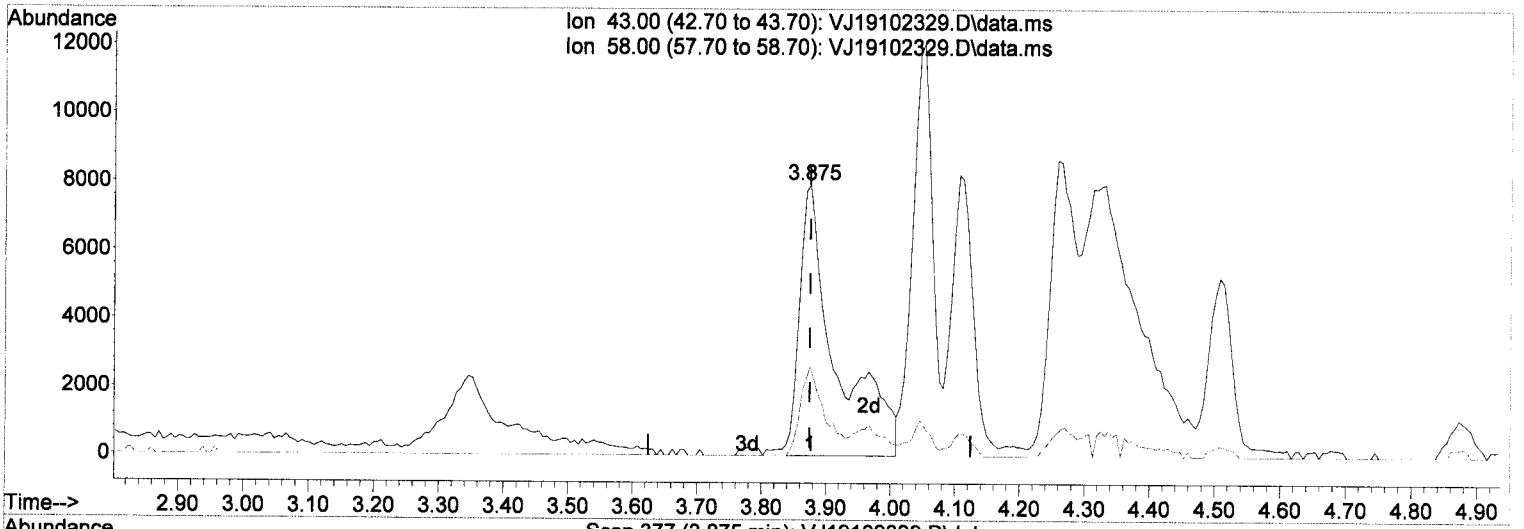
M.2.

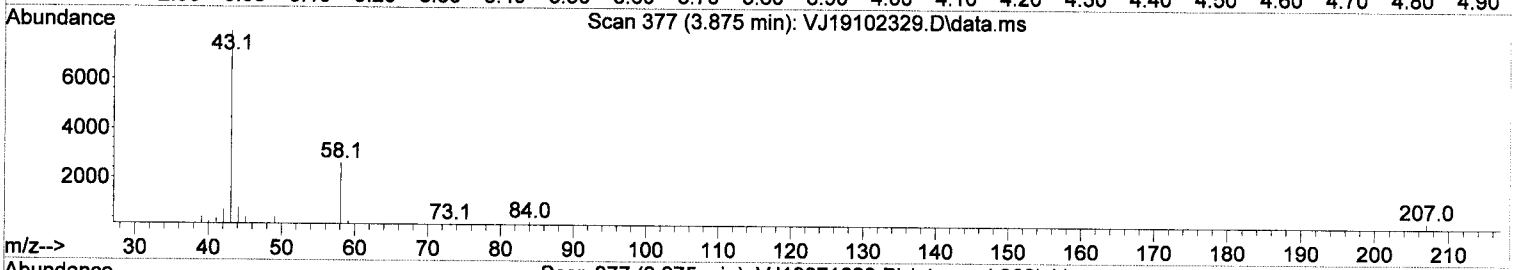
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.15
0.00	0.00	0.00
0.00	0.00	0.00

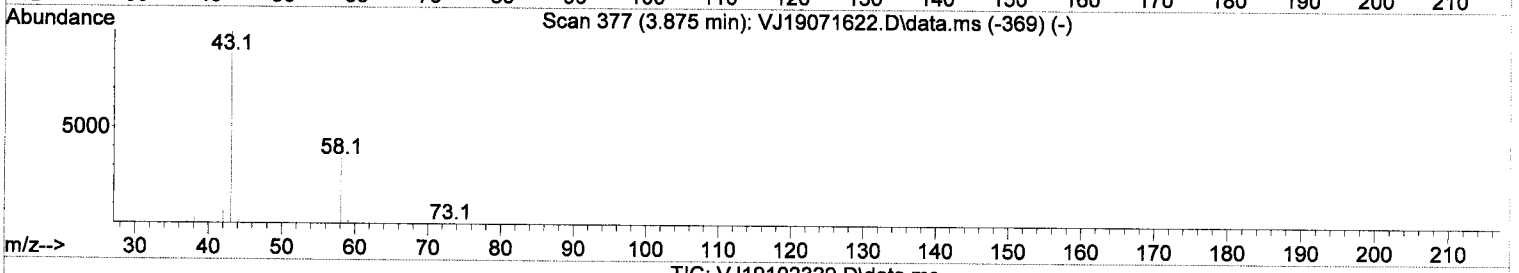
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(14) Acetone

3.875min (+ 0.001) 27.89 ug/L m

response 31545

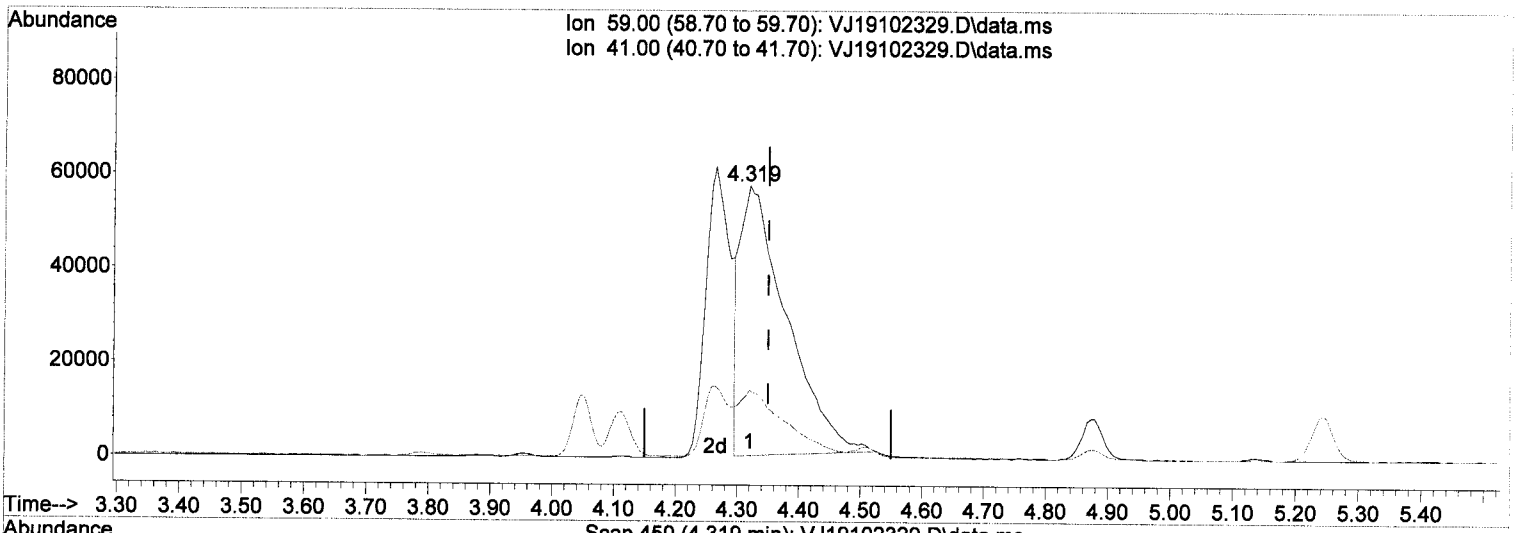
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.15
0.00	0.00	0.00
0.00	0.00	0.00

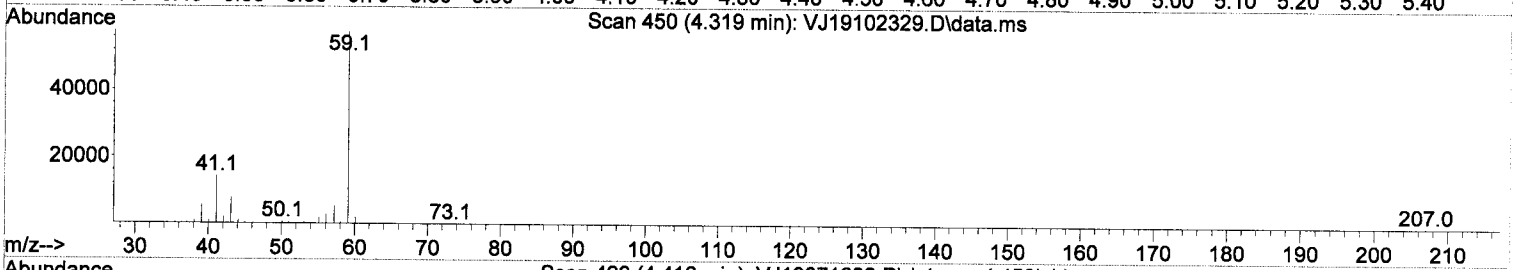
MM 10/24/20

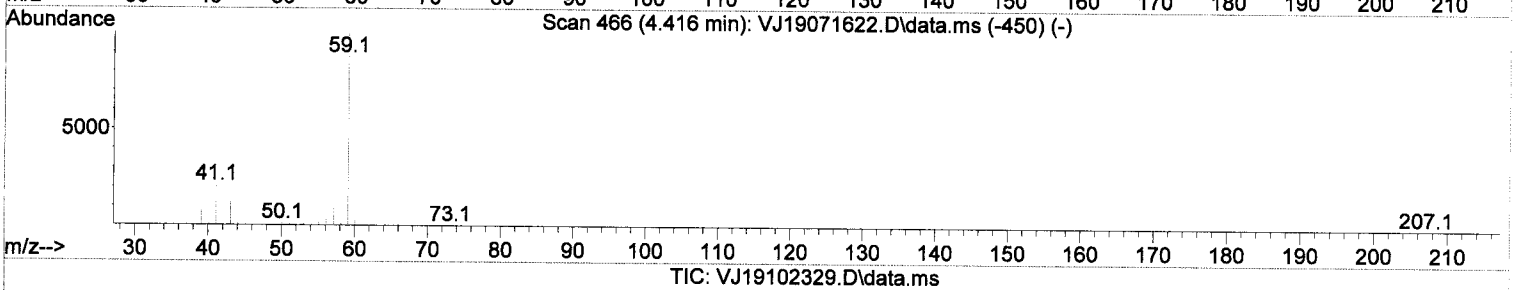
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(18) tert-Butanol (TBA)

4.319min (-0.030) 565.45 ug/L

response 301023

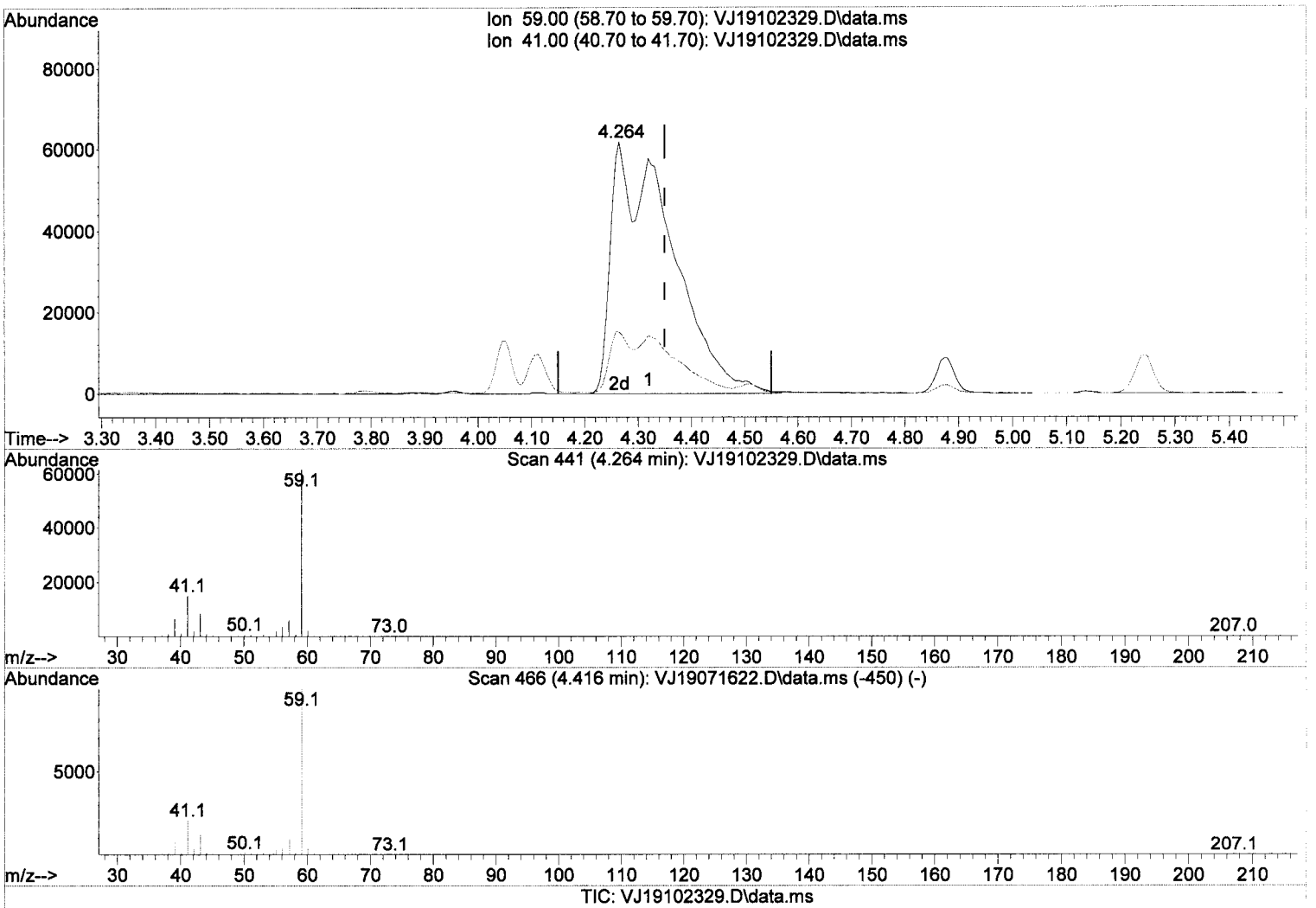
M.2.

Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.77#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



TIC: VJ19102329.D\data.ms

(18) tert-Butanol (TBA)

4.264min (-0.085) 891.56 ug/L m

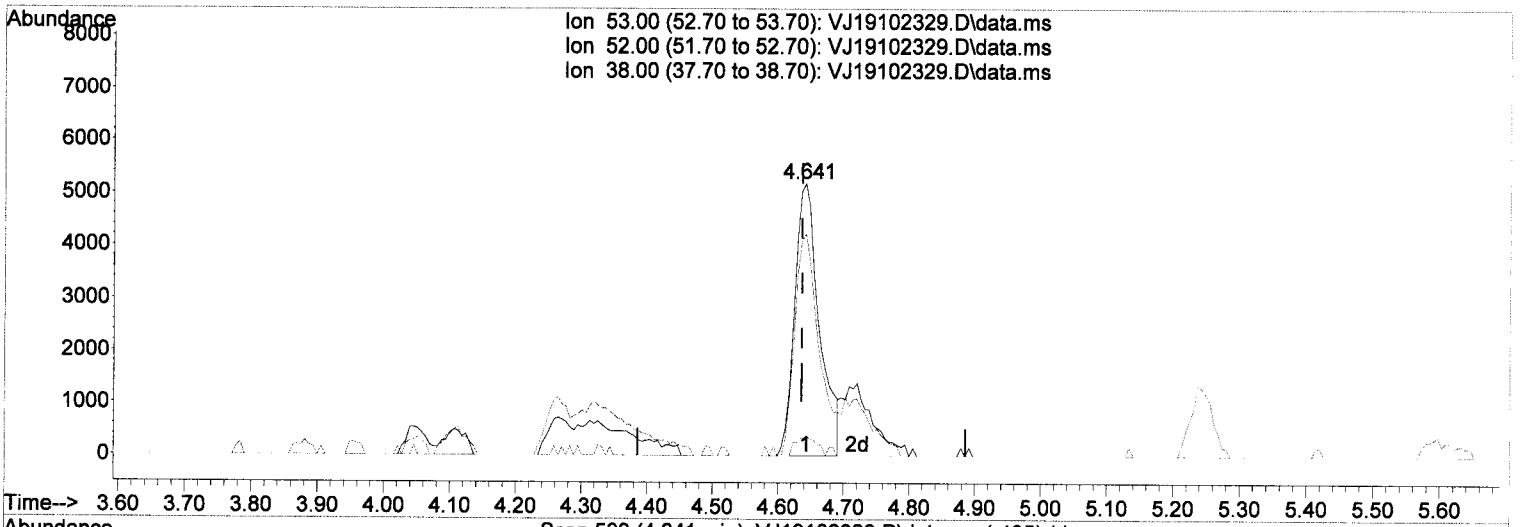
response 487639

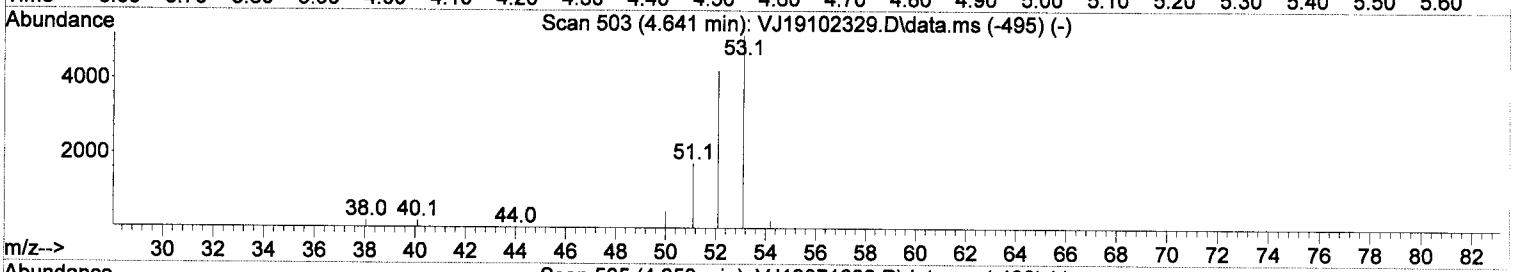
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	24.53#
0.00	0.00	0.00
0.00	0.00	0.00

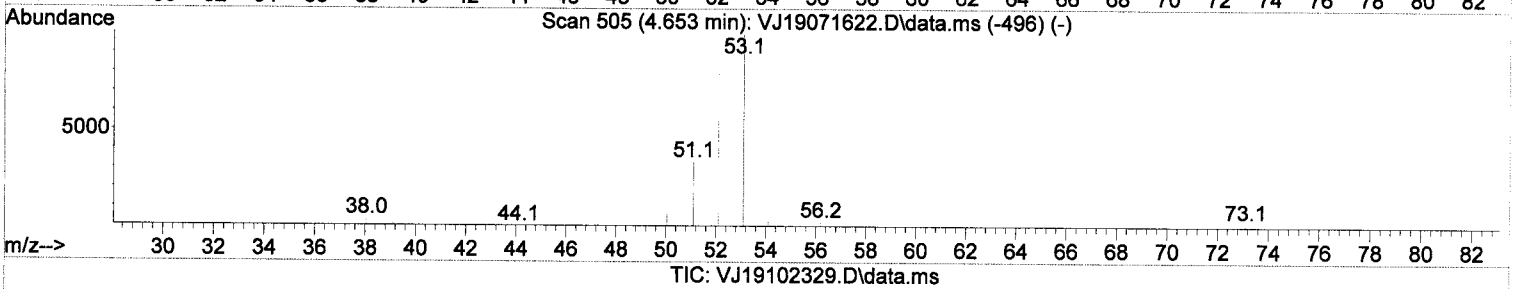
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(21) Acrylonitrile

4.641min (+ 0.006) 15.35 ug/L

response 13627

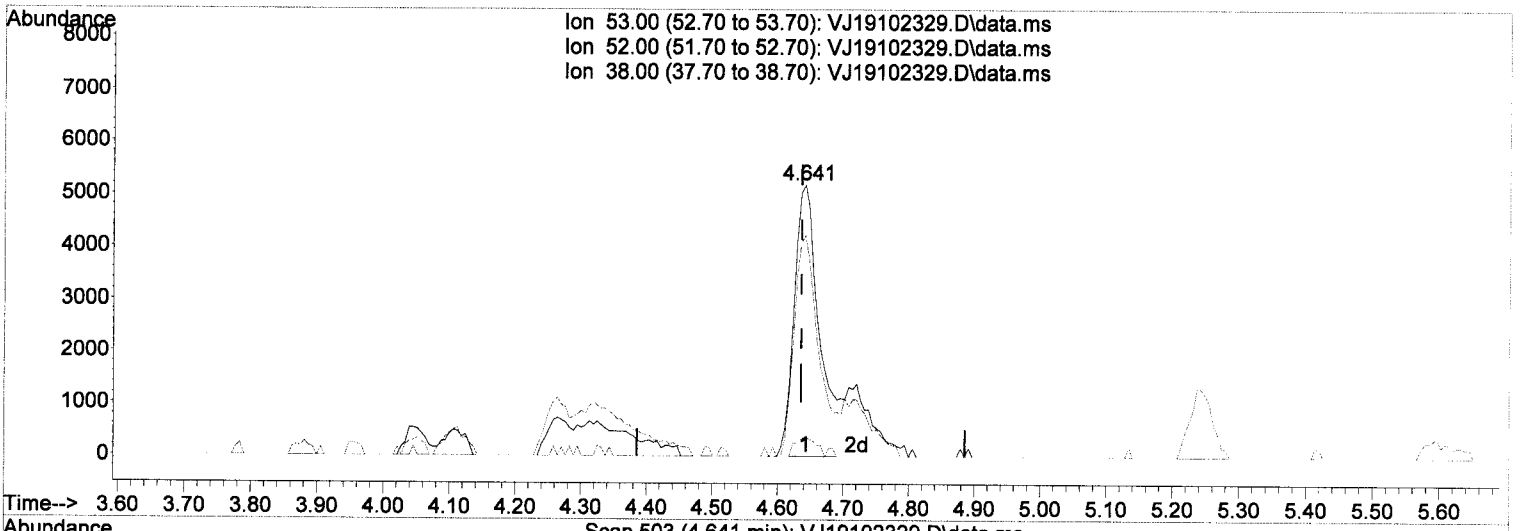
M.2.

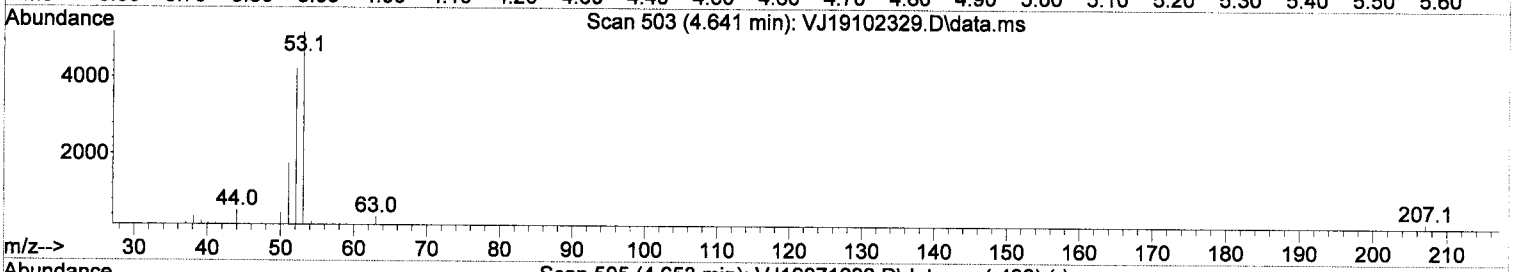
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.49
38.00	5.50	7.06
0.00	0.00	0.00

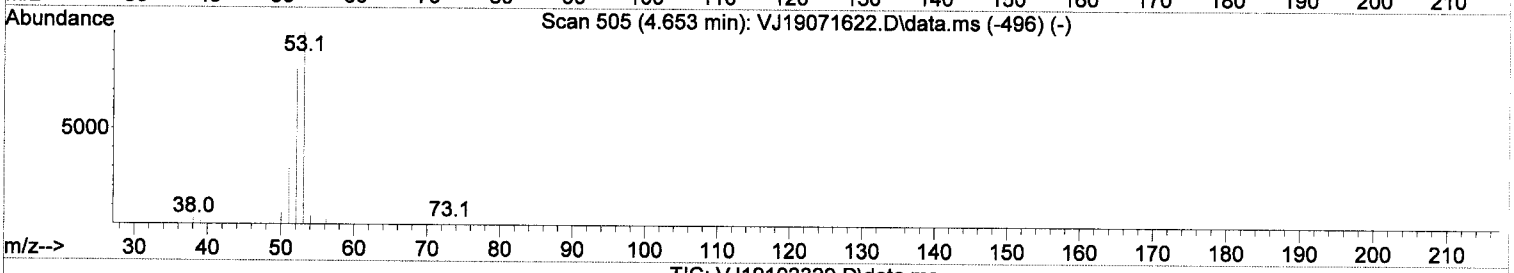
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(21) Acrylonitrile

4.641min (+ 0.006) 20.40 ug/L m

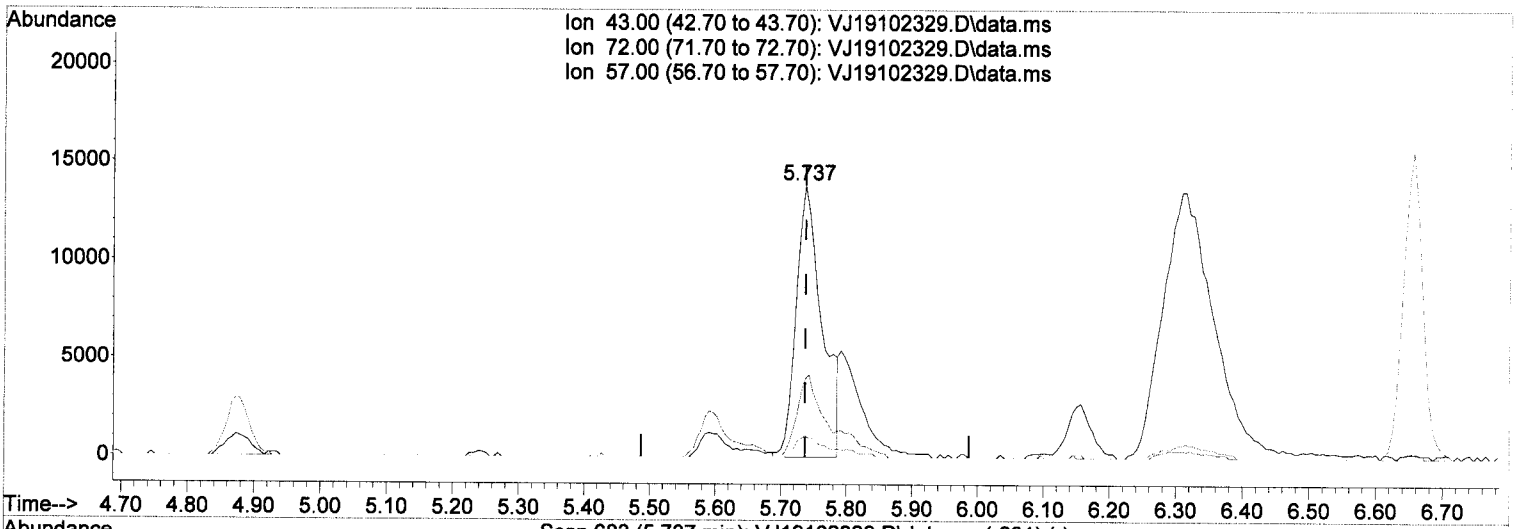
response 18110

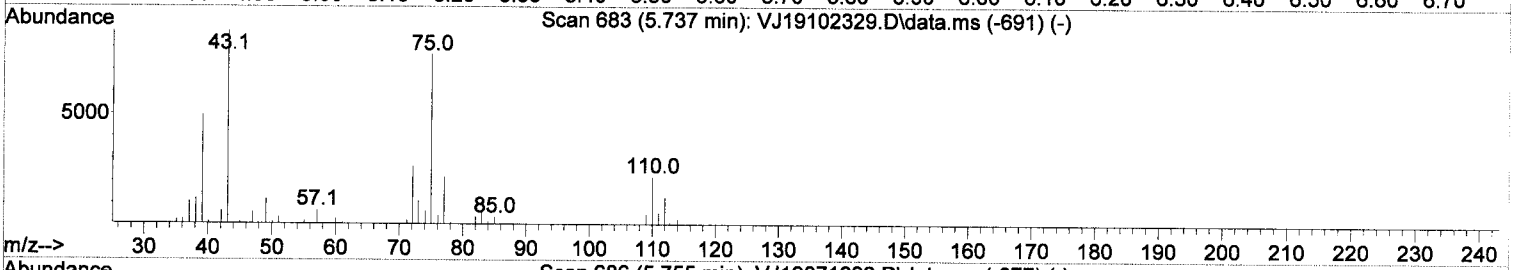
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.49
38.00	5.50	7.06
0.00	0.00	0.00

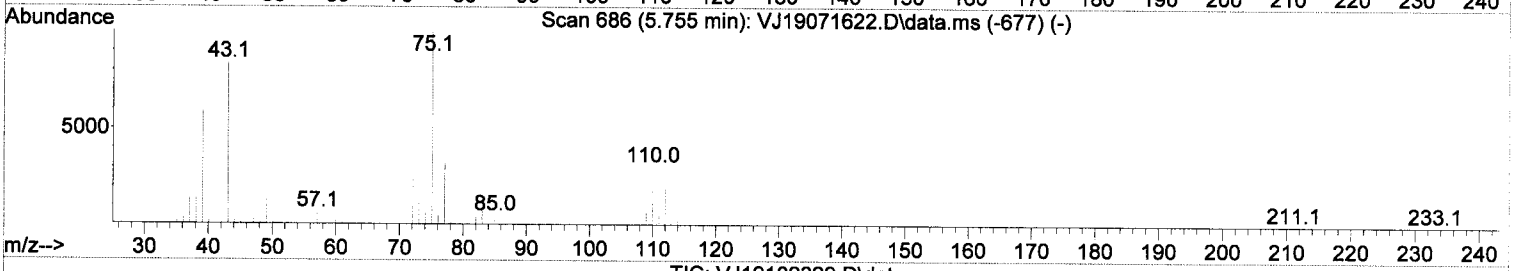
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(32) 2-Butanone (MEK)

5.737min (+ 0.001) 23.50 ug/L

response 37992

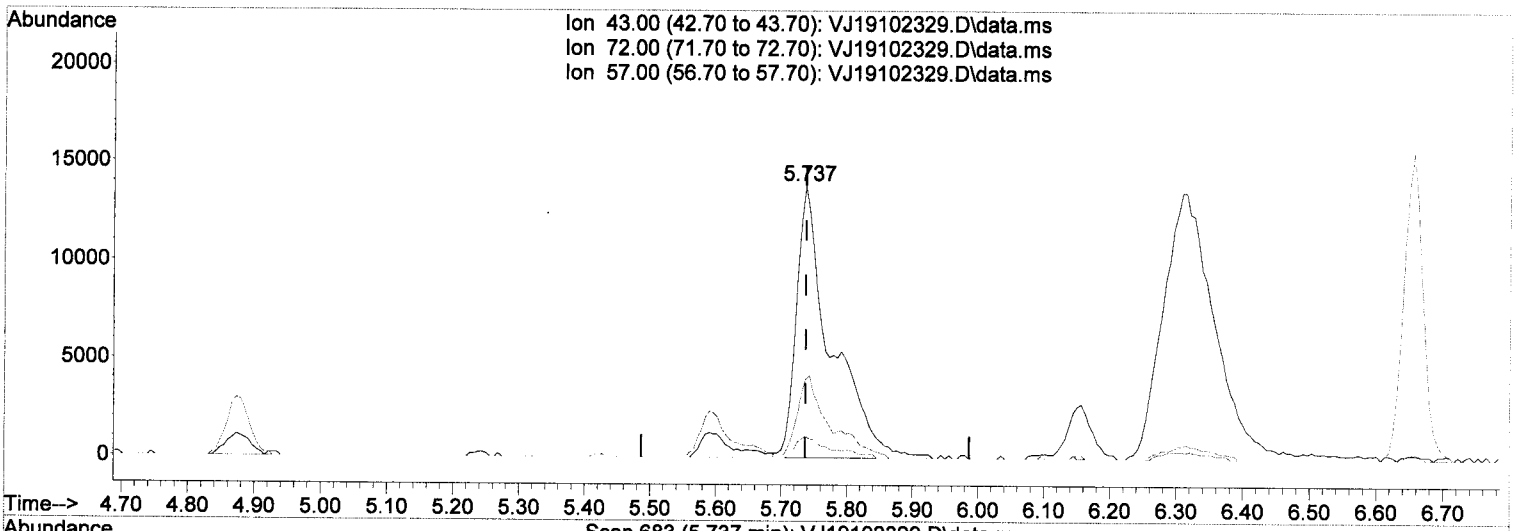
M.2

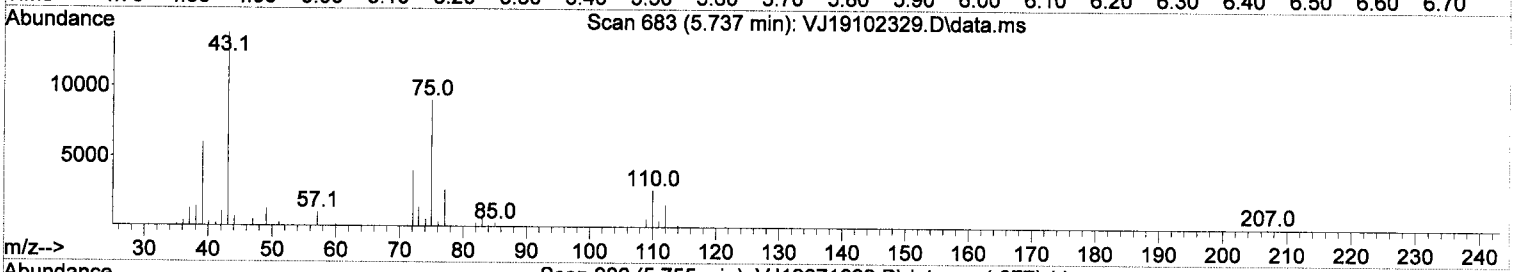
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	28.02
57.00	7.20	8.14
0.00	0.00	0.00

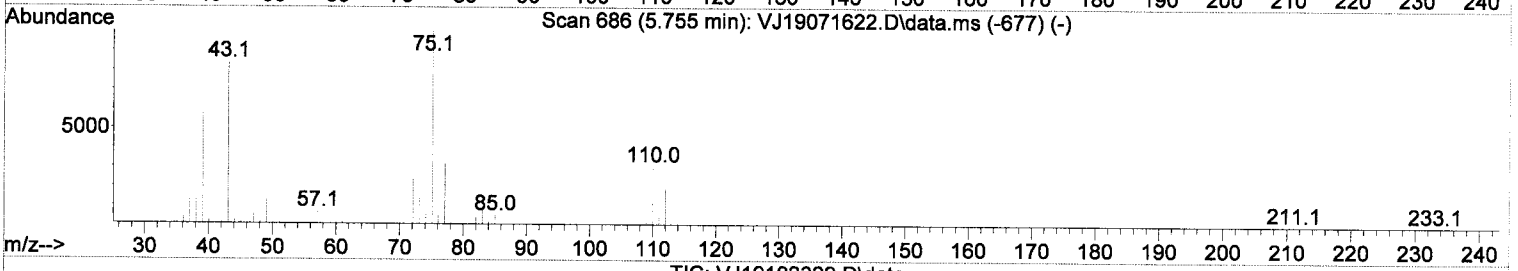
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102329.D\data.ms

(32) 2-Butanone (MEK)

5.737min (+ 0.001) 31.57 ug/L m

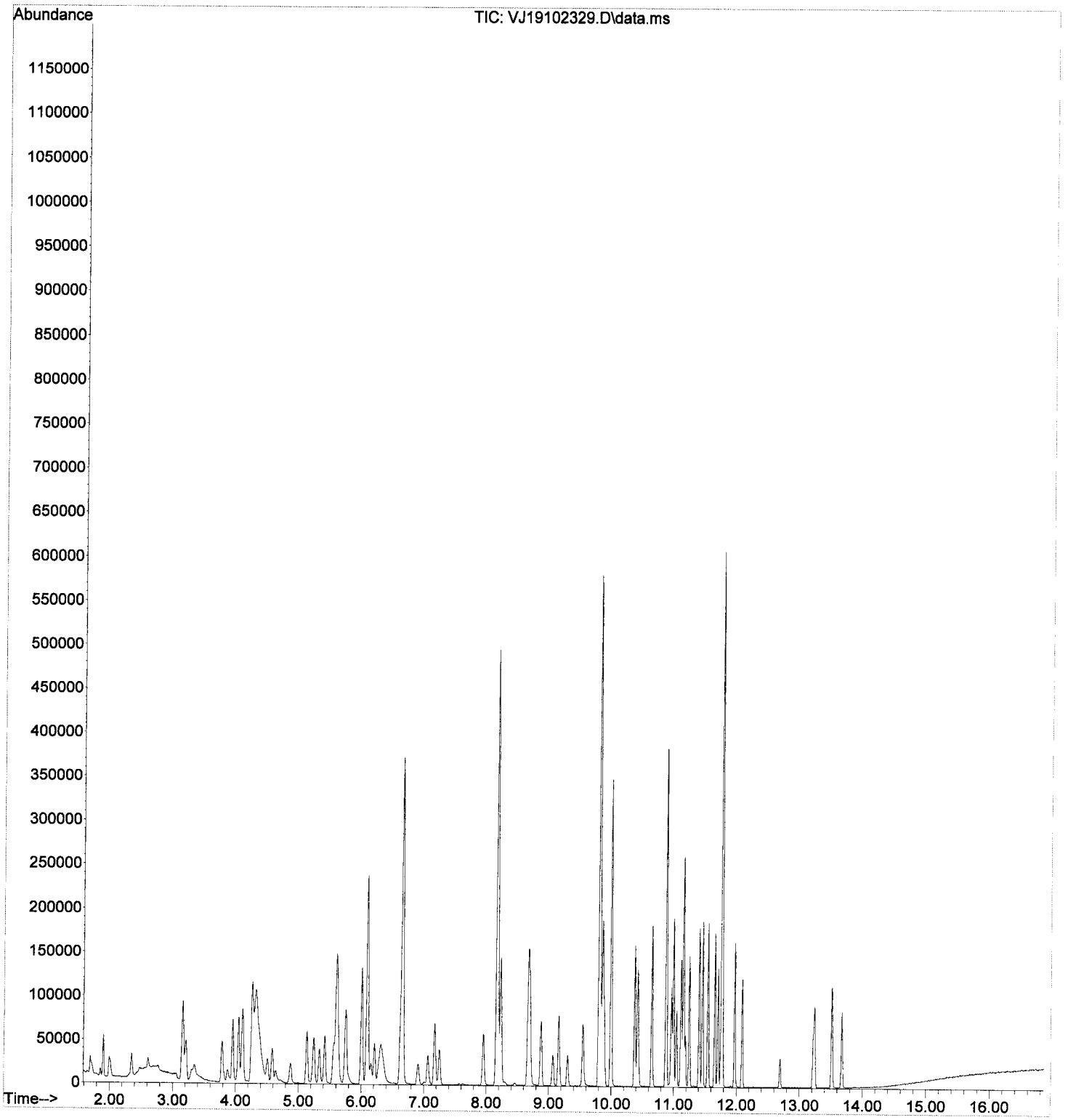
response 51036

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	28.89
57.00	7.20	8.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102329.D
Acq On : 24 Oct 2019 12:59 am
Operator : MM
Sample : 9J23072-CAL7
Misc : 1X 5mL 10/20PPB VOC+MeOH
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 24 08:14:00 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

10/24/19

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	94087	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	252726	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	111564	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.597	111	74311	58.43	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	285833	70.15	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	349892	50.99	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	79925	46.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	42729	18.45	ug/L		97
3) Chloromethane	1.898	50	73020	29.00	ug/L		99
4) Vinyl Chloride	1.995	62	57870	26.53	ug/L		94
5) Bromomethane	2.348	96	25485	25.66	ug/L		96
6) Chloroethane	2.470	64	6188	6.06	ug/L		84
7) Trichlorofluoromethane	2.597	101	12628	3.95	ug/L		98
8) Ethanol	3.315	45	122288	2363.38	ug/L		90
9) 1,1-Dichloroethene	3.139	61	70432	24.64	ug/L		89
10) Carbon Disulfide	3.151	76	120674	33.90	ug/L		99
11) Freon 113	3.200	101	43205	33.70	ug/L		85
12) Iodomethane	3.291	142	14327	43.60	ug/L		93
13) Methylene Chloride	3.778	84	46523	32.83	ug/L		91
14) Acetone	3.869	43	~~45862~~	44.12	ug/L		98
15) t-1,2-Dichloroethene	3.948	61	73863	28.66	ug/L		97
16) n-Hexane	4.045	86	11103	39.59	ug/L	#	76
17) Methyl-tert-butyl-ether	4.106	73	176865	25.24	ug/L		99
18) tert-Butanol (TBA)	4.264	59	1026400	1900.95	ug/L	#	90
19) Diisopropyl ether (DIPE)	4.508	45	46804	6.95	ug/L		90
20) 1,1-Dichloroethane	4.581	63	80359	27.16	ug/L		99
21) Acrylonitrile	4.635	53	~~28427~~	24.84	ug/L		97
22) Ethyl-tert-butyl ether...	4.873	59	41722	6.25	ug/L		94
23) c-1,2-Dichloroethene	5.128	61	73333	26.29	ug/L		95
24) 2,2-Dichloropropane	5.244	77	72158	22.08	ug/L		99
25) Bromochloromethane	5.329	49	45927	29.64	ug/L		79
26) Chloroform	5.414	83	86201	23.83	ug/L		96
27) Carbon Tetrachloride	5.554	117	58891	19.68	ug/L		94
28) Tetrahydrofuran	5.590	42	37130	37.63	ug/L		100
29) 1,1,1-Trichloroethane	5.621	97	79966	22.45	ug/L		95
31) 1,1-Dichloropropene	5.749	75	75436	27.22	ug/L		93
32) 2-Butanone (MEK)	5.737	43	101470	68.29	ug/L		99
33) Benzene	6.004	78	240789	33.67	ug/L		99
34) tert-Amyl methyl ether...	6.156	73	38296	5.78	ug/L		98
35) 1,2-Dichloroethane (EDC)	6.205	62	77917	19.05	ug/L		97
36) iso-Butyl Alcohol	6.290	43	154175	1000.29	ug/L		95
38) Trichloroethene (TCE)	6.625	130	49869	28.48	ug/L		92
39) tert-Amyl ethyl ether ...	6.905	59	29237	5.97	ug/L		87
40) Dibromomethane	7.063	93	31731	26.33	ug/L		86
41) 1,2-Dichloropropane	7.172	63	61016	32.69	ug/L		98
42) Bromodichloromethane	7.251	83	63632	23.20	ug/L		95
44) c-1,3-Dichloropropene	7.951	75	80676	20.76	ug/L		98
46) Toluene	8.231	91	237451	22.82	ug/L		99
47) Tetrachloroethene (PCE)	8.681	166	46373	22.07	ug/L		89
48) 4-Methyl-2-Pentanone (...	8.669	43	161301	47.73	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

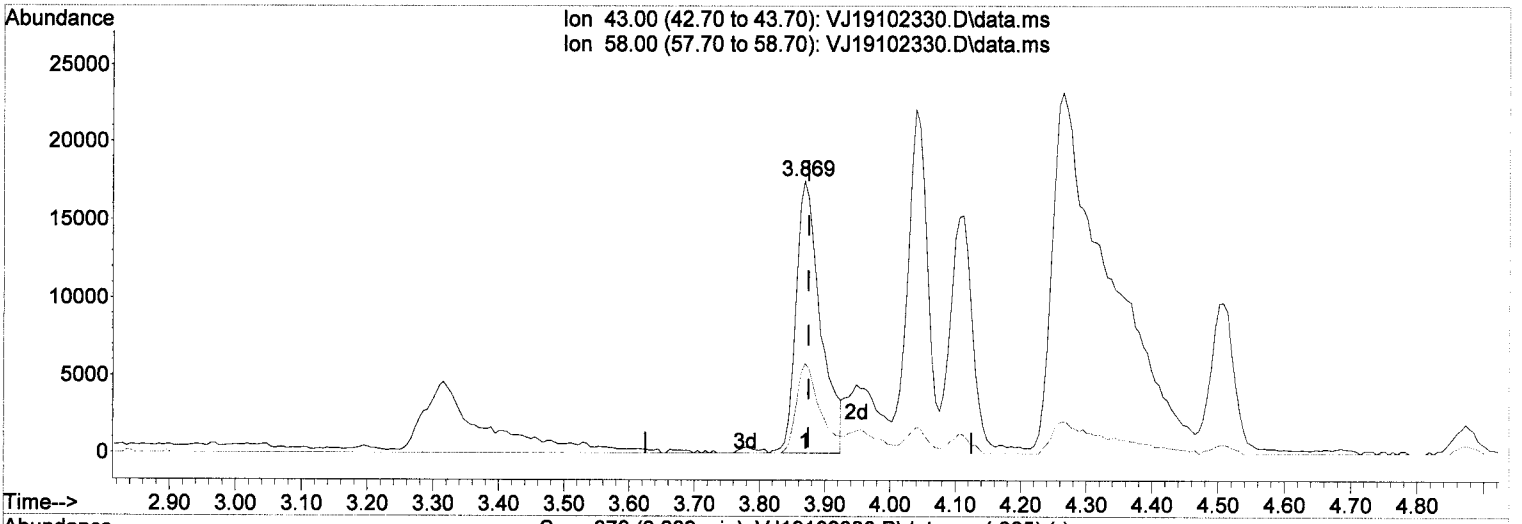
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	81643	19.65	ug/L		94
50) 1,1,2-Trichloroethane	8.876	97	51573	23.28	ug/L		95
51) Dibromochloromethane	9.064	129	40104	17.09	ug/L		99
52) 1,3-Dichloropropane	9.162	76	95374	21.36	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.301	107	50265	21.47	ug/L		96
54) 2-Hexanone	9.545	43	118204	46.44	ug/L		99
55) Chlorobenzene	9.825	112	137767	21.94	ug/L		95
56) Ethylbenzene	9.861	91	245666	20.51	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.886	131	44112	18.53	ug/L		97
58) m,p-Xylenes (2)	9.995	91	359257	39.16	ug/L		97
59) o-Xylene	10.378	91	172231	18.89	ug/L		95
60) Styrene	10.421	104	116013	20.30	ug/L		95
61) Bromoform	10.439	173	26337	16.76	ug/L		97
62) Isopropylbenzene	10.652	105	211570	20.10	ug/L		97
65) Bromobenzene	10.962	156	47411	22.32	ug/L	#	69
66) n-Propylbenzene	10.999	91	255618	20.89	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.047	83	74780	28.94	ug/L		97
68) 2-Chlorotoluene	11.120	126	45697	21.88	ug/L		87
69) 1,3,5-Trimethylbenzene	11.157	105	167903	20.16	ug/L		96
70) 1,2,3-Trichloropropane	11.151	110	23923	21.50	ug/L		93
71) t-1,4-Dichloro-2-butene	11.187	88	9771	18.12	ug/L	#	85
72) 4-Chlorotoluene	11.248	91	150657	19.93	ug/L		93
73) tert-Butylbenzene	11.406	91	95439	17.61	ug/L		89
74) 1,2,4-Trimethylbenzene	11.461	105	167688	19.91	ug/L		97
75) sec-Butylbenzene	11.546	105	207744	21.23	ug/L		96
76) 4-Isopropyltoluene	11.656	119	160438	19.48	ug/L		97
77) 1,3-Dichlorobenzene	11.711	146	87437	21.18	ug/L		96
78) 1,4-Dichlorobenzene	11.778	146	87387	21.91	ug/L		95
79) n-Butylbenzene	11.972	91	148499	19.54	ug/L		95
80) 1,2-Dichlorobenzene	12.094	146	80490	21.12	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.696	157	13313	21.98	ug/L	#	58
82) Hexachlorobutadiene	13.219	223	10256	17.15	ug/L		94
83) 1,2,4-Trichlorobenzene	13.244	180	48878	20.43	ug/L		95
84) Naphthalene	13.517	128	180749	22.85	ug/L		98
85) 1,2,3-Trichlorobenzene	13.676	180	47658	20.84	ug/L		97

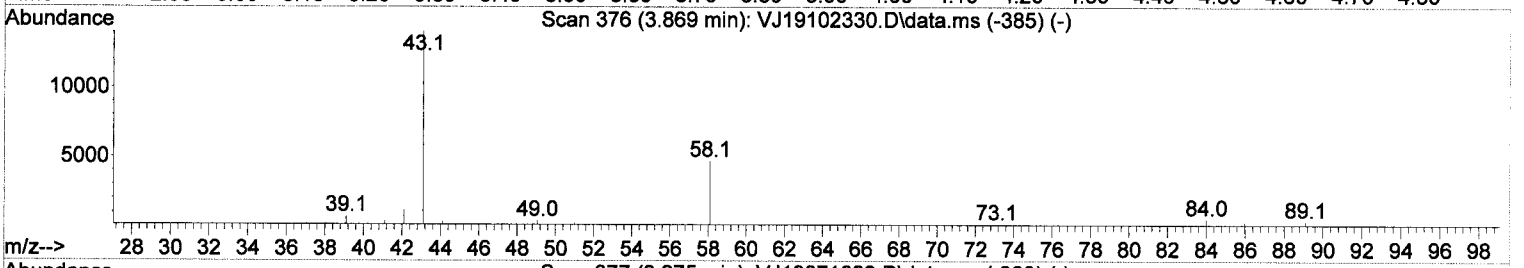
(#) = qualifier out of range (m) = manual integration (+) = signals summed

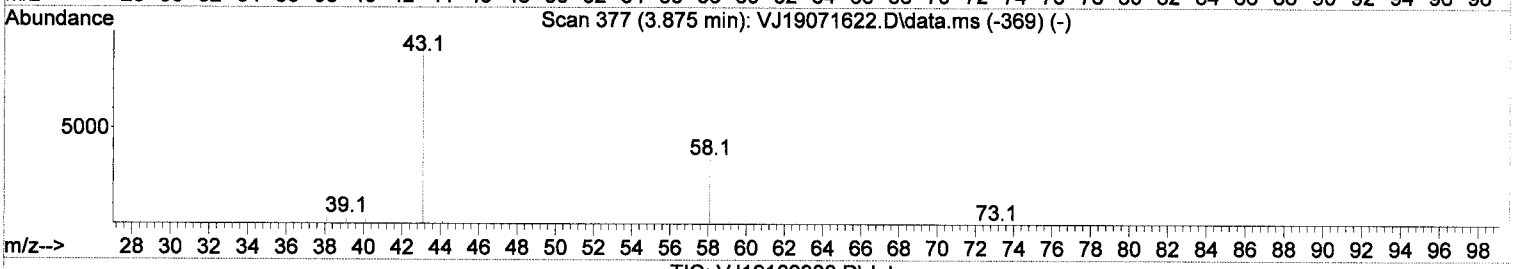
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102330.D\data.ms

(14) Acetone

3.869min (-0.005) 44.12 ug/L

response 45862

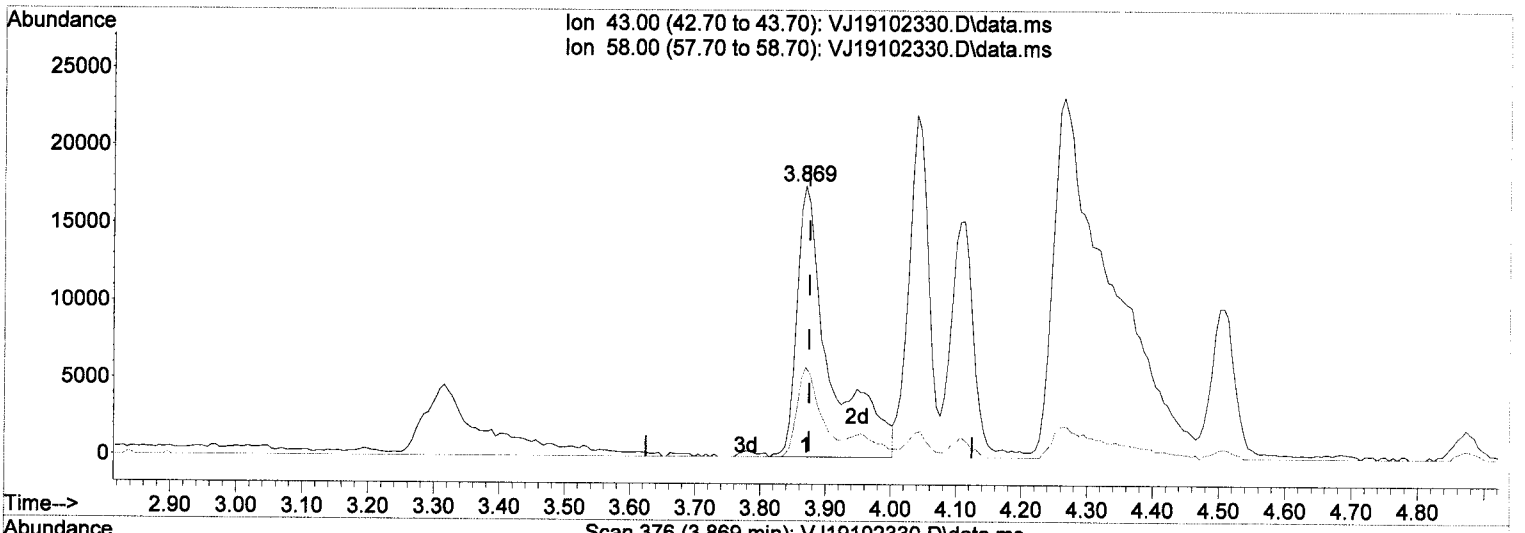
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.04
0.00	0.00	0.00
0.00	0.00	0.00

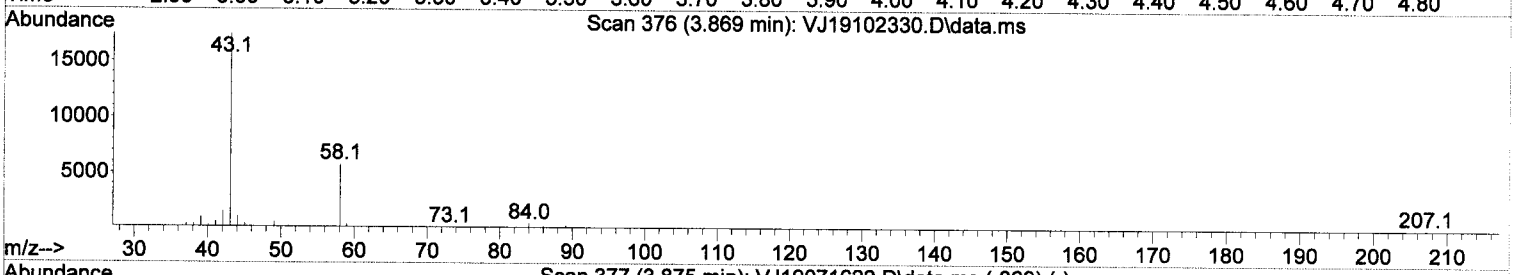
MJ.

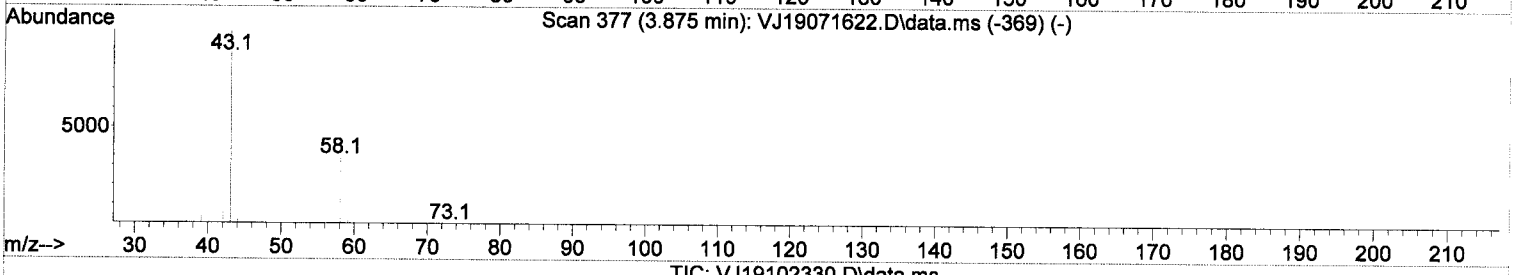
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102330.D\data.ms

(14) Acetone

3.869min (-0.005) 59.35 ug/L (m)

response 61696

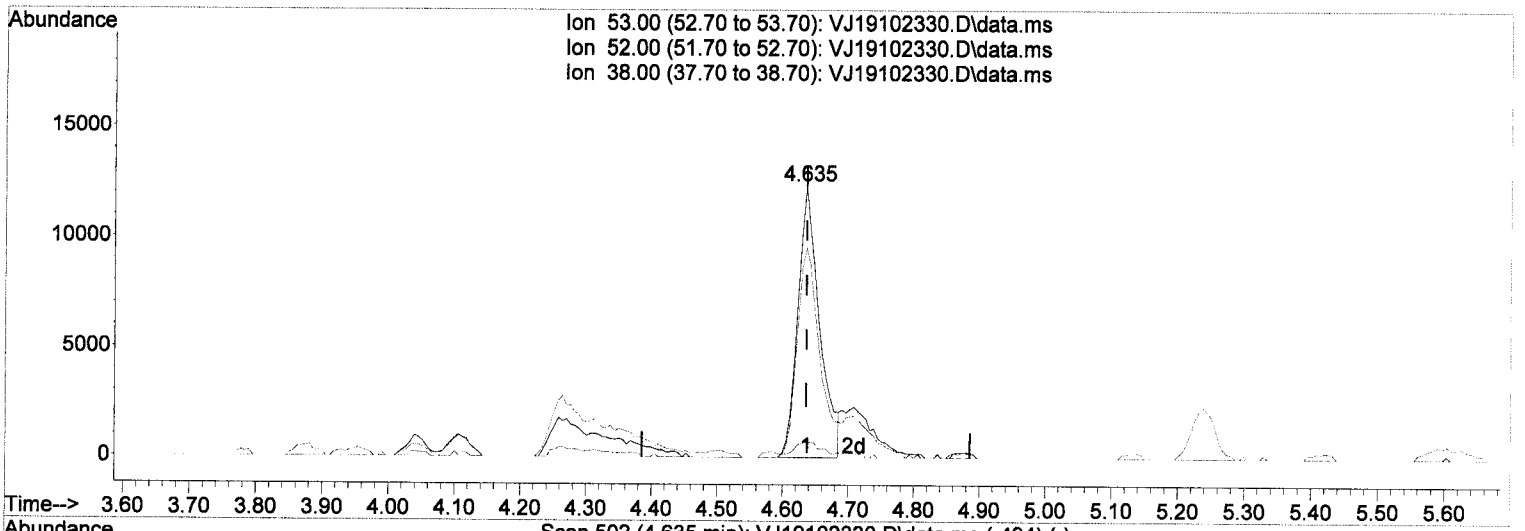
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.04
0.00	0.00	0.00
0.00	0.00	0.00

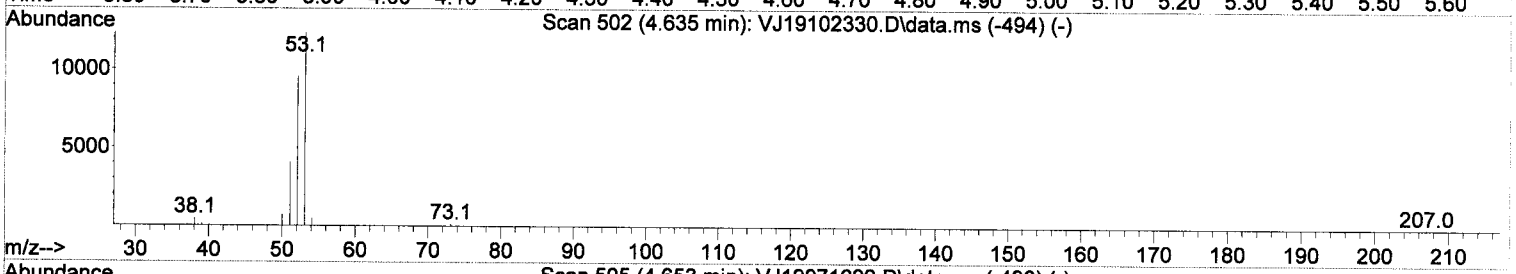
M 10/24/19

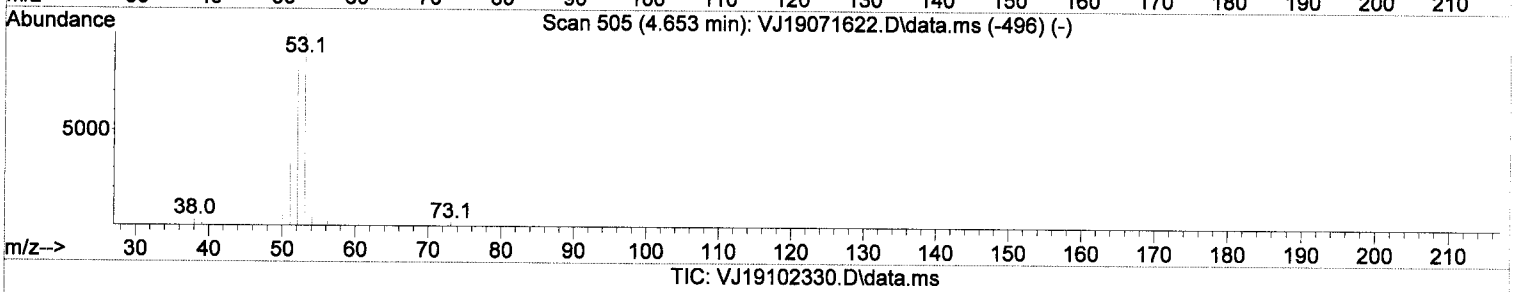
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102330.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 34.84 ug/L

response 28427

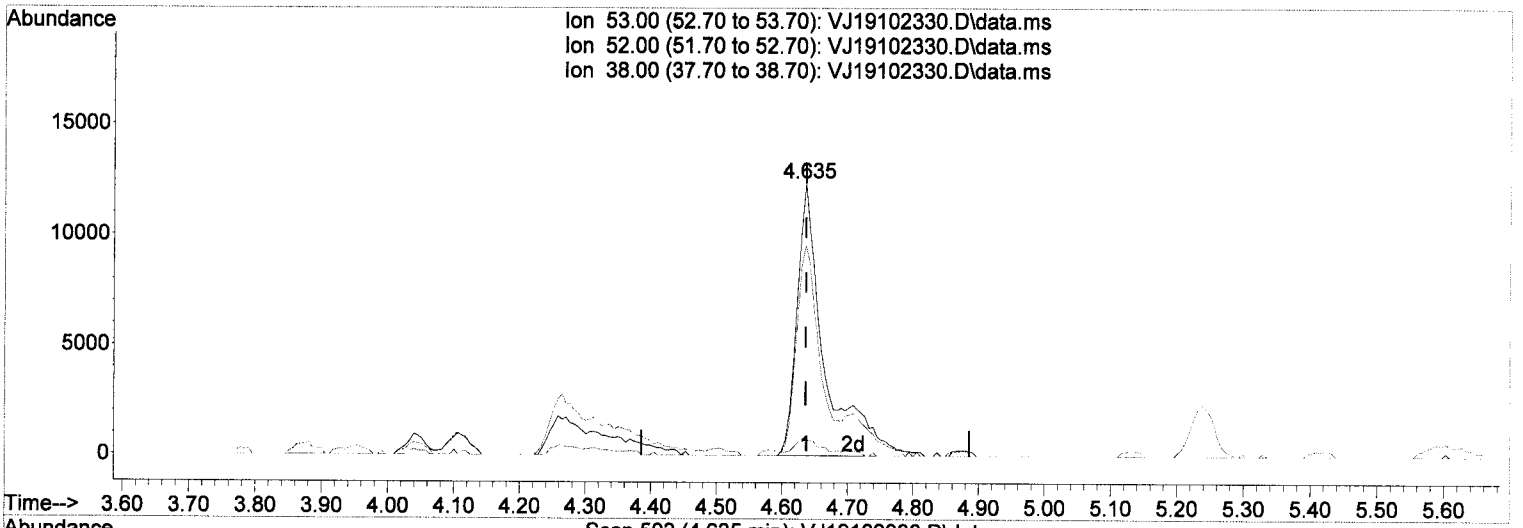
M.2.

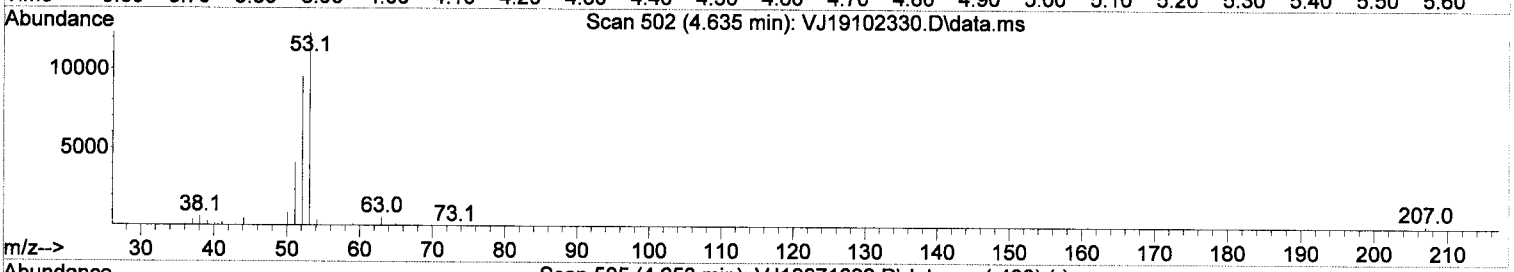
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.16
38.00	5.50	3.70
0.00	0.00	0.00

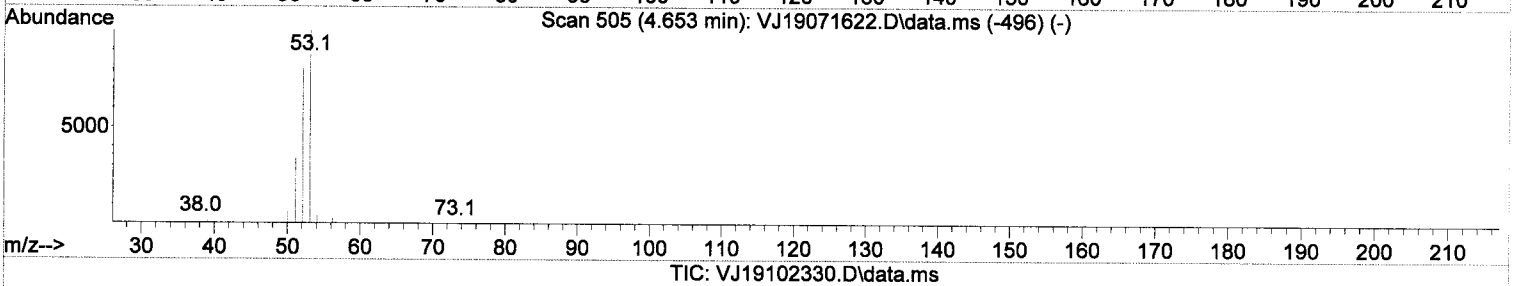
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102330.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 44.64 ug/L

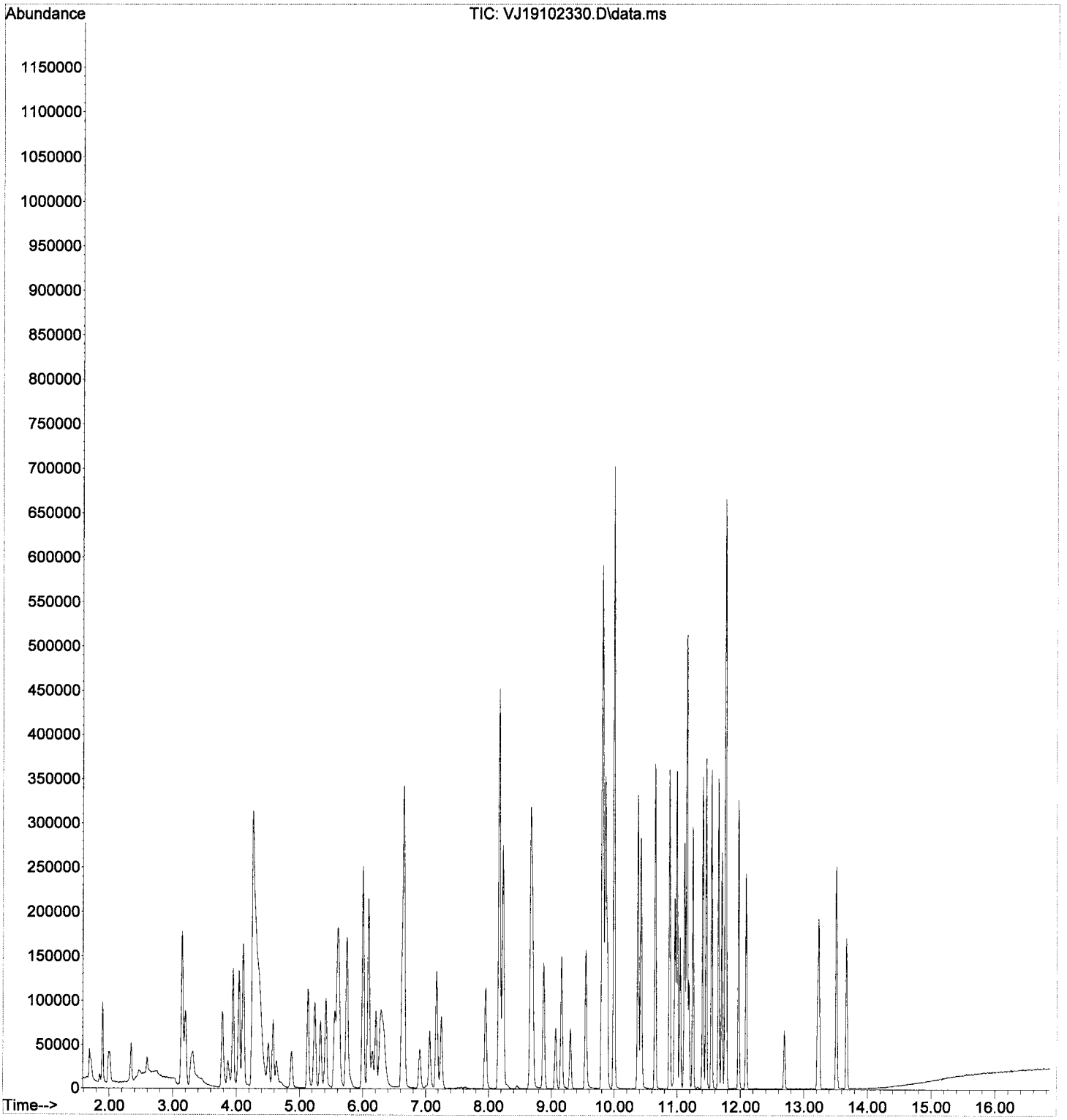
response 36419

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	77.16
38.00	5.50	5.64
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102330.D
Acq On : 24 Oct 2019 1:26 am
Operator : MM
Sample : 9J23072-CAL8
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 24 08:14:03 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	105013	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	282031	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	124308	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	85109	59.95	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	323717	71.18	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	394687	51.54	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	88914	46.61	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	131685	50.95	ug/L		98
3) Chloromethane	1.892	50	201248	71.62	ug/L		99
4) Vinyl Chloride	1.983	62	155736	63.06	ug/L		95
5) Bromomethane	2.342	96	63337	60.39	ug/L		96
6) Chloroethane	2.470	64	22708	19.91	ug/L		96
7) Trichlorofluoromethane	2.603	101	38671	10.83	ug/L		99
8) Ethanol	3.346	45	239469	4146.53	ug/L		92
9) 1,1-Dichloroethene	3.145	61	181540	56.89	ug/L		93
10) Carbon Disulfide	3.157	76	335203	84.37	ug/L		98
11) Freon 113	3.200	101	113502	79.33	ug/L		87
12) Iodomethane	3.291	142	47020	89.59	ug/L		89
13) Methylene Chloride	3.777	84	118736	77.26	ug/L		90
14) Acetone	3.869	43	~~112420~~	96.89	ug/L		97
15) t-1,2-Dichloroethene	3.948	61	191374	66.54	ug/L		98
16) n-Hexane	4.045	86	31443	96.62	ug/L	#	86
17) Methyl-tert-butyl-ether	4.106	73	469291	59.99	ug/L		98
18) tert-Butanol (TBA)	4.319	59	~~1395157~~	2261.14	ug/L	#	86
19) Diisopropyl ether (DIPE)	4.501	45	102191	13.60	ug/L		94
20) 1,1-Dichloroethane	4.580	63	207492	62.82	ug/L		99
21) Acrylonitrile	4.629	53	~~74111~~	81.38	ug/L		99
22) Ethyl-tert-butyl ether...	4.873	59	90750	12.17	ug/L		94
23) c-1,2-Dichloroethene	5.128	61	189767	60.94	ug/L		96
24) 2,2-Dichloropropane	5.238	77	189548	51.96	ug/L		100
25) Bromochloromethane	5.329	49	116893	67.59	ug/L		80
26) Chloroform	5.414	83	226777	56.18	ug/L		97
27) Carbon Tetrachloride	5.554	117	158501	47.45	ug/L		94
28) Tetrahydrofuran	5.590	42	95139	86.39	ug/L		98
29) 1,1,1-Trichloroethane	5.621	97	208934	52.56	ug/L		96
31) 1,1-Dichloropropene	5.749	75	199471	64.49	ug/L		95
32) 2-Butanone (MEK)	5.730	43	~~189045~~	113.99	ug/L		94
33) Benzene	6.004	78	625910	78.42	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	82359	11.14	ug/L		97
35) 1,2-Dichloroethane (EDC)	6.205	62	202778	44.43	ug/L		99
36) iso-Butyl Alcohol	6.302	43	411574	2392.47	ug/L		99
38) Trichloroethene (TCE)	6.619	130	131822	66.43	ug/L		95
39) tert-Amyl ethyl ether ...	6.904	59	65747	12.03	ug/L		89
40) Dibromomethane	7.063	93	83755	62.27	ug/L		84
41) 1,2-Dichloropropane	7.172	63	160675	77.12	ug/L		97
42) Bromodichloromethane	7.245	83	175537	57.34	ug/L		98
44) c-1,3-Dichloropropene	7.951	75	225850	52.08	ug/L		98
46) Toluene	8.231	91	618659	53.27	ug/L		98
47) Tetrachloroethene (PCE)	8.681	166	122230	52.12	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.669	43	437036	115.89	ug/L		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

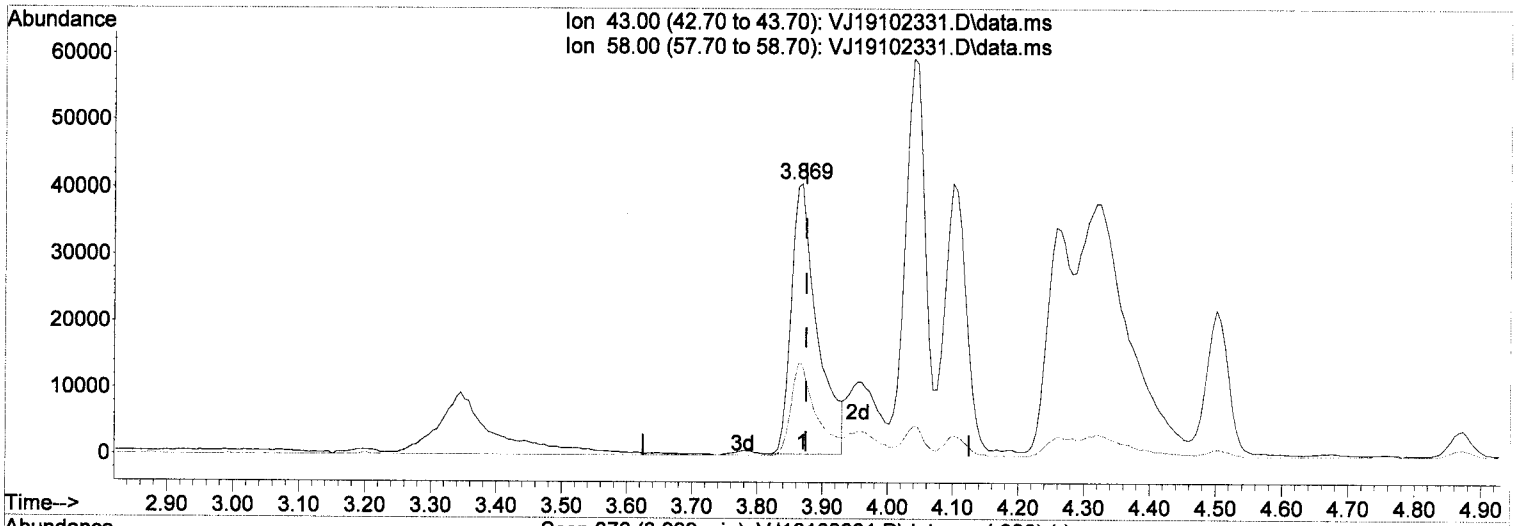
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.699	75	221998	47.89	ug/L		96
50) 1,1,2-Trichloroethane	8.876	97	133185	53.79	ug/L		97
51) Dibromochloromethane	9.064	129	113957	43.52	ug/L		99
52) 1,3-Dichloropropane	9.161	76	247593	49.68	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.301	107	135703	51.93	ug/L		100
54) 2-Hexanone	9.545	43	323576	113.92	ug/L		99
55) Chlorobenzene	9.825	112	353531	50.46	ug/L		95
56) Ethylbenzene	9.861	91	654045	48.92	ug/L		98
57) 1,1,1,2-Tetrachloroethane	9.885	131	121183	45.61	ug/L		97
58) m,p-Xylenes (2)	9.995	91	967453	94.49	ug/L		97
59) o-Xylene	10.378	91	471843	46.38	ug/L		95
60) Styrene	10.421	104	342762	53.74	ug/L		98
61) Bromoform	10.439	173	78066	43.02	ug/L		97
62) Isopropylbenzene	10.652	105	584329	49.73	ug/L		97
65) Bromobenzene	10.962	156	125116	52.87	ug/L	#	72
66) n-Propylbenzene	10.993	91	690882	50.67	ug/L		94
67) 1,1,2,2-Tetrachloroethane	11.047	83	193478	67.20	ug/L		96
68) 2-Chlorotoluene	11.114	126	121749	52.32	ug/L	#	78
69) 1,3,5-Trimethylbenzene	11.157	105	450995	48.60	ug/L		95
70) 1,2,3-Trichloropropane	11.151	110	61884	49.92	ug/L		94
71) t-1,4-Dichloro-2-butene	11.187	88	27694	46.09	ug/L		93
72) 4-Chlorotoluene	11.248	91	398929	47.37	ug/L		92
73) tert-Butylbenzene	11.406	91	260062	43.07	ug/L		90
74) 1,2,4-Trimethylbenzene	11.461	105	450083	47.95	ug/L		97
75) sec-Butylbenzene	11.546	105	570890	52.35	ug/L		96
76) 4-Isopropyltoluene	11.656	119	449627	49.00	ug/L		97
77) 1,3-Dichlorobenzene	11.710	146	228262	49.62	ug/L		97
78) 1,4-Dichlorobenzene	11.777	146	228373	51.40	ug/L		95
79) n-Butylbenzene	11.972	91	411527	48.59	ug/L		94
80) 1,2-Dichlorobenzene	12.094	146	209123	49.24	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.696	157	38129	56.50	ug/L	#	65
82) Hexachlorobutadiene	13.219	223	28768	43.18	ug/L		95
83) 1,2,4-Trichlorobenzene	13.244	180	133371	50.04	ug/L		95
84) Naphthalene	13.511	128	507971	57.66	ug/L		97
85) 1,2,3-Trichlorobenzene	13.675	180	129134	50.68	ug/L		96

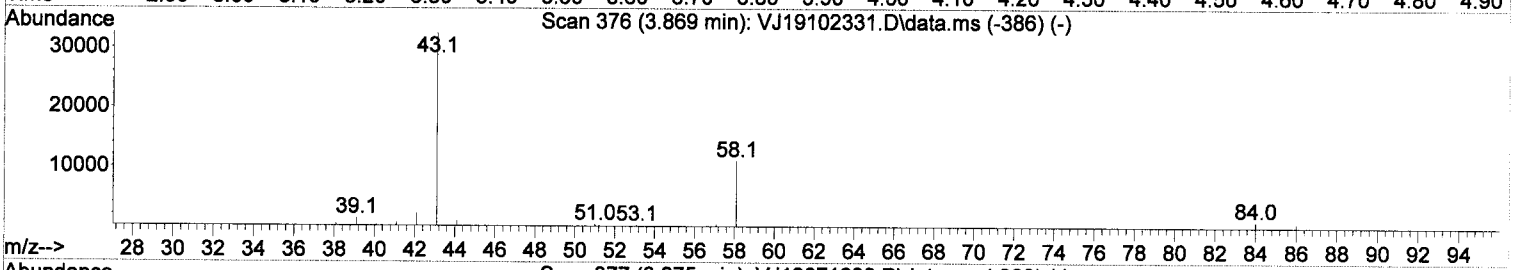
(#) = qualifier out of range (m) = manual integration (+) = signals summed

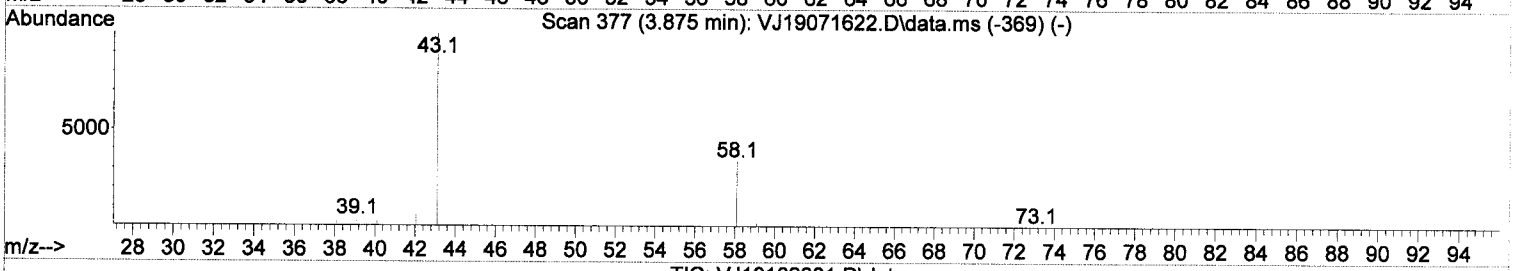
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(14) Acetone

3.869min (-0.005) 96.89 ug/L

response 112420

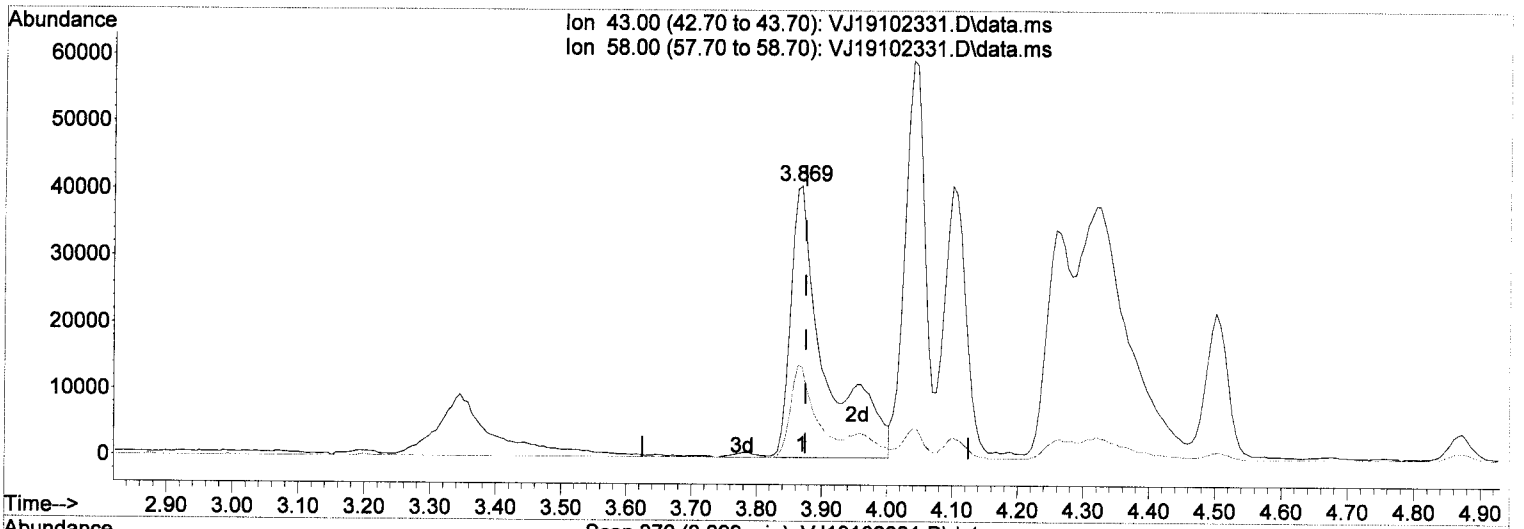
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.86
0.00	0.00	0.00
0.00	0.00	0.00

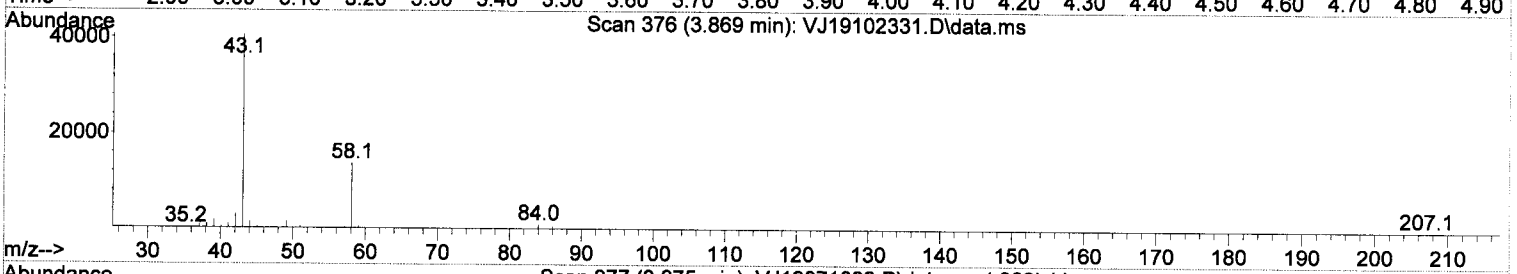
M.2.

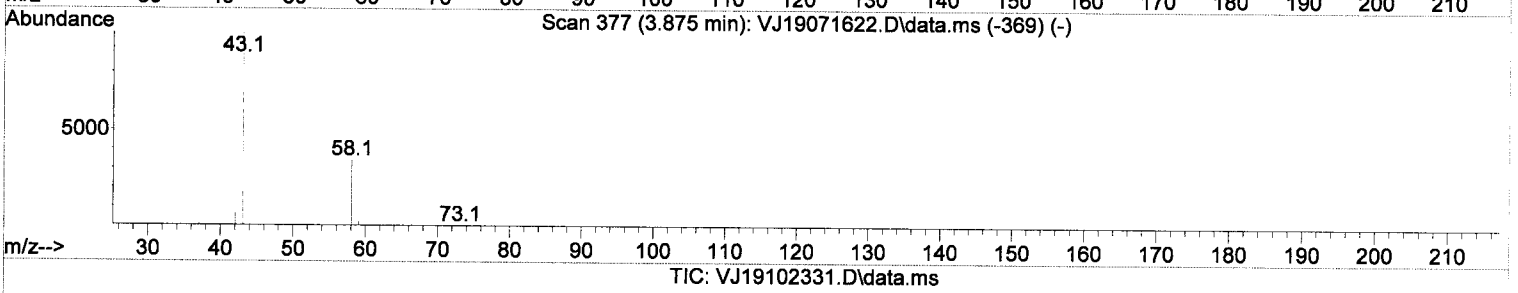
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(14) Acetone

3.869min (-0.005) 129.97 ug/L m

response 150797

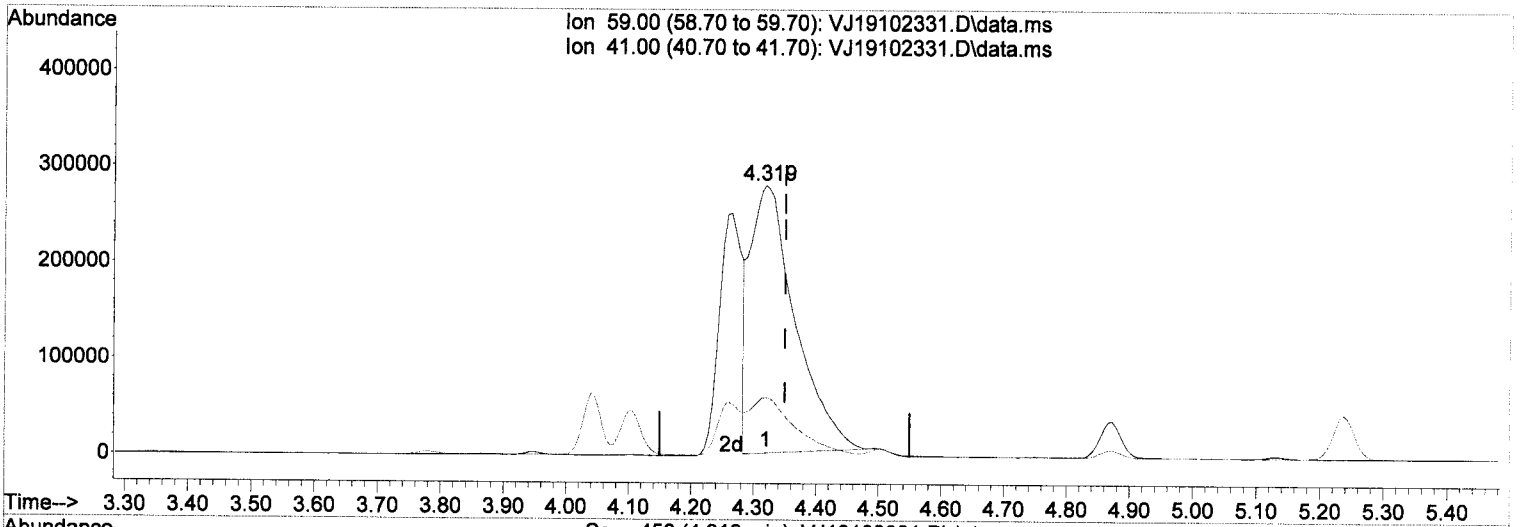
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.68
0.00	0.00	0.00
0.00	0.00	0.00

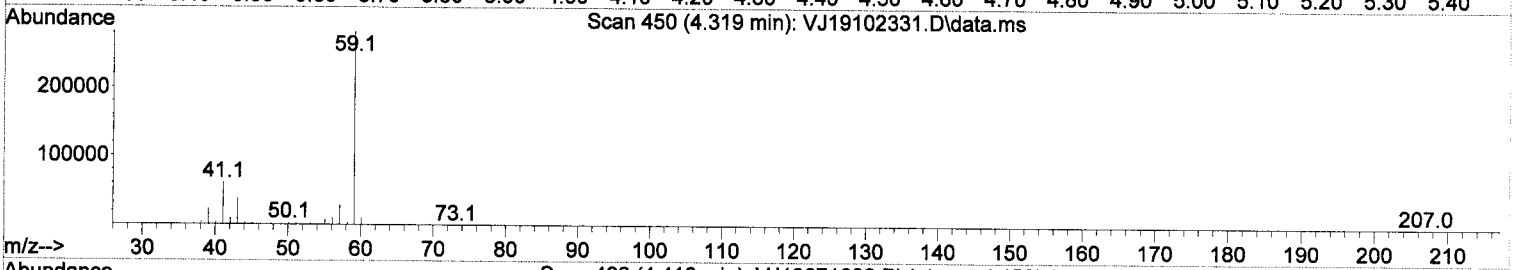
10/24/19

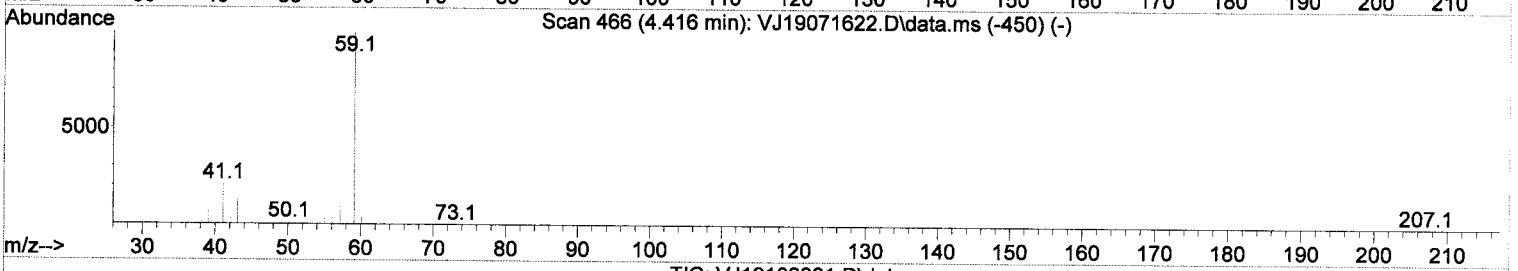
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(18) tert-Butanol (TBA)

4.319min (-0.030) 2261.14 ug/L

response 1395157

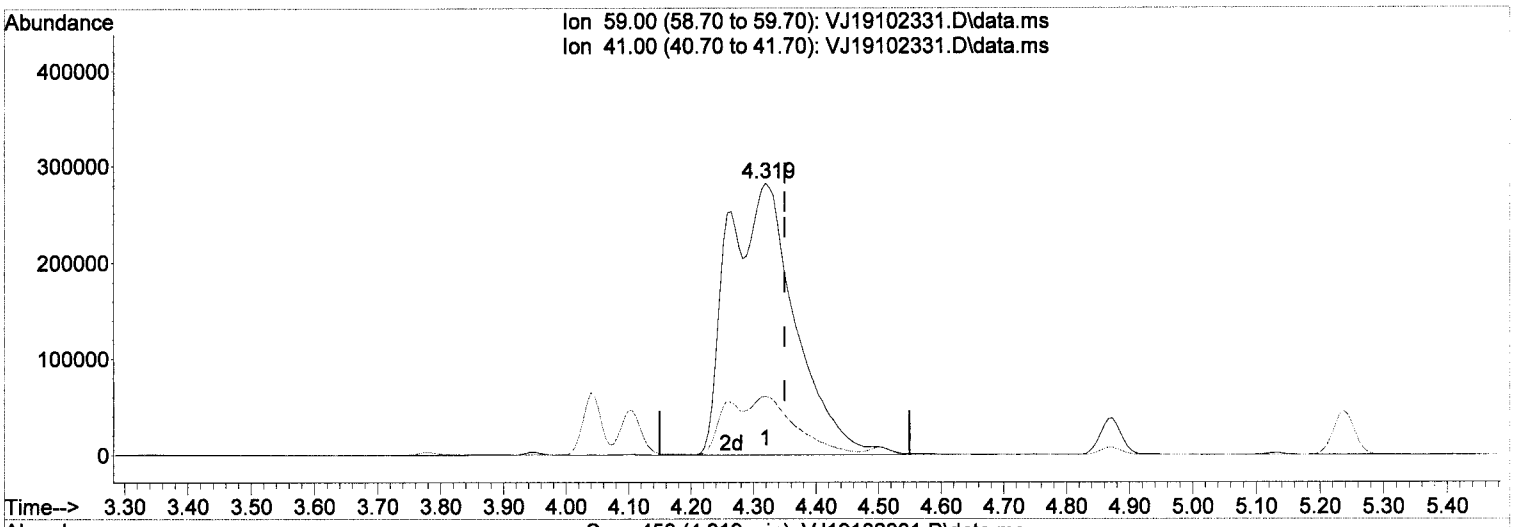
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	21.59#
0.00	0.00	0.00
0.00	0.00	0.00

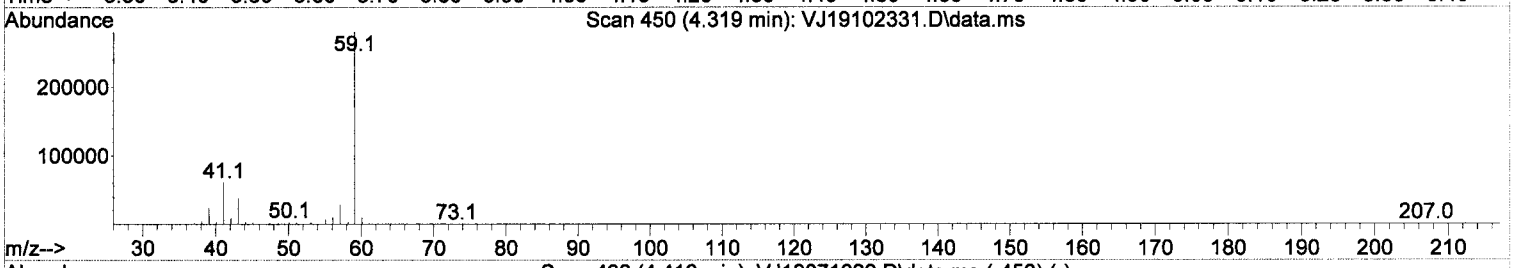
M.L.

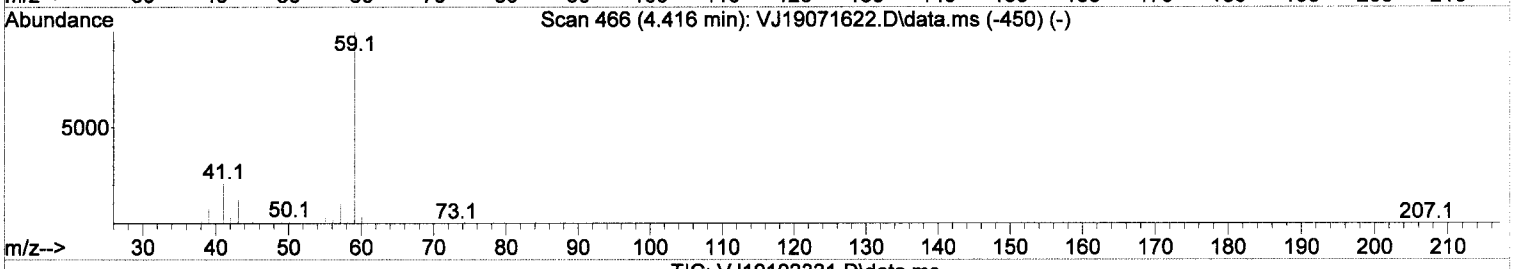
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(18) tert-Butanol (TBA)

4.319min (-0.030) 3230.41 ug/L m

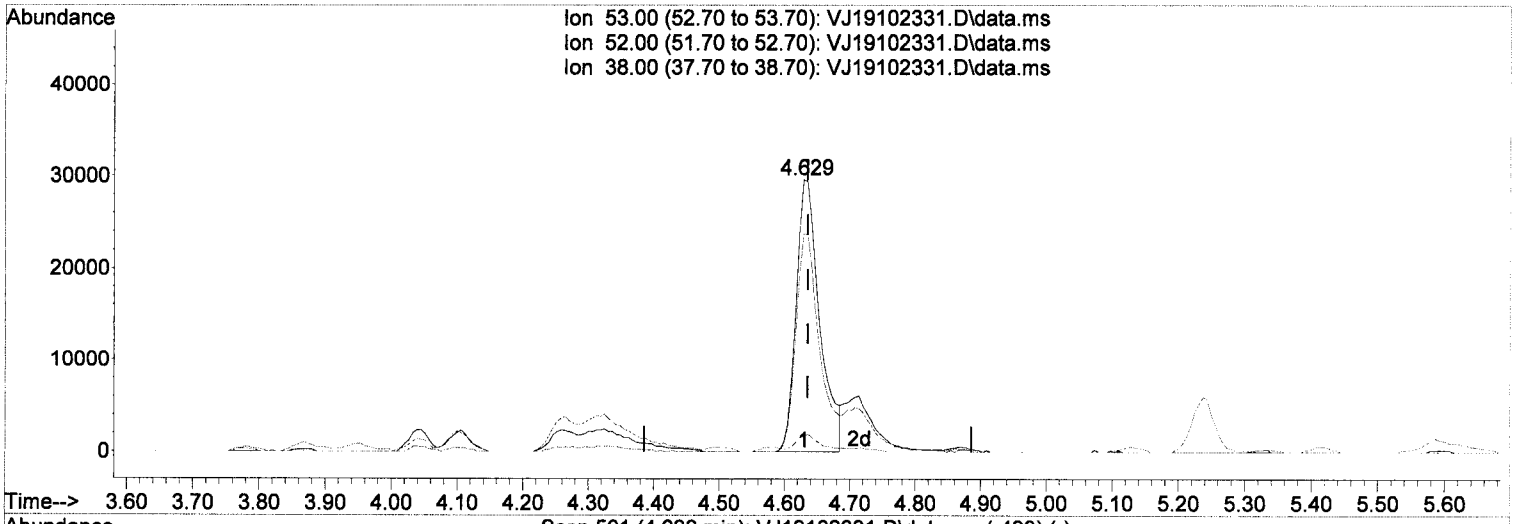
response 2117115

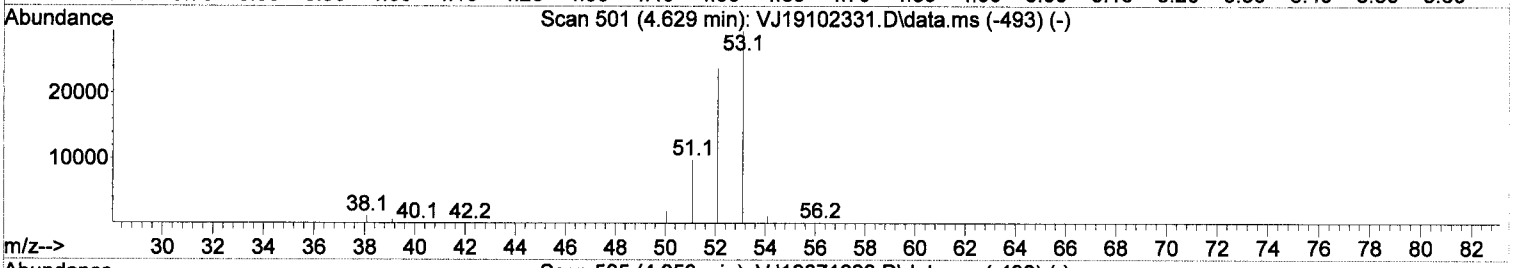
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	21.59#
0.00	0.00	0.00
0.00	0.00	0.00

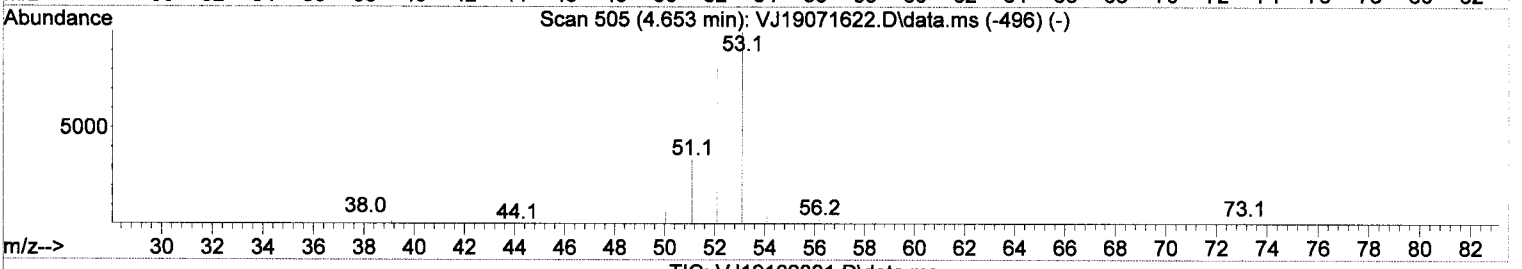
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 81.38 ug/L

response 74111

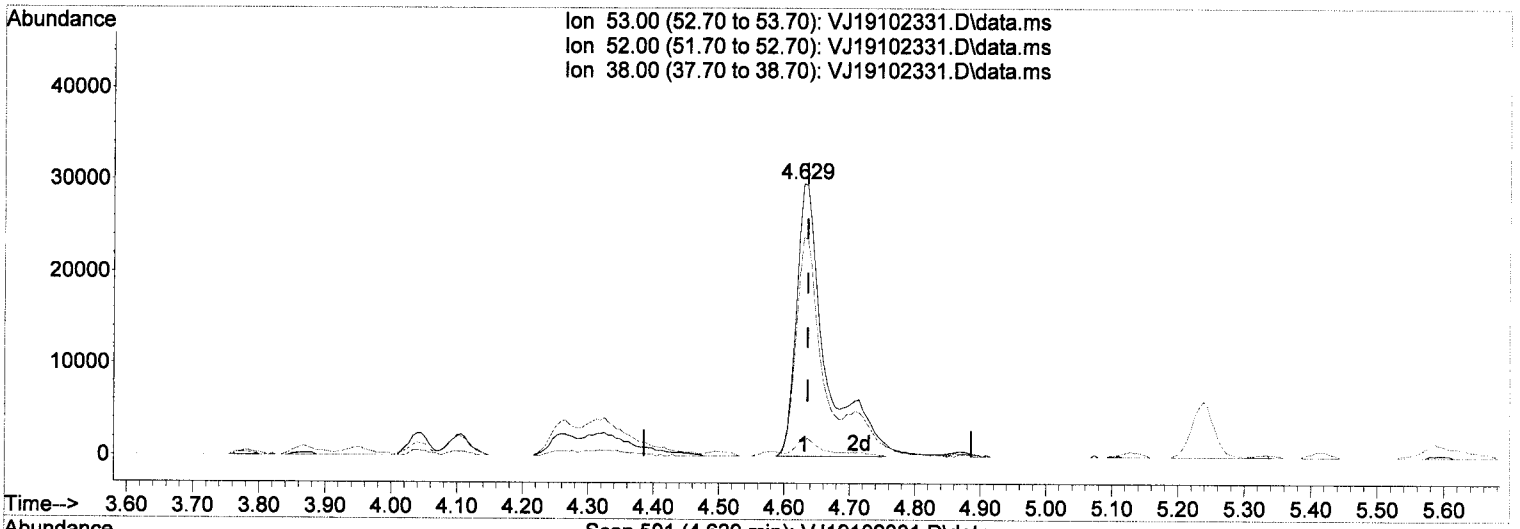
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.38
38.00	5.50	4.25
0.00	0.00	0.00

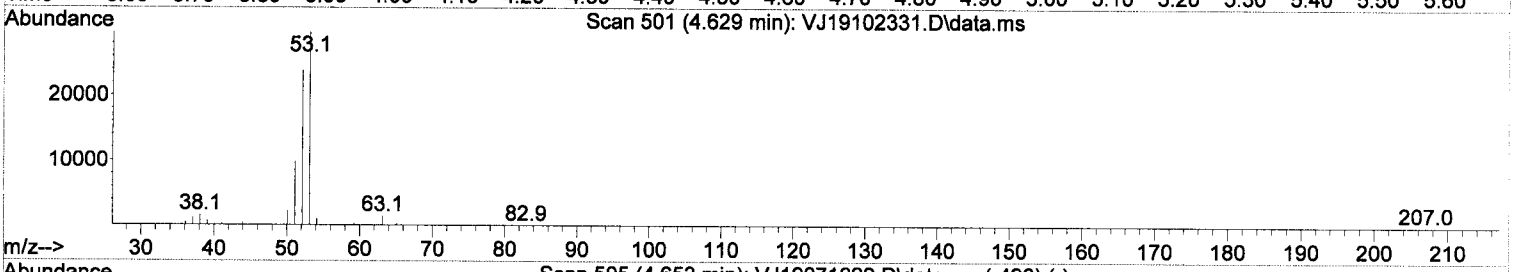
M2.

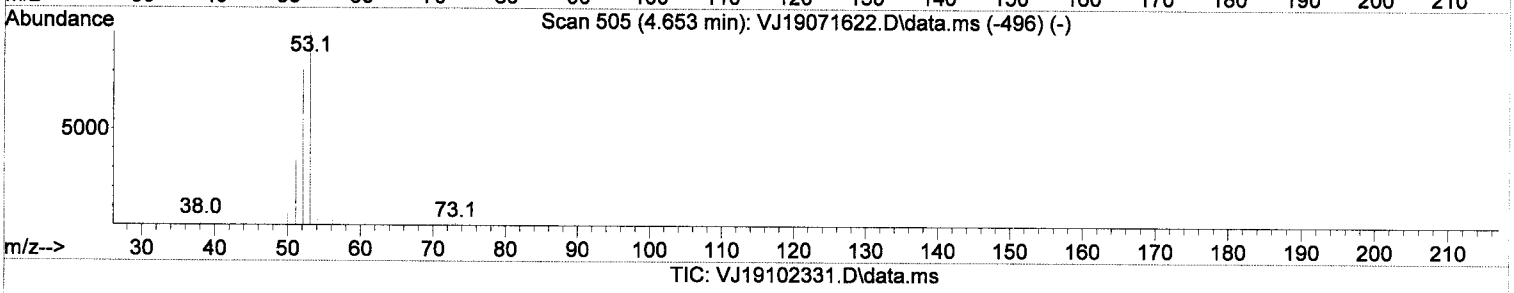
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 102.87 ug/L m

response 93684

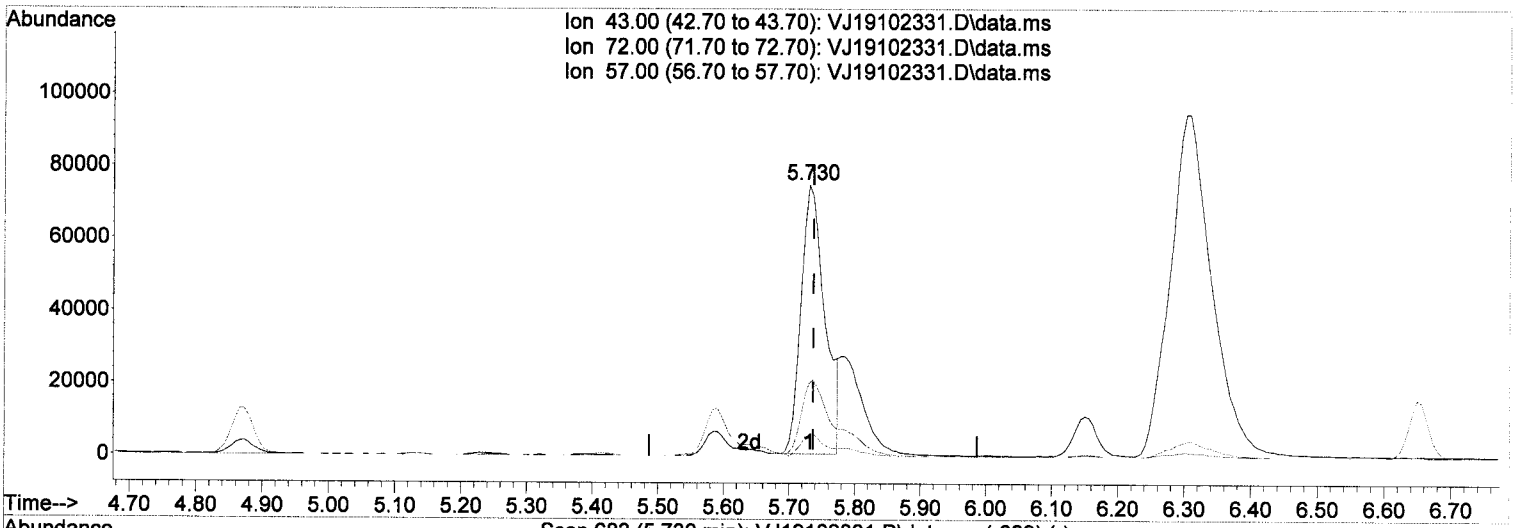
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.38
38.00	5.50	5.68
0.00	0.00	0.00

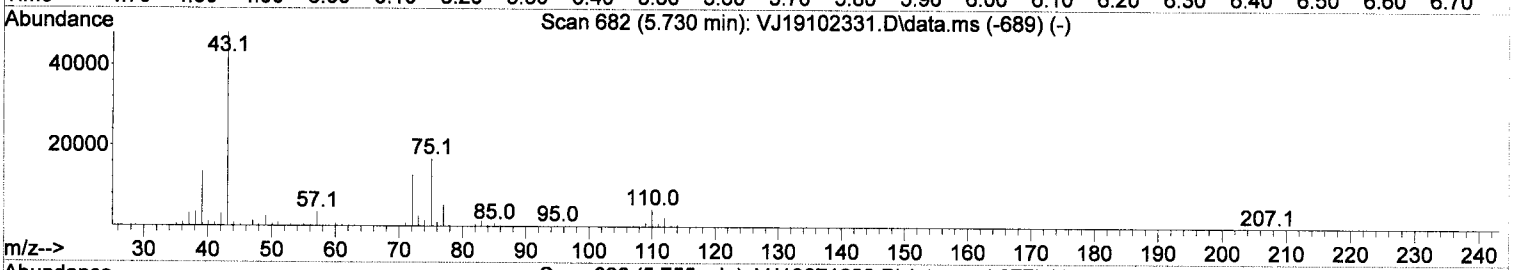
10/24/19

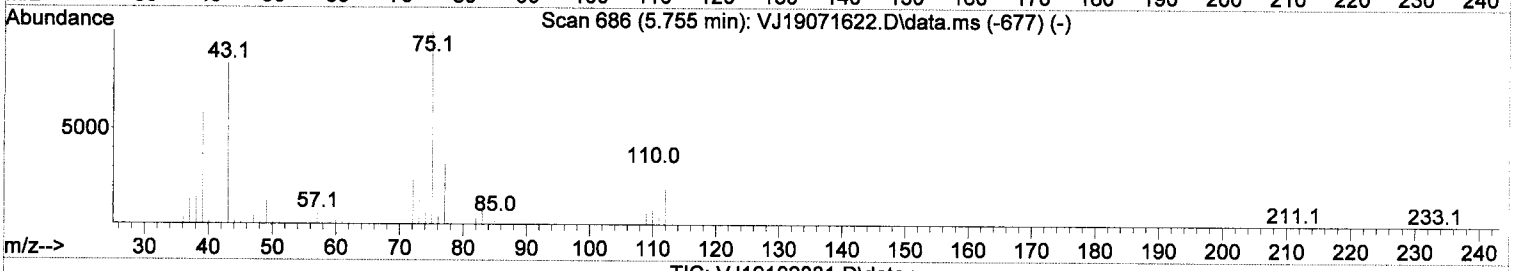
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 113.99 ug/L

response 189043

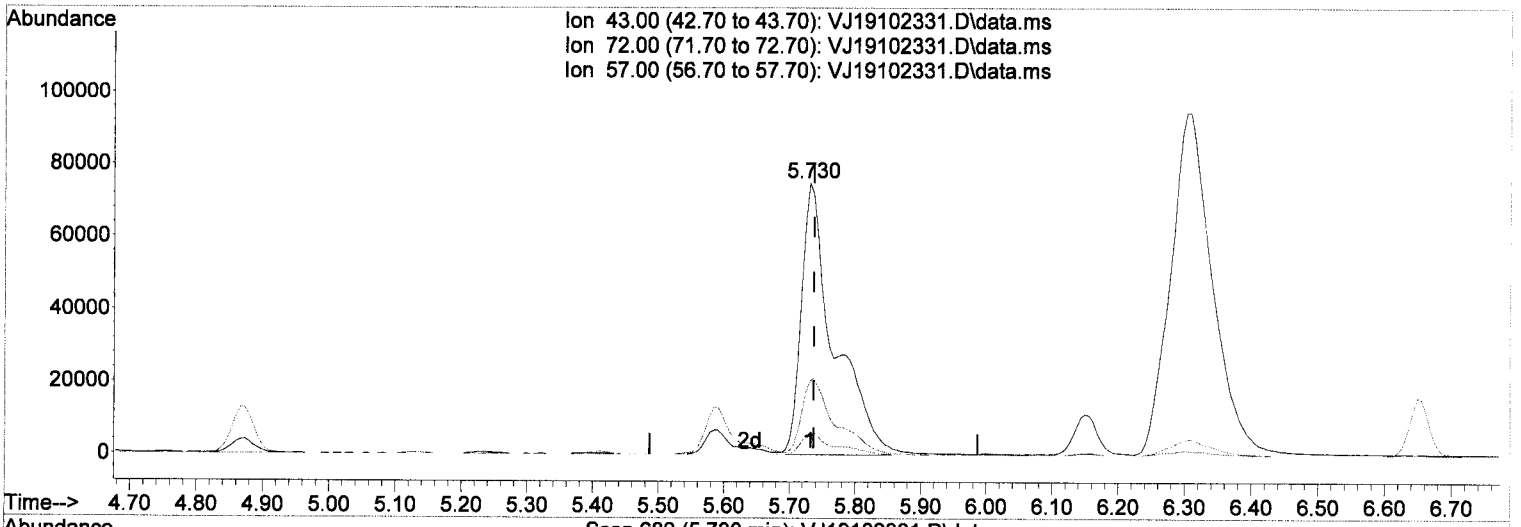
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	25.57
57.00	7.20	7.73
0.00	0.00	0.00

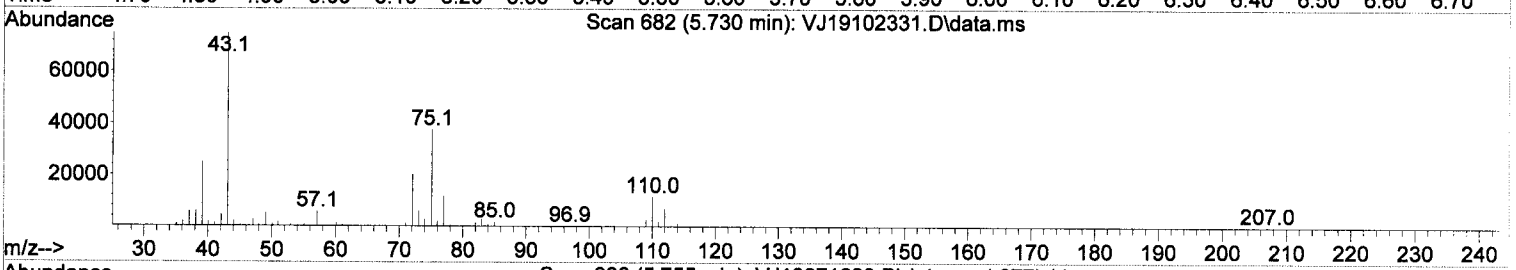
M.2.

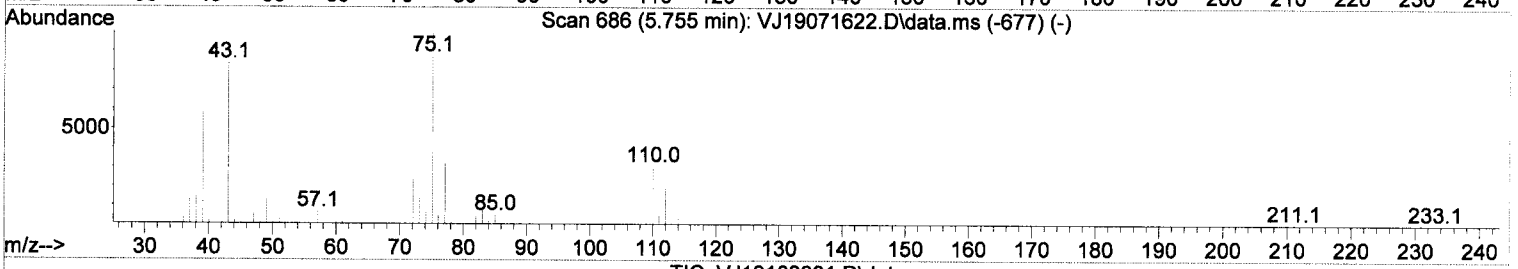
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102331.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 158.17 ug/L m

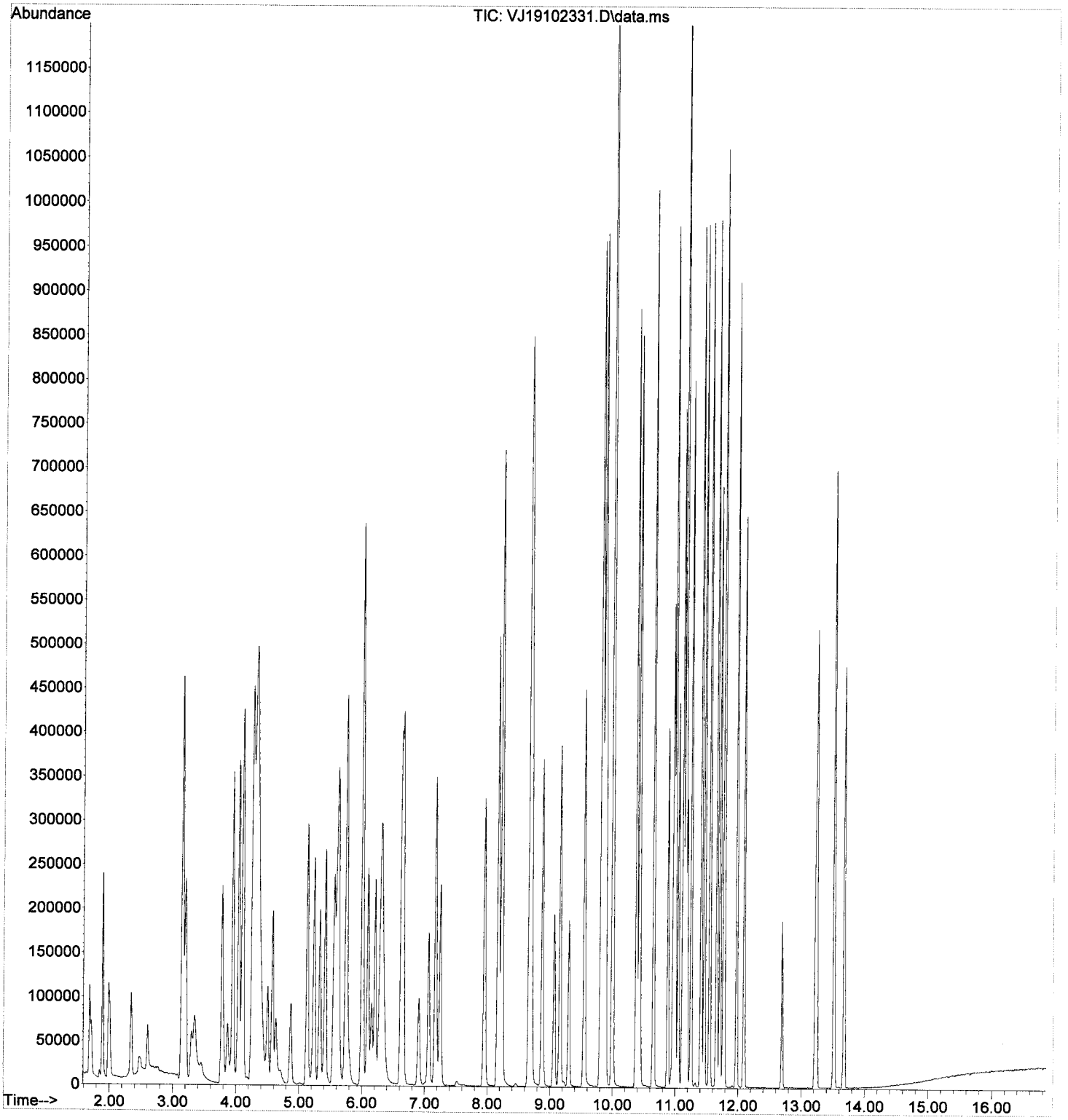
response 262305

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	26.97
57.00	7.20	7.66
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102331.D
Acq On : 24 Oct 2019 1:53 am
Operator : MM
Sample : 9J23072-CAL9
Misc : 1X 5mL 50/100PPB VOC+MeOH
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 24 08:14:06 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102332.D
Acq On : 24 Oct 2019 2:19 am
Operator : MM
Sample : 9J23072-IBL2
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 24 09:41:13 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

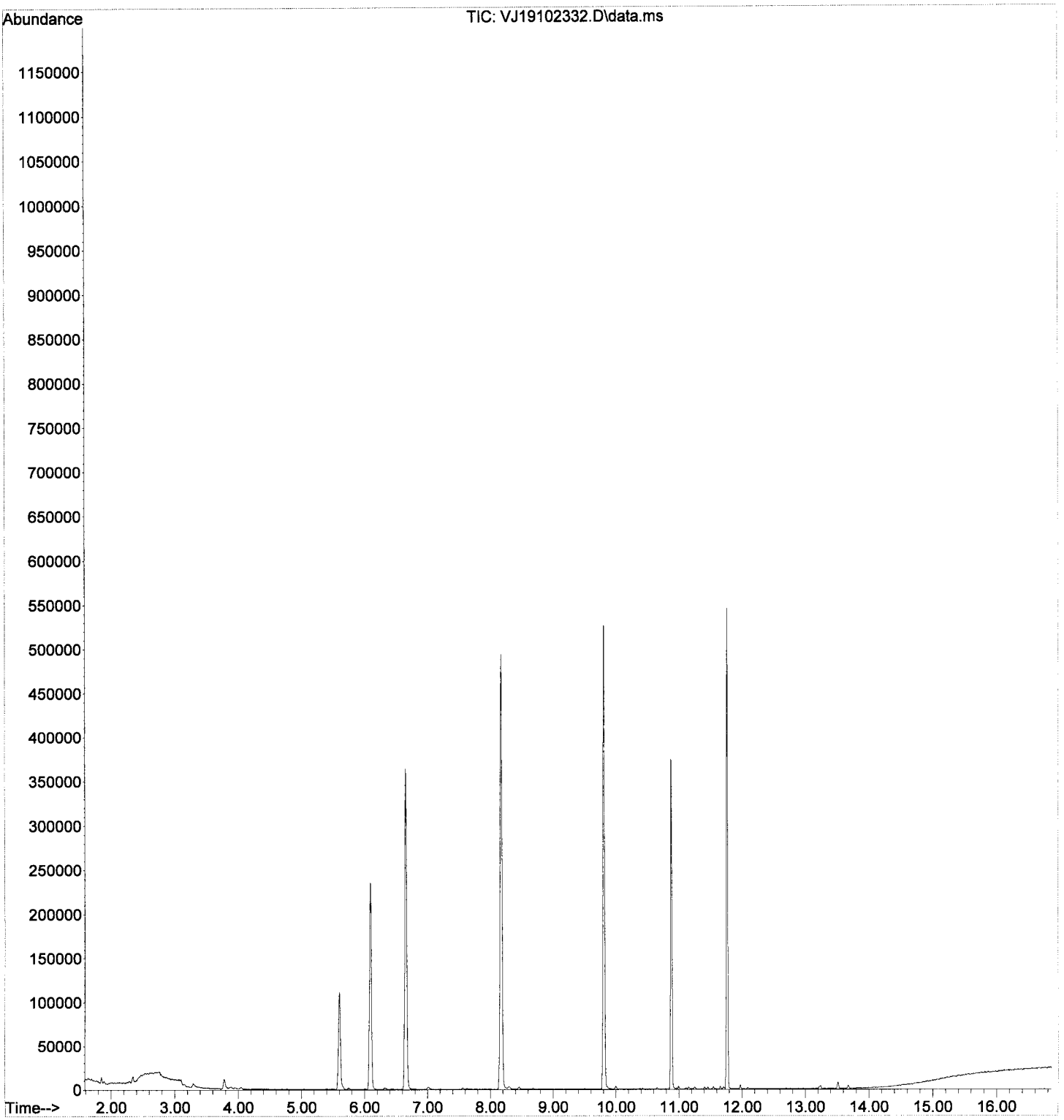
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.089	99	102386	50.00 ug/L	0.00
43) Chlorobenzene-d5 (I)	9.806	117	273341	50.00 ug/L	0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	110048	50.00 ug/L	0.00
System Monitoring Compounds					
30) Dibromofluoromethane (S)	5.596	111	78486	48.50 ug/L	0.00
37) 1,4-Difluorobenzene (S)	6.655	114	312478	49.61 ug/L	0.00
45) Toluene-d8 (S)	8.170	98	385533	50.58 ug/L	0.00
64) 4-Bromofluorobenzene (S)	10.883	174	82617	51.99 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.697	85	208	0.09 ug/L #	51
3) Chloromethane	1.892	50	3251	0.81 ug/L	95
5) Bromomethane	2.342	96	4006	0.77 ug/L	98
6) Chloroethane	2.451	64	166	1.62 ug/L #	61
8) Ethanol	3.321	45	6089	Below Cal	89
10) Carbon Disulfide	3.157	76	2317	0.33 ug/L	81
12) Iodomethane	3.297	142	3655	4.71 ug/L	98
13) Methylene Chloride	3.784	84	5623	1.53 ug/L	95
14) Acetone	3.863	43	1912	1.22 ug/L	98
15) t-1,2-Dichloroethene	3.948	61	589	0.15 ug/L	96
28) Tetrahydrofuran	5.596	42	569	0.27 ug/L #	30
31) 1,1-Dichloropropene	5.749	75	547	0.14 ug/L #	39
32) 2-Butanone (MEK)	5.749	43	1103	0.40 ug/L	52
36) iso-Butyl Alcohol	6.314	43	838	2.66 ug/L	90
47) Tetrachloroethene (PCE)	8.681	166	303	0.13 ug/L #	74
55) Chlorobenzene	9.825	112	617	0.08 ug/L #	15
56) Ethylbenzene	9.855	91	1295	0.10 ug/L	93
58) m,p-Xylenes (2)	9.995	91	2069	0.23 ug/L	92
60) Styrene	10.421	104	326	0.22 ug/L	69
62) Isopropylbenzene	10.658	105	1144	0.11 ug/L	82
65) Bromobenzene	10.968	156	205	0.09 ug/L #	72
66) n-Propylbenzene	10.999	91	2329	0.19 ug/L	92
68) 2-Chlorotoluene	11.120	126	217	0.10 ug/L #	77
69) 1,3,5-Trimethylbenzene	11.157	105	1216	0.17 ug/L	82
72) 4-Chlorotoluene	11.254	91	1302	0.19 ug/L	74
73) tert-Butylbenzene	11.406	91	562	0.13 ug/L #	68
74) 1,2,4-Trimethylbenzene	11.461	105	1149	0.15 ug/L	88
75) sec-Butylbenzene	11.546	105	1742	0.19 ug/L	85
76) 4-Isopropyltoluene	11.656	119	1548	0.22 ug/L	87
77) 1,3-Dichlorobenzene	11.711	146	866	0.21 ug/L	86
78) 1,4-Dichlorobenzene	11.777	146	1142	0.26 ug/L #	74
79) n-Butylbenzene	11.972	91	2418	0.35 ug/L	92
80) 1,2-Dichlorobenzene	12.088	146	623	0.16 ug/L	86
82) Hexachlorobutadiene	13.219	223	222	0.46 ug/L #	84
83) 1,2,4-Trichlorobenzene	13.244	180	1195	0.52 ug/L	95
84) Naphthalene	13.511	128	5712	0.70 ug/L	91
85) 1,2,3-Trichlorobenzene	13.676	180	1273	0.57 ug/L	94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102332.D
Acq On : 24 Oct 2019 2:19 am
Operator : MM
Sample : 9J23072-IBL2
Misc : 1X 5mL DI+MeOH
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 24 09:41:13 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	109942	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	294436	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	135112	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.602	111	87982	59.20	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	338746	71.15	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	411311	51.45	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	93929	45.31	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	259035	95.72	ug/L		99
3) Chloromethane	1.898	50	397217	135.02	ug/L		99
4) Vinyl Chloride	1.995	62	313932	119.18	ug/L		96
5) Bromomethane	2.348	96	123566	114.51	ug/L		99
6) Chloroethane	2.494	64	47113	39.45	ug/L		97
7) Trichlorofluoromethane	2.609	101	77408	20.70	ug/L		100
8) Ethanol	3.351	45	449287	7430.86	ug/L		91
9) 1,1-Dichloroethene	3.145	61	396303	118.63	ug/L		91
10) Carbon Disulfide	3.157	76	748104	179.86	ug/L		98
11) Freon 113	3.205	101	250927	167.52	ug/L		87
12) Iodomethane	3.297	142	117106	150.44	ug/L		90
13) Methylene Chloride	3.783	84	249850	154.91	ug/L		93
14) Acetone	3.869	43	~~219265~~	180.51	ug/L		96 308333
15) t-1,2-Dichloroethene	3.954	61	416493	138.32	ug/L		98
16) n-Hexane	4.045	86	69515	194.60	ug/L	#	71
17) Methyl-tert-butyl-ether	4.106	73	1020787	124.64	ug/L		97
18) tert-Butanol (TBA)	4.325	59	~~2773547~~	3888.55	ug/L	#	86 443802
19) Diisopropyl ether (DIPE)	4.507	45	200708	25.51	ug/L		94
20) 1,1-Dichloroethane	4.580	63	436977	126.37	ug/L		99
21) Acrylonitrile	4.635	53	~~147629~~	154.84	ug/L		97 195553
22) Ethyl-tert-butyl ether...	4.872	59	180440	23.12	ug/L		95
23) c-1,2-Dichloroethene	5.134	61	410212	125.83	ug/L		98
24) 2,2-Dichloropropane	5.243	77	411005	107.61	ug/L		99
25) Bromochloromethane	5.329	49	249374	137.73	ug/L		80
26) Chloroform	5.420	83	483892	114.50	ug/L		96
27) Carbon Tetrachloride	5.560	117	354527	101.38	ug/L		95
28) Tetrahydrofuran	5.590	42	~~162789~~	141.19	ug/L		98 204078
29) 1,1,1-Trichloroethane	5.621	97	466945	112.20	ug/L		98
31) 1,1-Dichloropropene	5.754	75	445742	137.64	ug/L		95
32) 2-Butanone (MEK)	5.736	43	~~360862~~	207.84	ug/L		99 557729
33) Benzene	6.004	78	1359633	162.71	ug/L		100
34) tert-Amyl methyl ether...	6.156	73	167834	21.68	ug/L		96
35) 1,2-Dichloroethane (EDC)	6.211	62	434140	90.85	ug/L		99
36) iso-Butyl Alcohol	6.308	43	909010	5047.15	ug/L		98
38) Trichloroethene (TCE)	6.624	130	292620	137.56	ug/L		96
39) tert-Amyl ethyl ether ...	6.904	59	133080	23.27	ug/L		89
40) Dibromomethane	7.062	93	179023	127.12	ug/L	#	84
41) 1,2-Dichloropropane	7.172	63	350522	160.69	ug/L		96
42) Bromodichloromethane	7.251	83	400178	124.87	ug/L		98
44) c-1,3-Dichloropropene	7.951	75	509437	112.52	ug/L		97
46) Toluene	8.230	91	1343640	110.82	ug/L		99
47) Tetrachloroethene (PCE)	8.681	166	275505	112.53	ug/L		91
48) 4-Methyl-2-Pentanone (...	8.675	43	950533	241.43	ug/L		96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

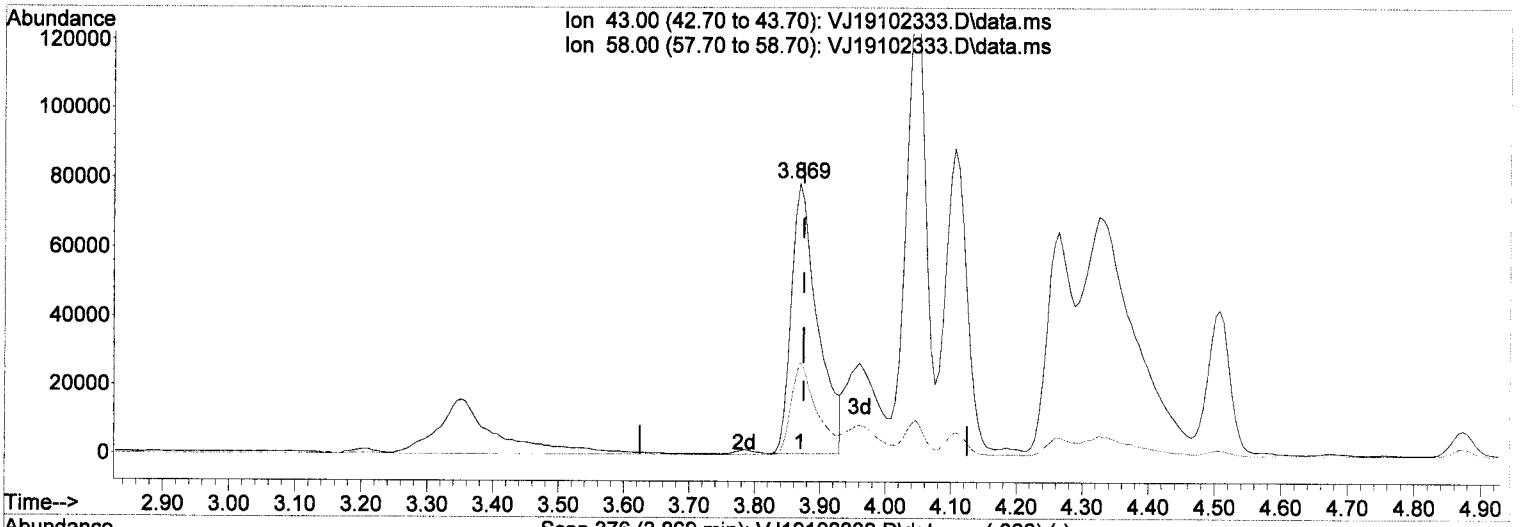
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	481174	99.42	ug/L		96
50) 1,1,2-Trichloroethane	8.881	97	282770	109.51	ug/L		98
51) Dibromochloromethane	9.070	129	256674	93.89	ug/L		99
52) 1,3-Dichloropropane	9.161	76	523949	100.70	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.301	107	289923	106.28	ug/L		99
54) 2-Hexanone	9.545	43	720460	242.97	ug/L		98
55) Chlorobenzene	9.824	112	776195	106.12	ug/L		96
56) Ethylbenzene	9.861	91	1432837	102.66	ug/L		99
57) 1,1,1,2-Tetrachloroethane	9.885	131	268092	96.65	ug/L		98
58) m,p-Xylenes (2)	9.995	91	2158981	201.99	ug/L		98
59) o-Xylene	10.378	91	1054003	99.24	ug/L		96
60) Styrene	10.421	104	801932	120.43	ug/L		98
61) Bromoform	10.439	173	181310	92.74	ug/L		97
62) Isopropylbenzene	10.652	105	1303605	106.28	ug/L		97
65) Bromobenzene	10.968	156	273427	106.29	ug/L	#	81
66) n-Propylbenzene	10.999	91	1532146	103.39	ug/L		97
67) 1,1,2,2-Tetrachloroethane	11.047	83	412177	131.71	ug/L		97
68) 2-Chlorotoluene	11.120	126	274790	108.64	ug/L		89
69) 1,3,5-Trimethylbenzene	11.157	105	1011802	100.32	ug/L		95
70) 1,2,3-Trichloropropane	11.151	110	134120	99.54	ug/L		91
71) t-1,4-Dichloro-2-butene	11.187	88	61632	94.37	ug/L		92
72) 4-Chlorotoluene	11.248	91	888249	97.03	ug/L		93
73) tert-Butylbenzene	11.406	91	578812	88.19	ug/L		90
74) 1,2,4-Trimethylbenzene	11.461	105	1005539	98.57	ug/L		97
75) sec-Butylbenzene	11.546	105	1269236	107.09	ug/L		96
76) 4-Isopropyltoluene	11.656	119	1010639	101.32	ug/L		97
77) 1,3-Dichlorobenzene	11.710	146	503820	100.77	ug/L		96
78) 1,4-Dichlorobenzene	11.777	146	508874	105.36	ug/L		95
79) n-Butylbenzene	11.972	91	927051	100.71	ug/L		95
80) 1,2-Dichlorobenzene	12.094	146	463375	100.38	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.696	157	90298	123.10	ug/L		70
82) Hexachlorobutadiene	13.219	223	61067	84.34	ug/L		94
83) 1,2,4-Trichlorobenzene	13.243	180	290565	100.30	ug/L		96
84) Naphthalene	13.517	128	1129820	117.98	ug/L		99
85) 1,2,3-Trichlorobenzene	13.675	180	281123	101.50	ug/L		98

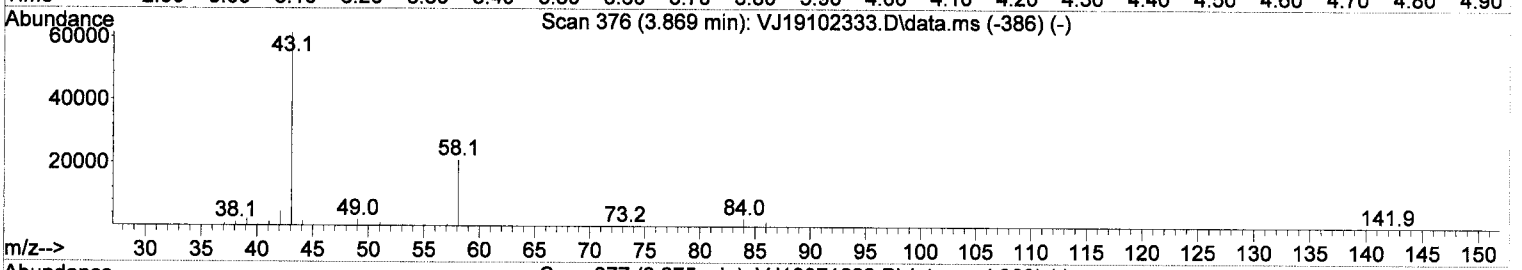
(#) = qualifier out of range (m) = manual integration (+) = signals summed

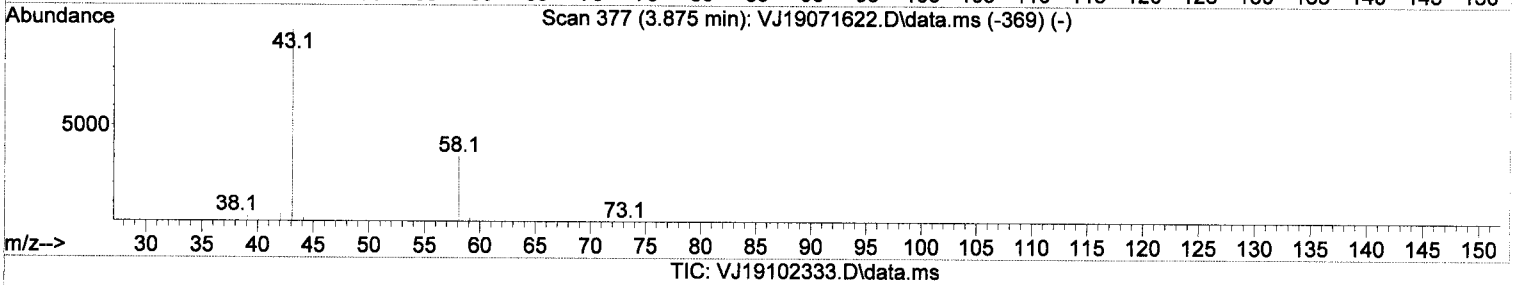
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(14) Acetone

3.869min (-0.005) 180.51 ug/L

response 219265

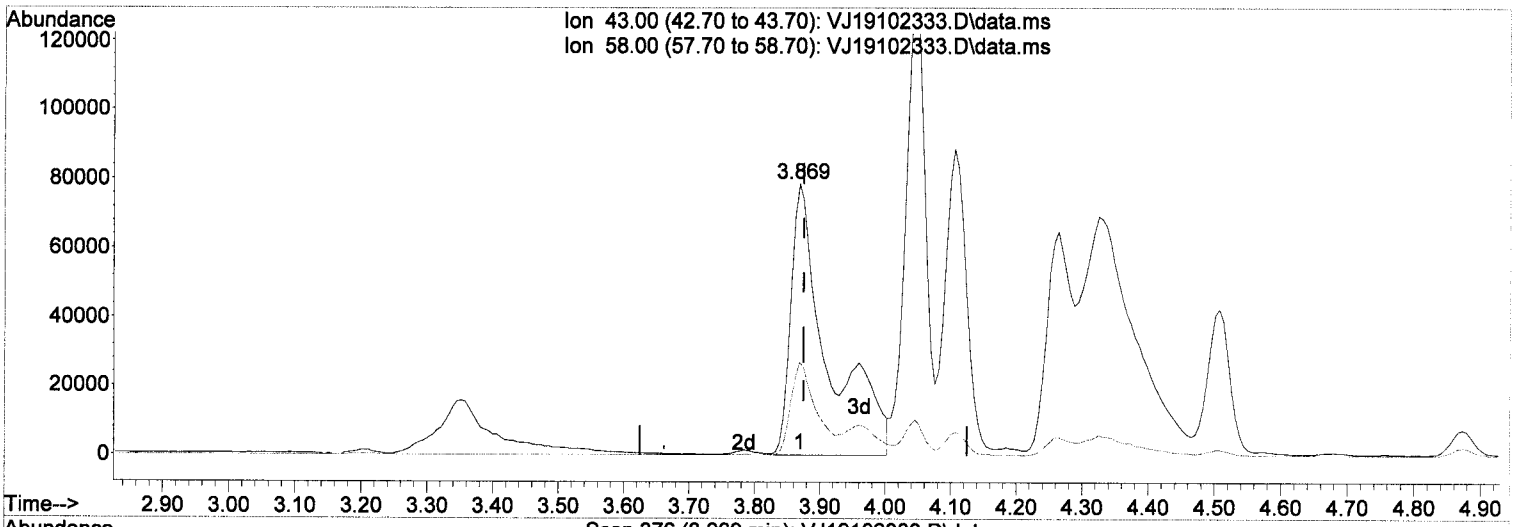
M.2.

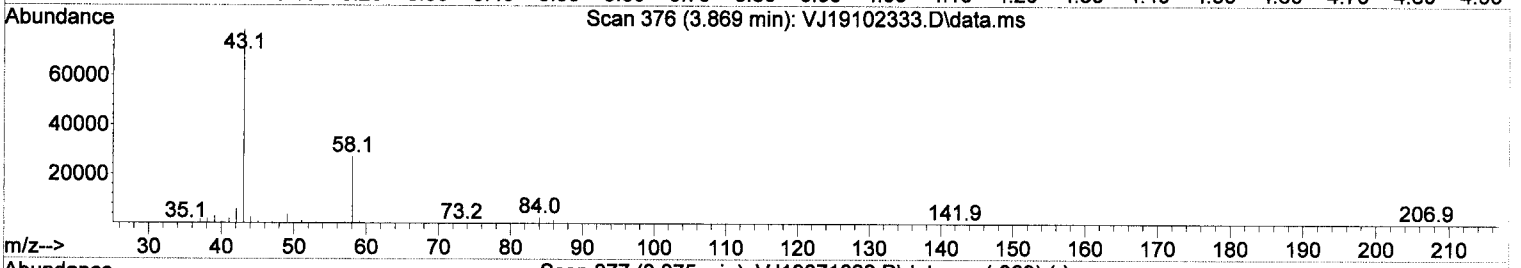
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	34.49
0.00	0.00	0.00
0.00	0.00	0.00

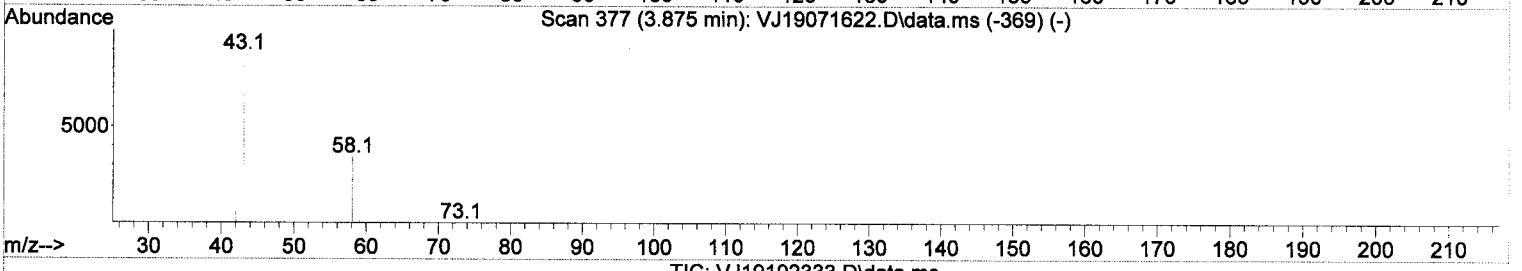
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(14) Acetone

3.869min (-0.005) 253.83 ug/L m

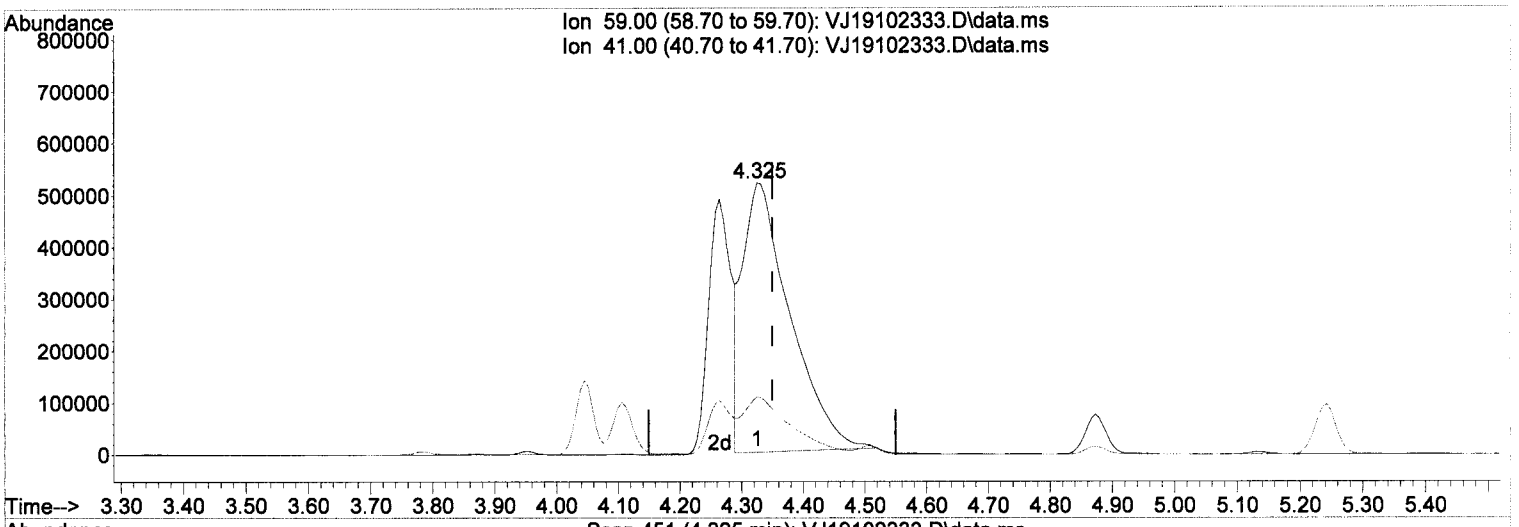
response 308333

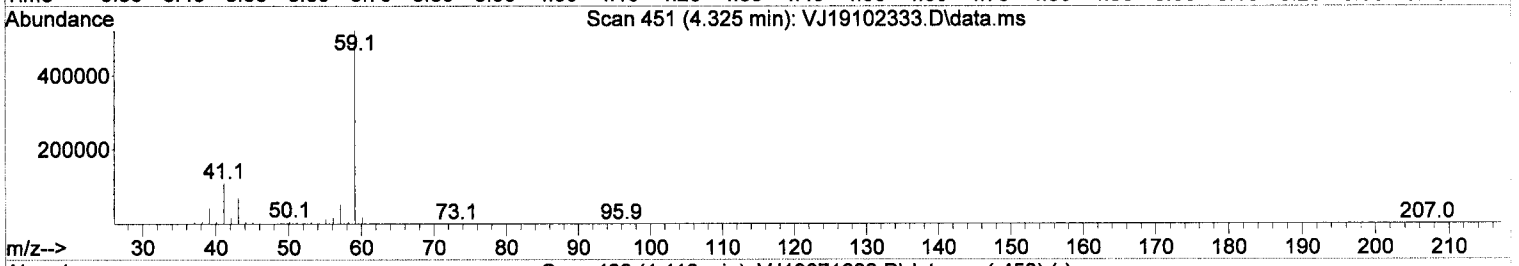
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	34.33
0.00	0.00	0.00
0.00	0.00	0.00

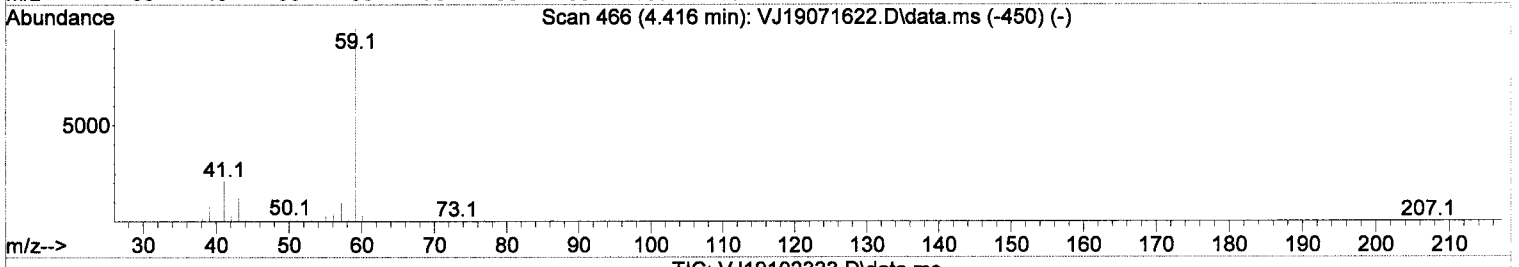
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(18) tert-Butanol (TBA)

4.325min (-0.024) 3888.55 ug/L

response 2773547

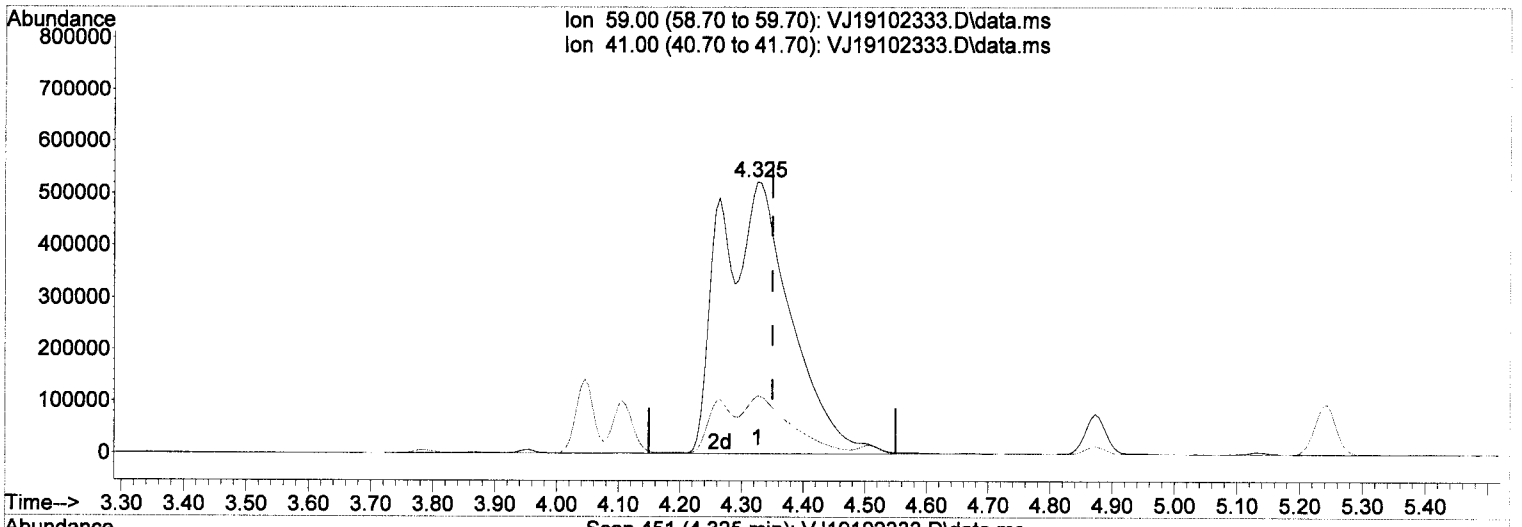
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	21.18#
0.00	0.00	0.00
0.00	0.00	0.00

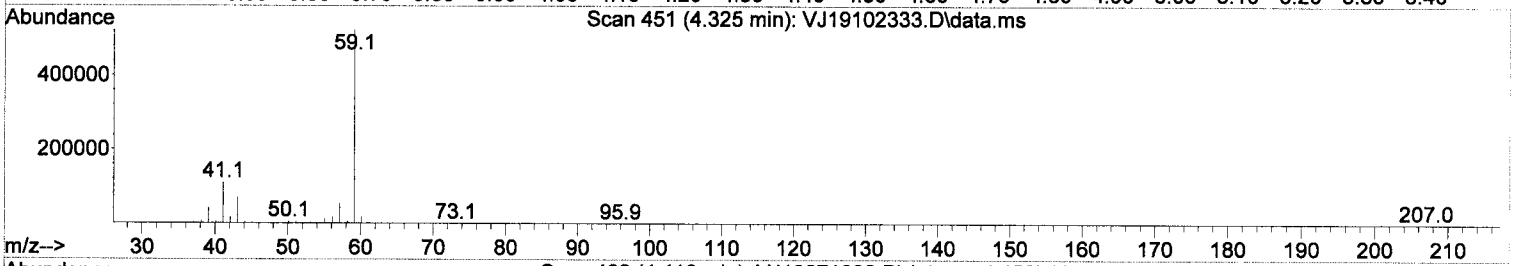
M.2.

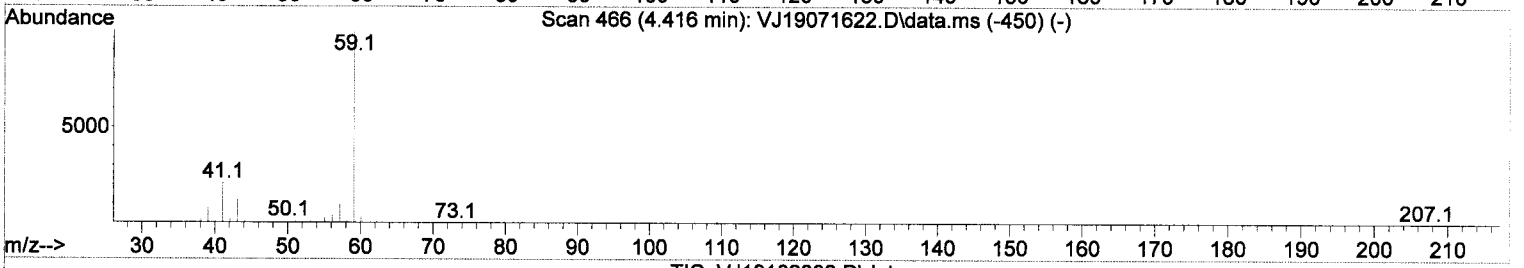
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(18) tert-Butanol (TBA)

4.325min (-0.024) 5356.48 ug/L m

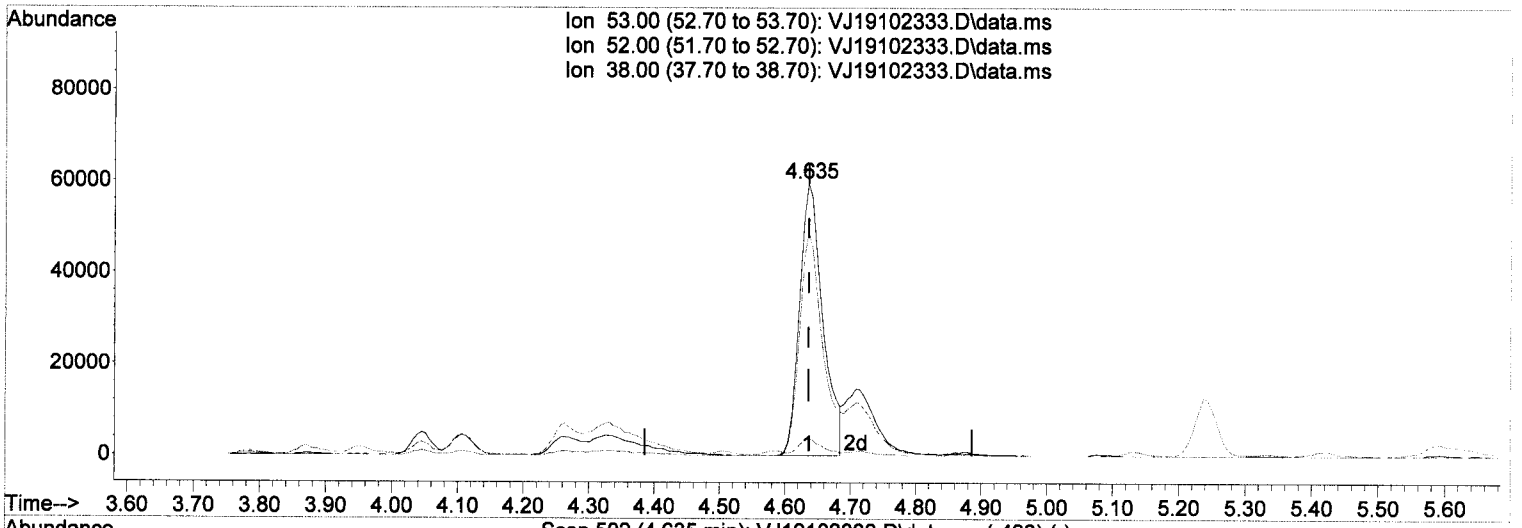
response 4143802

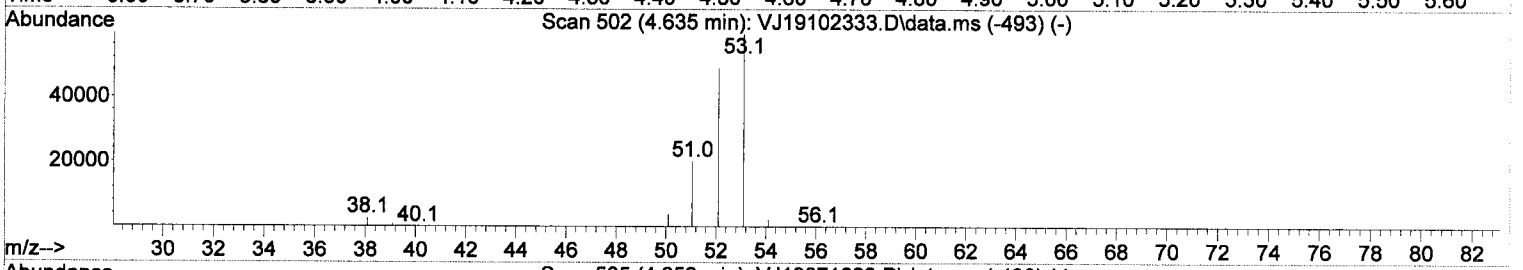
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	21.18#
0.00	0.00	0.00
0.00	0.00	0.00

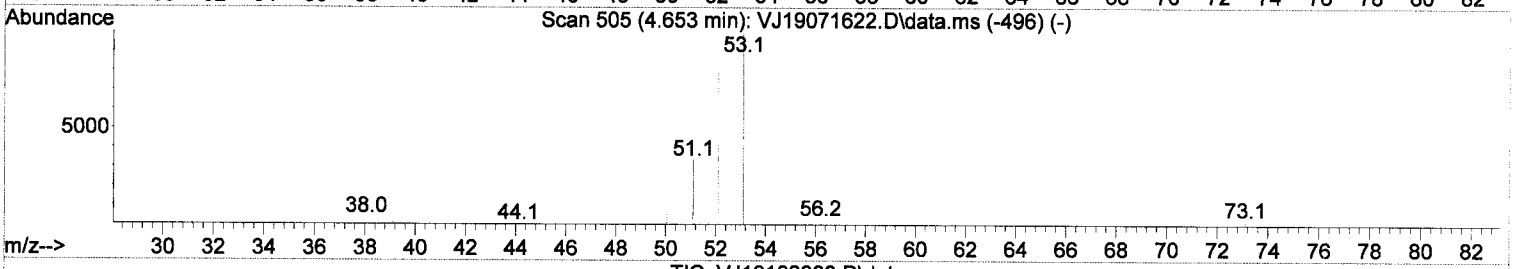
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 154.84 ug/L

response 147629

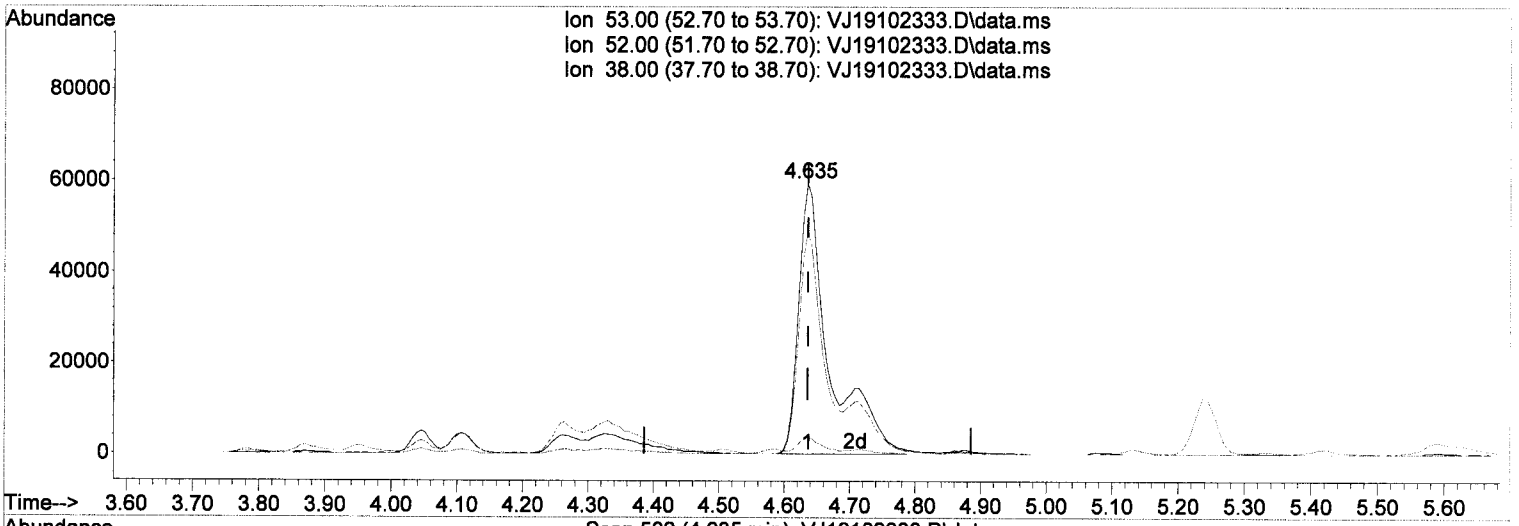
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.06
38.00	5.50	5.06
0.00	0.00	0.00

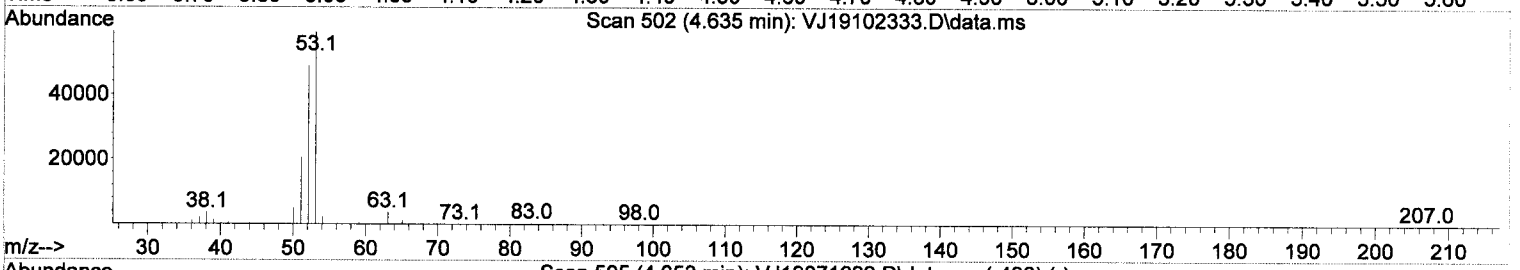
M.2.

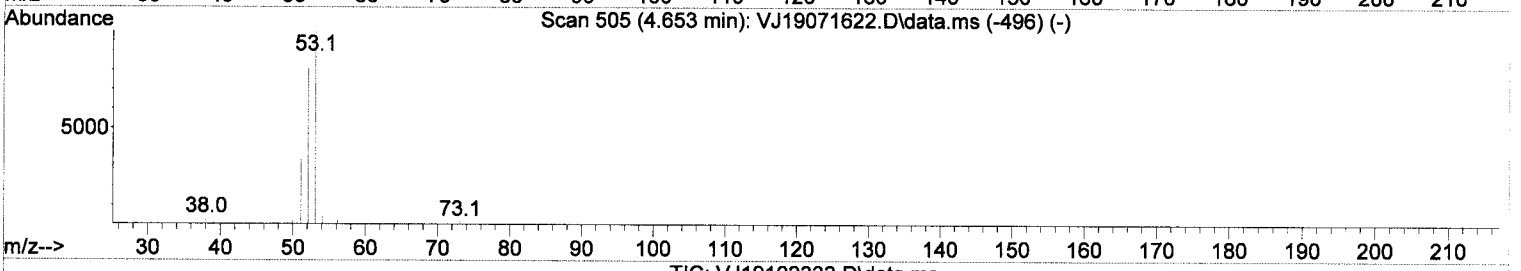
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 205.11 ug/L m

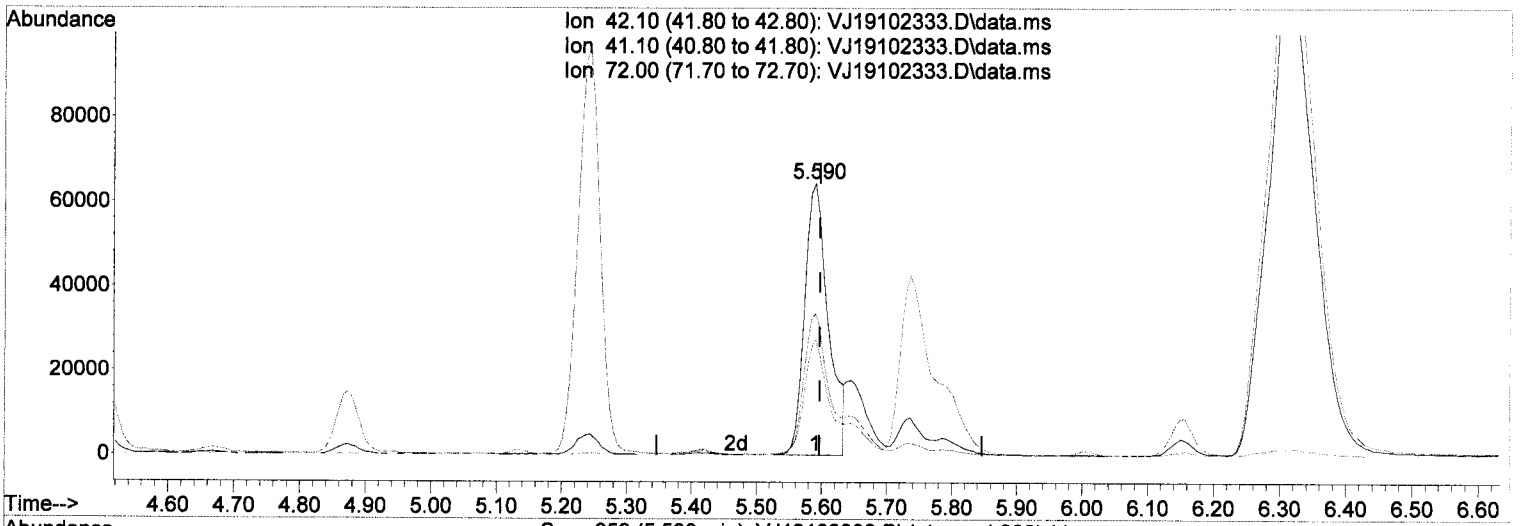
response 195553

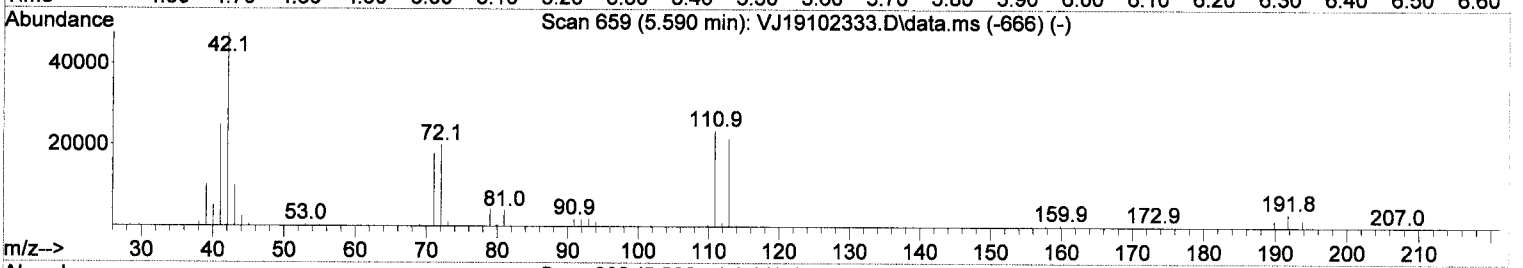
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	82.06
38.00	5.50	6.20
0.00	0.00	0.00

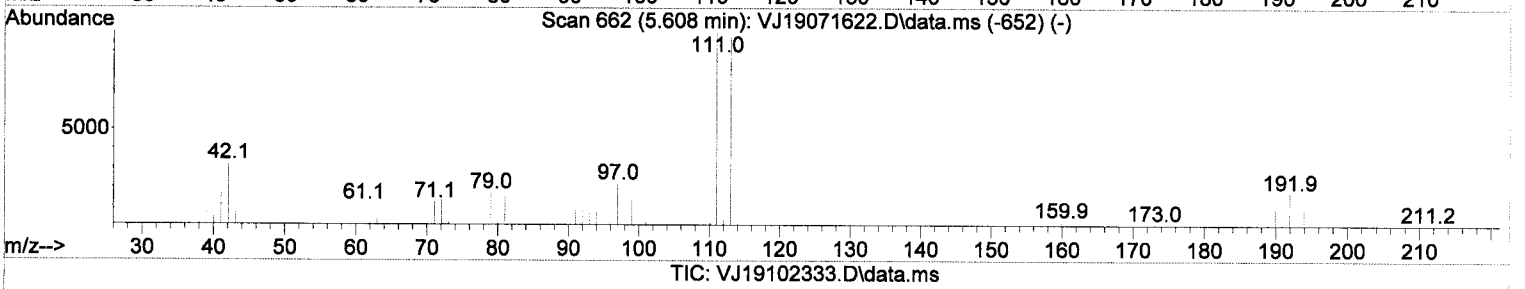
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(28) Tetrahydrofuran

5.590min (-0.006) 141.19 ug/L

response 162789

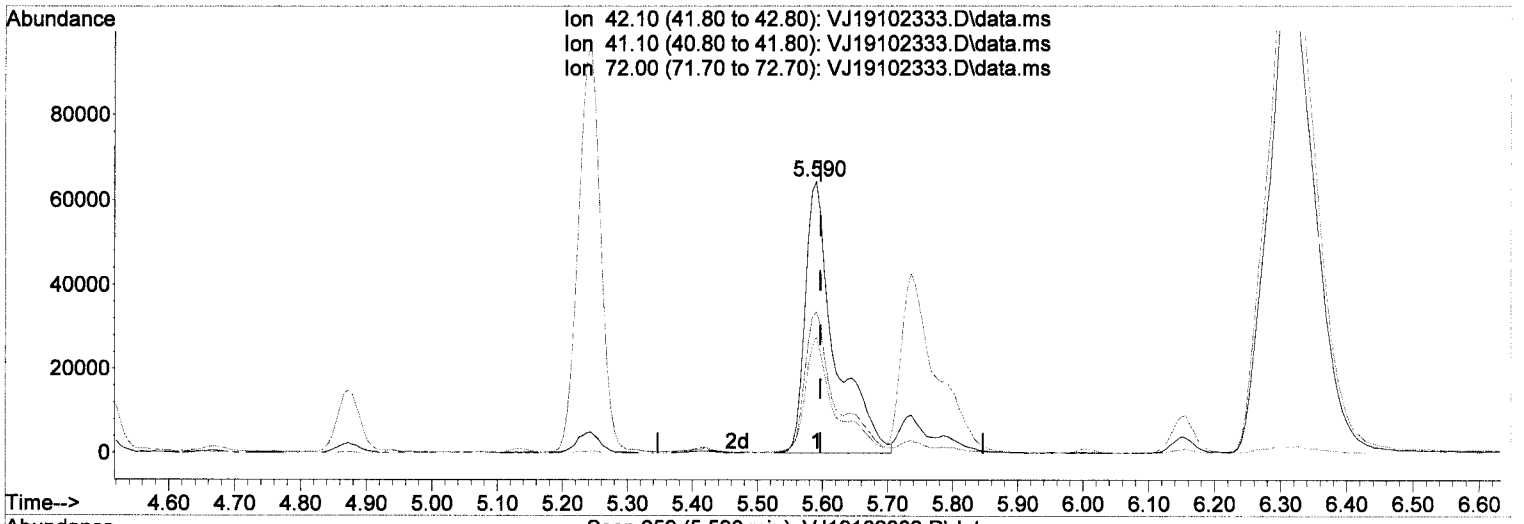
Ion	Exp%	Act%
42.10	100.00	100.00
41.10	52.70	51.87
72.00	40.40	42.79
0.00	0.00	0.00

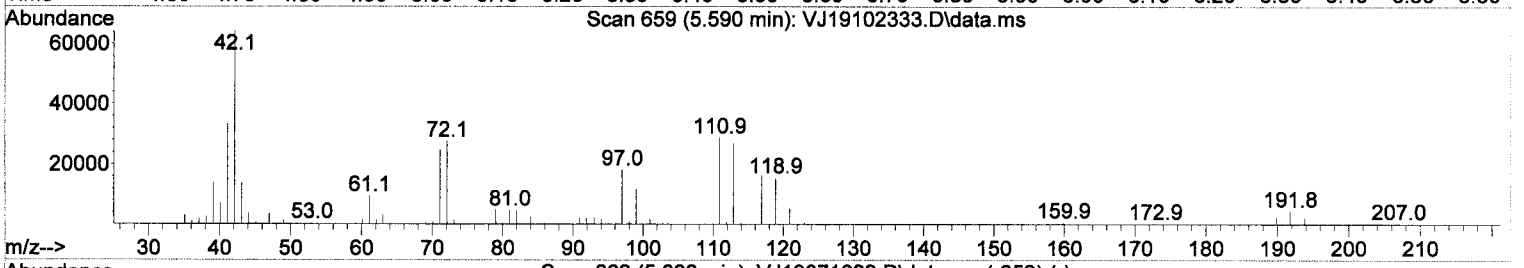
M.2.

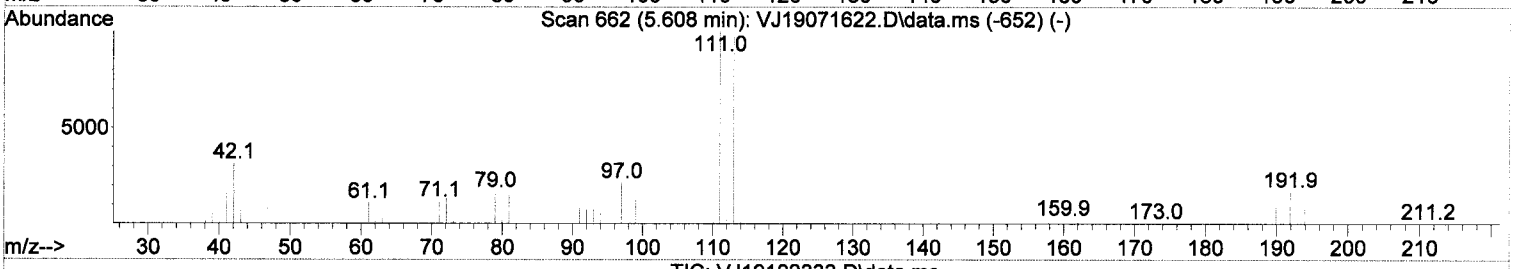
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(28) Tetrahydrofuran

5.590min (-0.006) 177.00 ug/L m

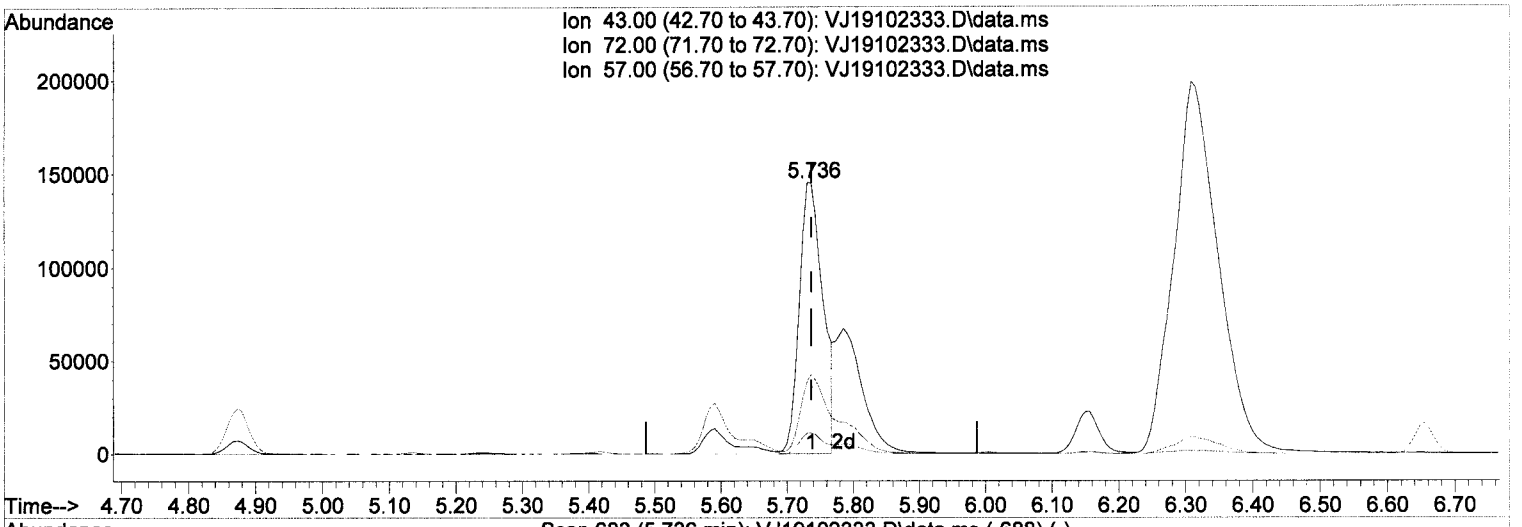
response 204078

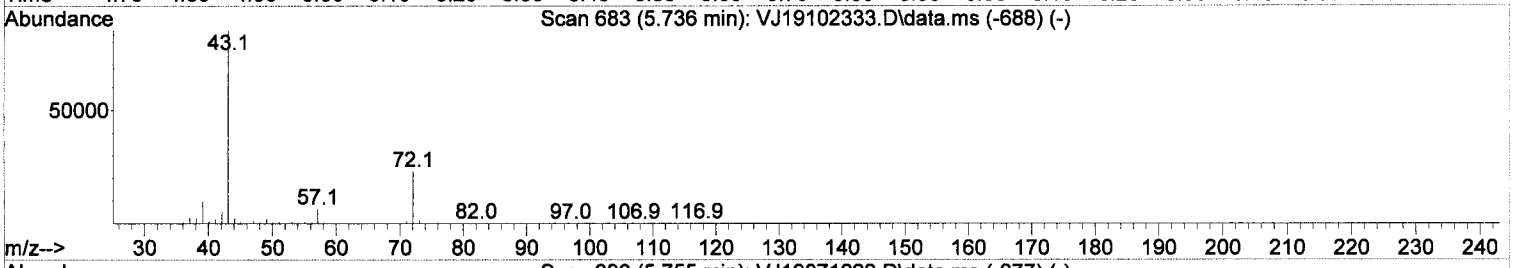
Ion	Exp%	Act%
42.10	100.00	100.00
41.10	52.70	52.22
72.00	40.40	42.79
0.00	0.00	0.00

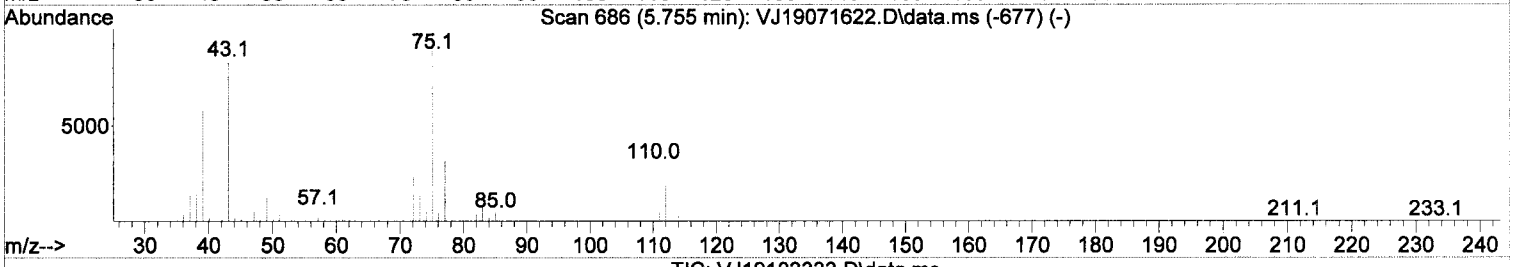
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(32) 2-Butanone (MEK)

5.736min (+ 0.000) 207.84 ug/L

response 360862

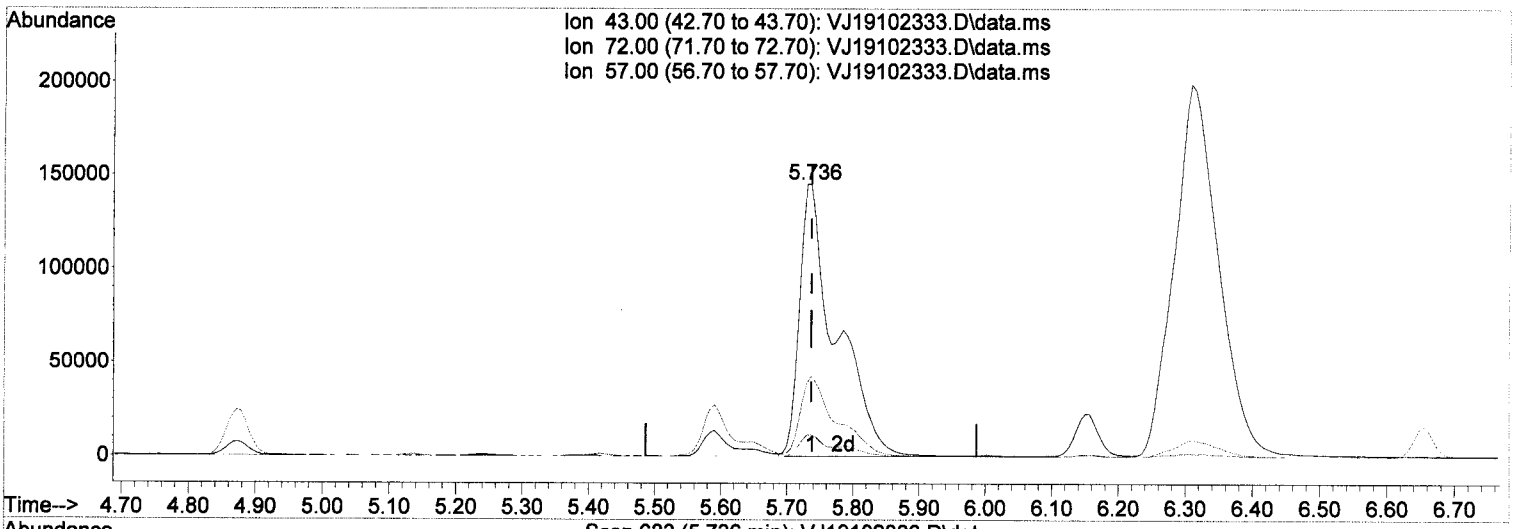
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	28.42
57.00	7.20	7.96
0.00	0.00	0.00

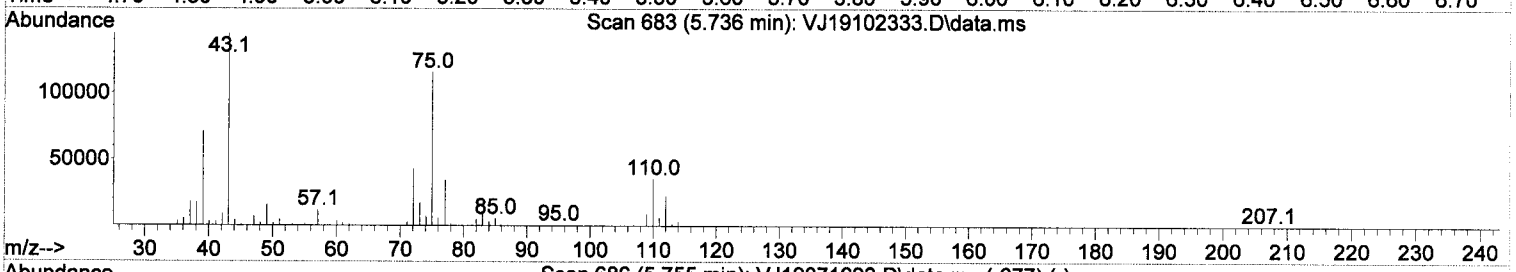
M.J.

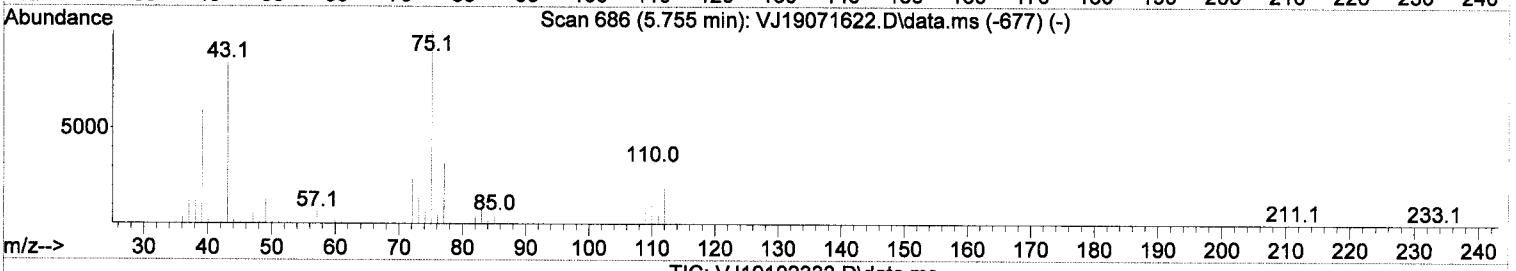
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102333.D\data.ms

(32) 2-Butanone (MEK)

5.736min (+ 0.000) 321.23 ug/L (m)

response 557729

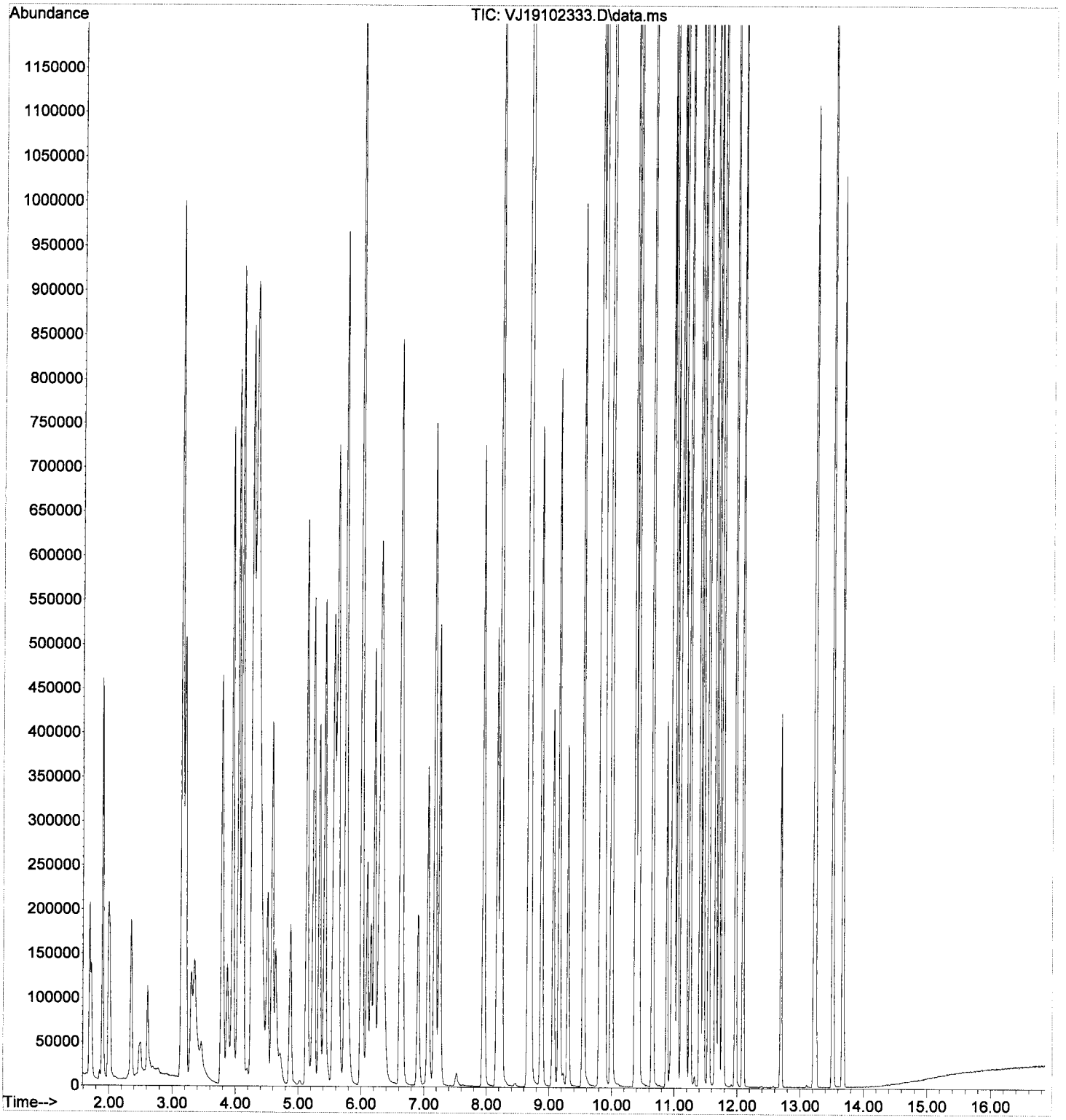
Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	29.40
57.00	7.20	7.90
0.00	0.00	0.00

m 10/24/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102333.D
Acq On : 24 Oct 2019 2:46 am
Operator : MM
Sample : 9J23072-CALA
Misc : 1X 5mL 100/200PPB VOC+MeOH
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 24 08:14:09 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102334.D
Acq On : 24 Oct 2019 3:13 am
Operator : MM
Sample : 9J23072-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 24 09:41:16 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	104554	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	284982	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	116300	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	80800	48.89	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	322580	50.15	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	399241	50.24	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	86666	51.61	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.697	85	796	0.33	ug/L	#	51
3) Chloromethane	1.892	50	3867	0.94	ug/L		94
5) Bromomethane	2.342	96	5091	1.60	ug/L		99
6) Chloroethane	2.463	64	55	1.35	ug/L	#	8
8) Ethanol	3.333	45	5609	Below Cal			90
9) 1,1-Dichloroethene	3.139	61	786	0.20	ug/L	#	64
10) Carbon Disulfide	3.151	76	4770	0.66	ug/L		87
11) Freon 113	3.193	101	775	0.33	ug/L		81
12) Iodomethane	3.291	142	5133	6.48	ug/L		83
13) Methylene Chloride	3.784	84	5648	1.49	ug/L		88
14) Acetone	3.875	43	2370	1.49	ug/L		93
15) t-1,2-Dichloroethene	3.948	61	1187	0.29	ug/L		85
18) tert-Butanol (TBA)	4.270	59	353	0.43	ug/L	#	1
28) Tetrahydrofuran	5.621	42	406	0.19	ug/L	#	60
31) 1,1-Dichloropropene	5.749	75	1167	0.28	ug/L		86
32) 2-Butanone (MEK)	5.742	43	1402	0.50	ug/L		91
33) Benzene	6.004	78	1461	0.11	ug/L		81
36) iso-Butyl Alcohol	6.320	43	926	2.88	ug/L		92
38) Trichloroethene (TCE)	6.631	130	579	0.22	ug/L	#	66
46) Toluene	8.231	91	1947	0.15	ug/L		92
47) Tetrachloroethene (PCE)	8.681	166	934	0.38	ug/L		80
55) Chlorobenzene	9.818	112	1177	0.15	ug/L	#	1
56) Ethylbenzene	9.855	91	2568	0.20	ug/L		98
58) m,p-Xylenes (2)	10.001	91	4085	0.44	ug/L		95
59) o-Xylene	10.378	91	1317	0.15	ug/L		92
60) Styrene	10.427	104	704	0.28	ug/L		71
62) Isopropylbenzene	10.652	105	2219	0.21	ug/L		89
65) Bromobenzene	10.968	156	416	0.17	ug/L		80
66) n-Propylbenzene	10.999	91	4554	0.36	ug/L		97
68) 2-Chlorotoluene	11.114	126	573	0.25	ug/L		86
69) 1,3,5-Trimethylbenzene	11.157	105	2207	0.28	ug/L		94
72) 4-Chlorotoluene	11.254	91	2585	0.35	ug/L		92
73) tert-Butylbenzene	11.406	91	1163	0.25	ug/L	#	79
74) 1,2,4-Trimethylbenzene	11.461	105	2363	0.30	ug/L		97
75) sec-Butylbenzene	11.546	105	3443	0.35	ug/L		95
76) 4-Isopropyltoluene	11.656	119	3126	0.41	ug/L		94
77) 1,3-Dichlorobenzene	11.710	146	1896	0.44	ug/L		96
78) 1,4-Dichlorobenzene	11.777	146	2115	0.46	ug/L	#	78
79) n-Butylbenzene	11.978	91	4572	0.62	ug/L		94
80) 1,2-Dichlorobenzene	12.094	146	1108	0.28	ug/L		84
82) Hexachlorobutadiene	13.219	223	629	1.25	ug/L		93
83) 1,2,4-Trichlorobenzene	13.243	180	2262	0.94	ug/L		95
84) Naphthalene	13.517	128	8728	1.01	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102334.D
Acq On : 24 Oct 2019 3:13 am
Operator : MM
Sample : 9J23072-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 24 09:41:16 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

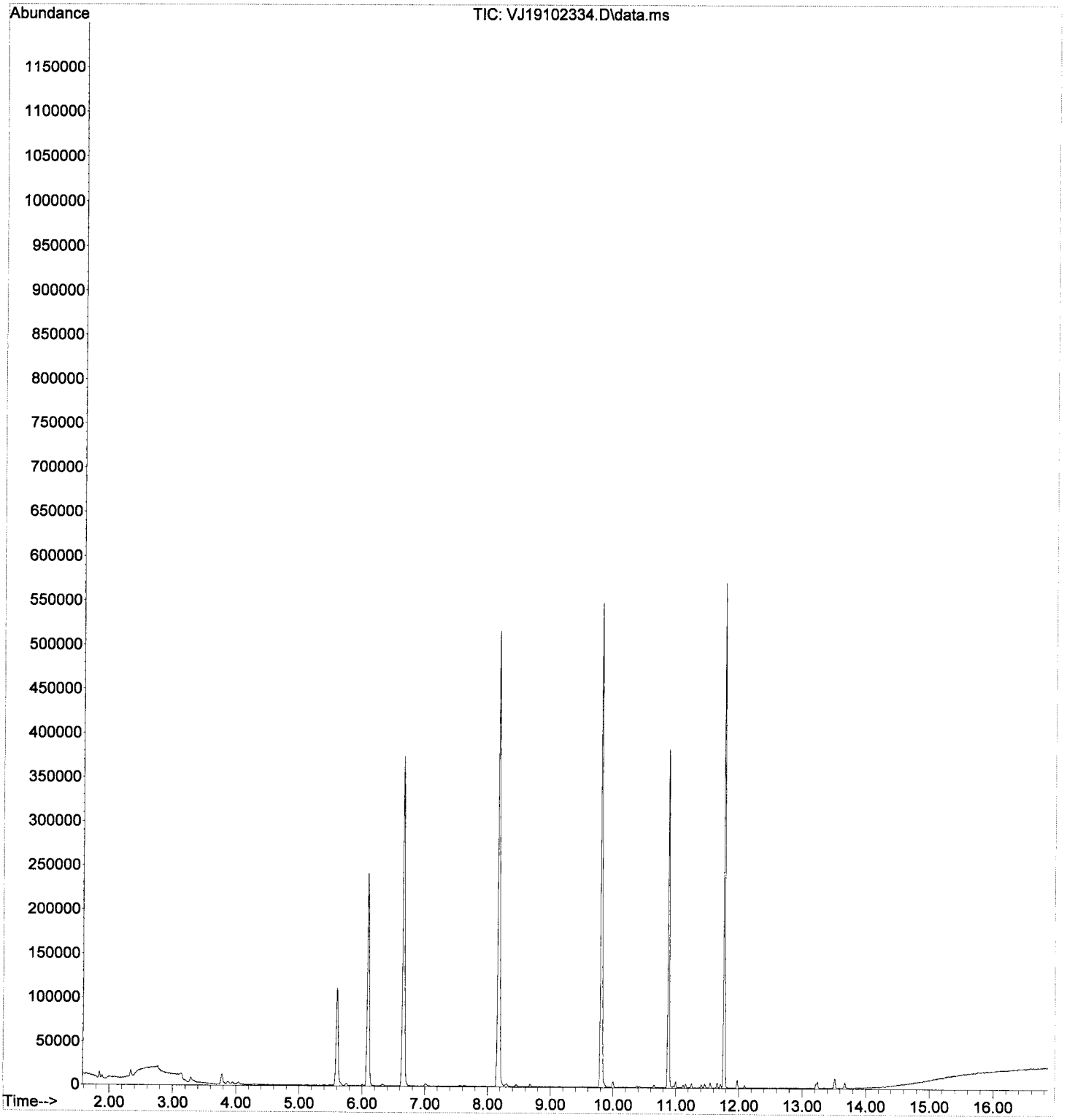
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) 1,2,3-Trichlorobenzene	13.675	180	2207	0.94	ug/L	90

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102334.D
Acq On : 24 Oct 2019 3:13 am
Operator : MM
Sample : 9J23072-IBL3
Misc : 1X 5mL DI+MeOH
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 24 09:41:16 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 24 08:14:12 2019
Quant Method : C:\msdchem\1\methods\VJ~~191024S~~.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	110028	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	301031	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	133612	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	89835	60.40	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	346693	72.76	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	415139	50.79	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	92209	44.98	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	~~292431~~	107.98	ug/L		97
3) Chloromethane	1.892	50	787223	267.39	ug/L		100
4) Vinyl Chloride	1.983	62	635586	232.67	ug/L		96
5) Bromomethane	2.342	96	258257	240.16	ug/L		99
6) Chloroethane	2.488	64	92724	77.59	ug/L		98
7) Trichlorofluoromethane	2.597	101	147731	39.48	ug/L		97
8) Ethanol	3.400	45	713	11.78	ug/L		96
9) 1,1-Dichloroethene	3.139	61	780132	233.34	ug/L		94
10) Carbon Disulfide	3.151	76	1509890	362.72	ug/L		99
11) Freon 113	3.193	101	501626	334.62	ug/L		86
12) Iodomethane	3.291	142	265396	238.33	ug/L		91
13) Methylene Chloride	3.777	84	493458	298.49	ug/L		94
14) Acetone	3.863	43	~~496457~~	408.38	ug/L		99
15) t-1,2-Dichloroethene	3.942	61	823777	273.36	ug/L		96
16) n-Hexane	4.039	86	140691	365.93	ug/L	#	76
17) Methyl-tert-butyl-ether	4.100	73	2113381	257.85	ug/L		98
18) tert-Butanol (TBA)	0.000		0	N.D.			
19) Diisopropyl ether (DIPE)	0.000		0	N.D.			
20) 1,1-Dichloroethane	4.580	63	865836	250.20	ug/L		99
21) Acrylonitrile	4.629	53	~~328546~~	344.33	ug/L		97
22) Ethyl-tert-butyl ether...	4.860	59	57	0.01	ug/L	#	38
23) c-1,2-Dichloroethene	5.128	61	811012	248.58	ug/L		98
24) 2,2-Dichloropropane	5.237	77	813691	212.88	ug/L		98
25) Bromochloromethane	5.329	49	489443	270.12	ug/L		84
26) Chloroform	5.414	83	951891	225.05	ug/L		96
27) Carbon Tetrachloride	5.554	117	735322	210.11	ug/L		96
28) Tetrahydrofuran	5.584	42	~~357281~~	309.64	ug/L		96
29) 1,1,1-Trichloroethane	5.621	97	937584	225.11	ug/L		97
31) 1,1-Dichloropropene	5.748	75	896409	276.59	ug/L		95
32) 2-Butanone (MEK)	5.730	43	~~847722~~	487.88	ug/L		97
33) Benzene	6.004	78	2717357	324.94	ug/L		99
34) tert-Amyl methyl ether...	6.156	73	133	0.02	ug/L	#	46
35) 1,2-Dichloroethane (EDC)	6.205	62	860316	179.89	ug/L		99
36) iso-Butyl Alcohol	6.302	43	1895741	10517.61	ug/L		97
38) Trichloroethene (TCE)	6.625	130	600664	270.76	ug/L		97
39) tert-Amyl ethyl ether ...	0.000		0	N.D.			
40) Dibromomethane	7.063	93	353624	250.91	ug/L		84
41) 1,2-Dichloropropane	7.172	63	710561	325.50	ug/L		97
42) Bromodichloromethane	7.245	83	825346	257.33	ug/L		97
44) c-1,3-Dichloropropene	7.951	75	1055097	227.94	ug/L		95
46) Toluene	8.231	91	2694190	217.35	ug/L		98
47) Tetrachloroethene (PCE)	8.675	166	563695	225.19	ug/L		85
48) 4-Methyl-2-Pentanone (...	8.675	43	1880689	467.22	ug/L		94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 24 08:14:12 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration

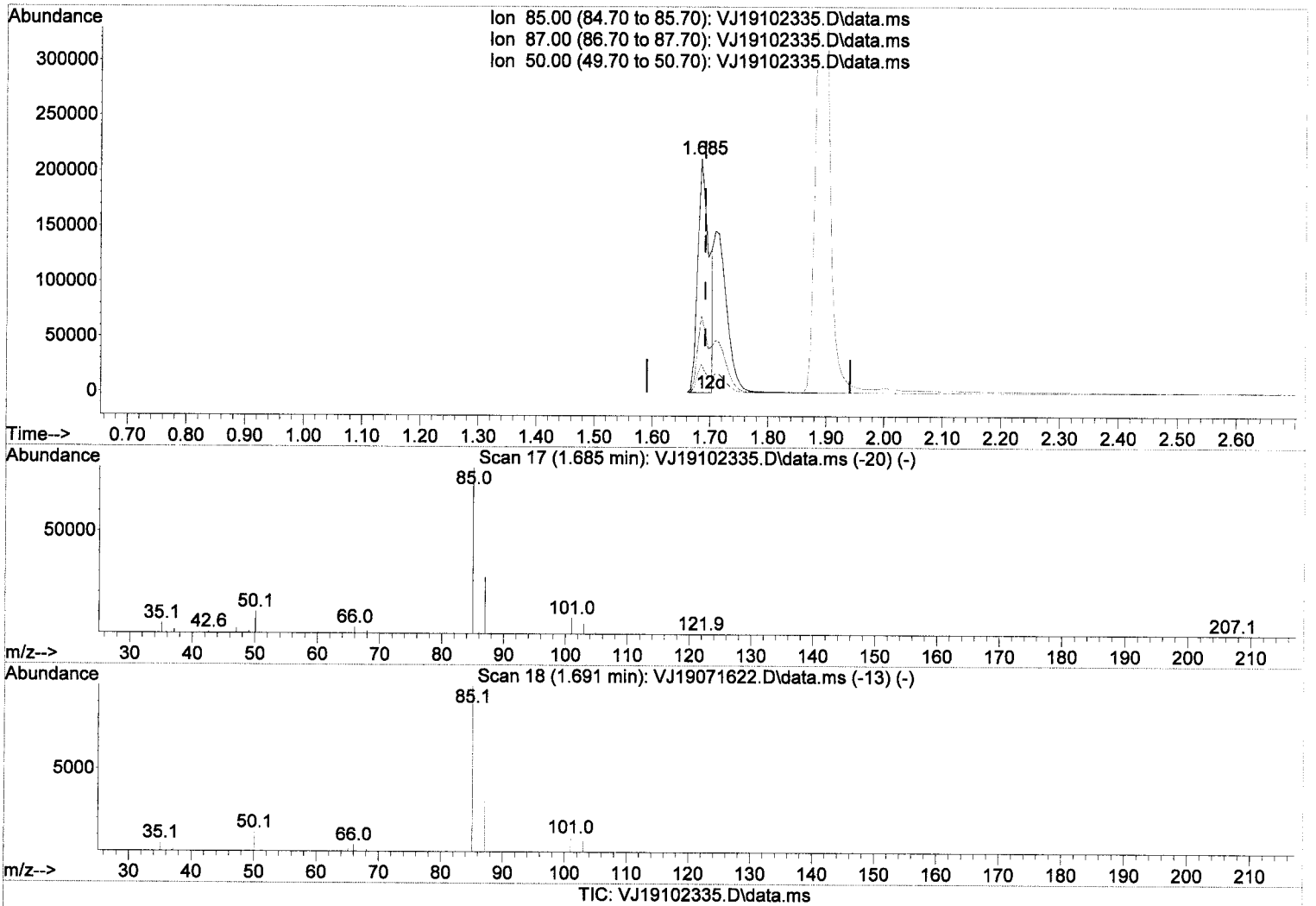
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) t-1,3-Dichloropropene	8.705	75	979397	197.94	ug/L		98
50) 1,1,2-Trichloroethane	8.875	97	564264	214.50	ug/L		97
51) Dibromochloromethane	9.064	129	542189	193.99	ug/L		99
52) 1,3-Dichloropropane	9.161	76	1049067	197.21	ug/L		98
53) 1,2-Dibromoethane (EDB)	9.301	107	586578	210.31	ug/L		100
54) 2-Hexanone	9.545	43	1458573	481.12	ug/L		96
55) Chlorobenzene	9.825	112	1537073	205.55	ug/L		96
56) Ethylbenzene	9.861	91	2864835	200.77	ug/L		100
57) 1,1,1,2-Tetrachloroethane	9.885	131	543615	191.69	ug/L		97
58) m,p-Xylenes (2)	9.995	91	4351315	398.18	ug/L		99
59) o-Xylene	10.378	91	2102591	193.64	ug/L		97
60) Styrene	10.421	104	1640257	240.92	ug/L		99
61) Bromoform	10.439	173	371025	177.73	ug/L		97
62) Isopropylbenzene	10.652	105	2575948	205.41	ug/L		98
65) Bromobenzene	10.968	156	539540	212.10	ug/L	#	82
66) n-Propylbenzene	10.999	91	3009505	205.36	ug/L		97
67) 1,1,2,2-Tetrachloroethane	11.047	83	808397	261.23	ug/L		97
68) 2-Chlorotoluene	11.120	126	541055	216.31	ug/L		90
69) 1,3,5-Trimethylbenzene	11.157	105	2020440	202.57	ug/L		96
70) 1,2,3-Trichloropropane	11.151	110	266315	199.87	ug/L		92
71) t-1,4-Dichloro-2-butene	11.187	88	121850	188.67	ug/L	#	92
72) 4-Chlorotoluene	11.248	91	1741373	192.36	ug/L		93
73) tert-Butylbenzene	11.406	91	1137746	175.29	ug/L		91
74) 1,2,4-Trimethylbenzene	11.461	105	1974970	195.77	ug/L		97
75) sec-Butylbenzene	11.546	105	2487376	212.22	ug/L		96
76) 4-Isopropyltoluene	11.656	119	1999489	202.71	ug/L		98
77) 1,3-Dichlorobenzene	11.710	146	987891	199.81	ug/L		96
78) 1,4-Dichlorobenzene	11.777	146	992164	207.74	ug/L		95
79) n-Butylbenzene	11.972	91	1809932	198.83	ug/L		94
80) 1,2-Dichlorobenzene	12.094	146	919855	201.50	ug/L		98
81) 1,2-Dibromo-3-Chloropr...	12.696	157	195586	269.62	ug/L		75
82) Hexachlorobutadiene	13.219	223	119522	166.93	ug/L		94
83) 1,2,4-Trichlorobenzene	13.243	180	586605	204.77	ug/L		96
84) Naphthalene	13.511	128	2345481	247.68	ug/L		98
85) 1,2,3-Trichlorobenzene	13.675	180	576564	210.50	ug/L		98

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 24 08:14:12 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



TIC: VJ19102335.D\data.ms

(2) Dichlorodifluoromethane

1.685min (-0.006) 107.98 ug/L

response 292431

M.2.

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	31.10	32.99
50.00	11.20	12.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
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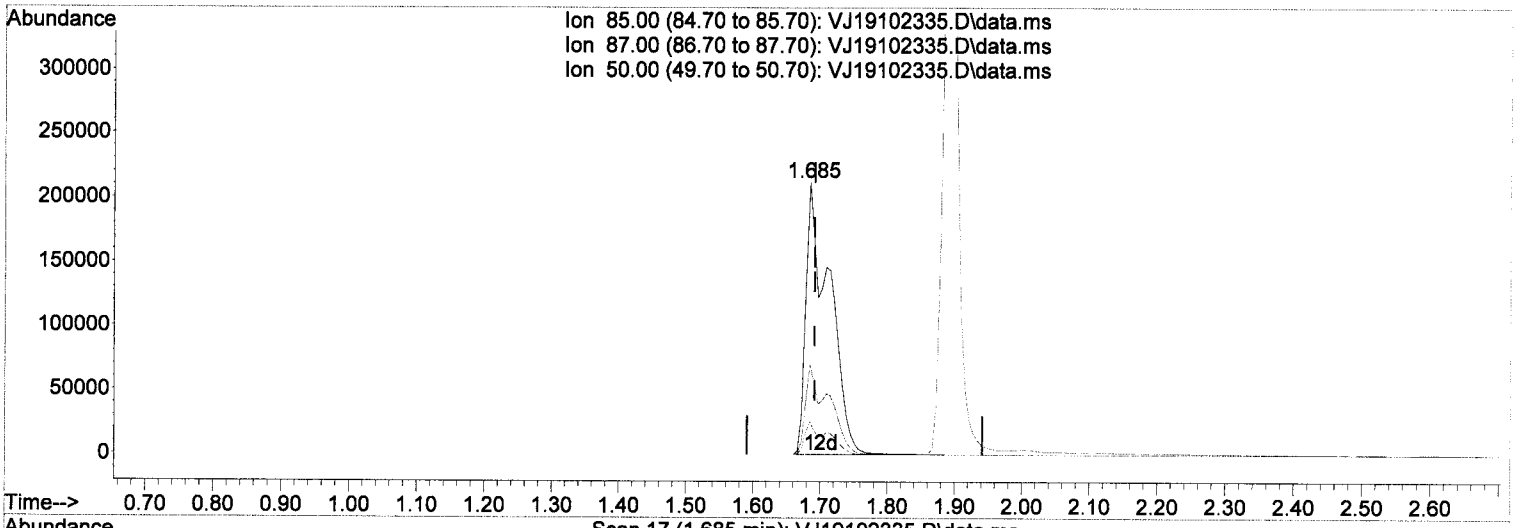

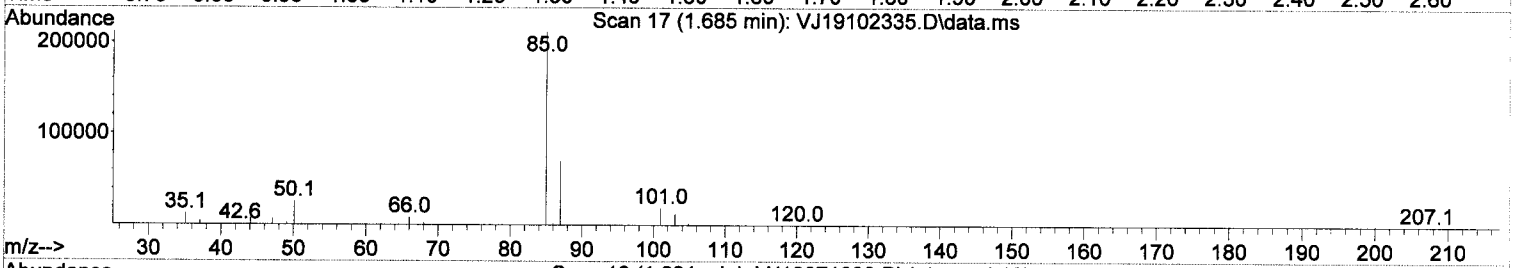

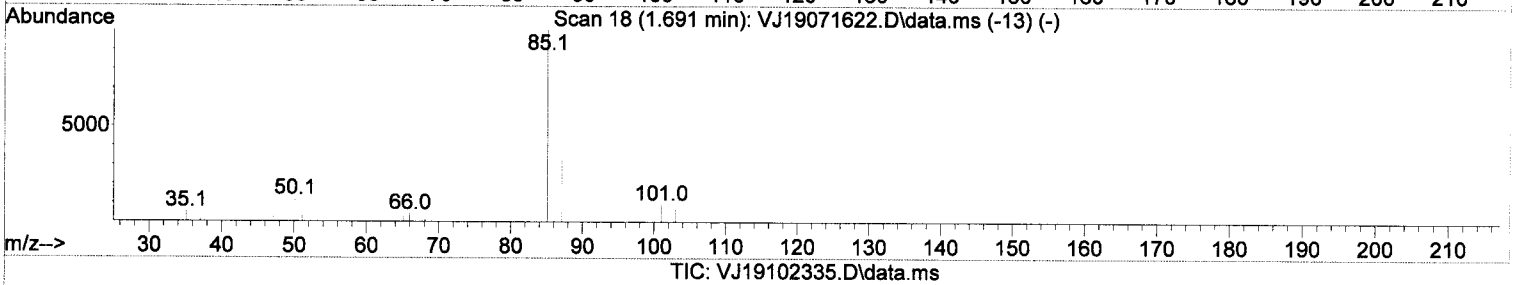

TIC: VJ19102335.D\data.ms

(2) Dichlorodifluoromethane

1.685min (-0.006) 190.24 ug/L m

response 515195

Ion	Exp%	Act%
85.00	100.00	100.00
87.00	31.10	32.99
50.00	11.20	12.13
0.00	0.00	0.00

10/24/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
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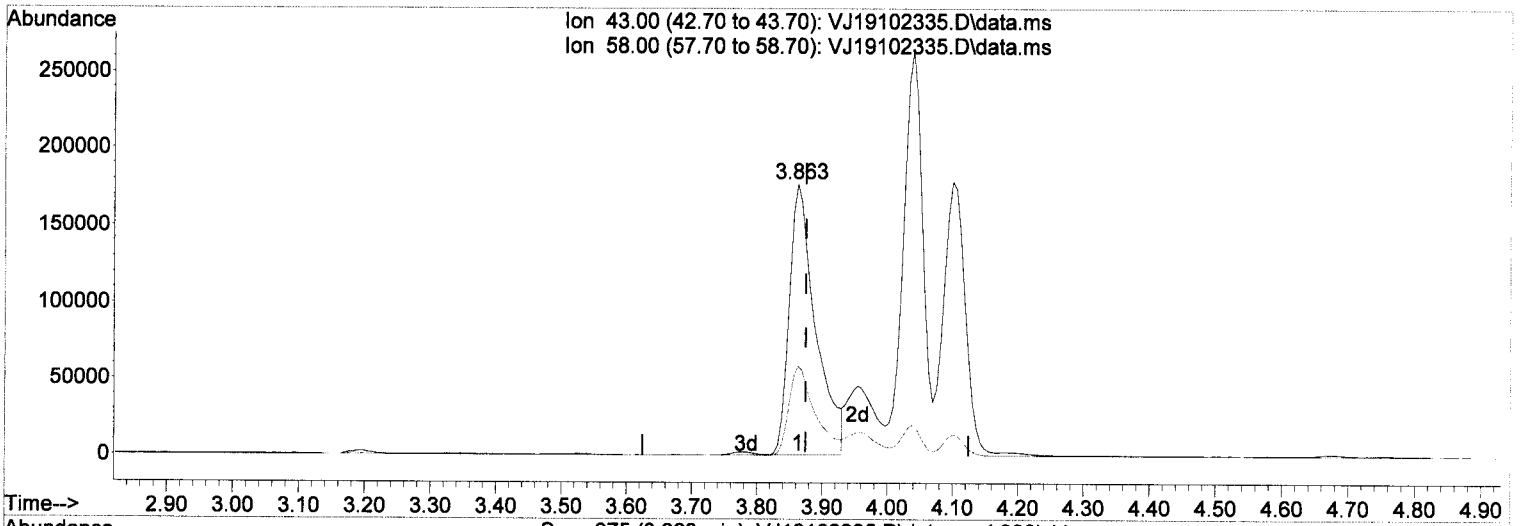

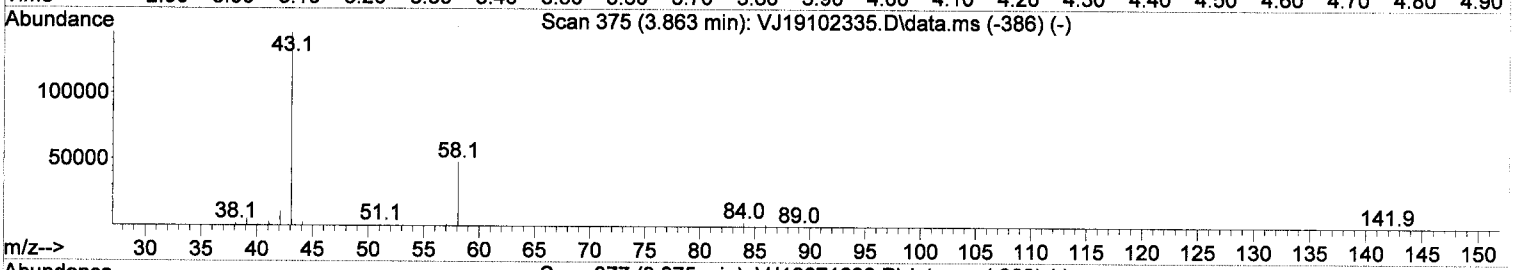

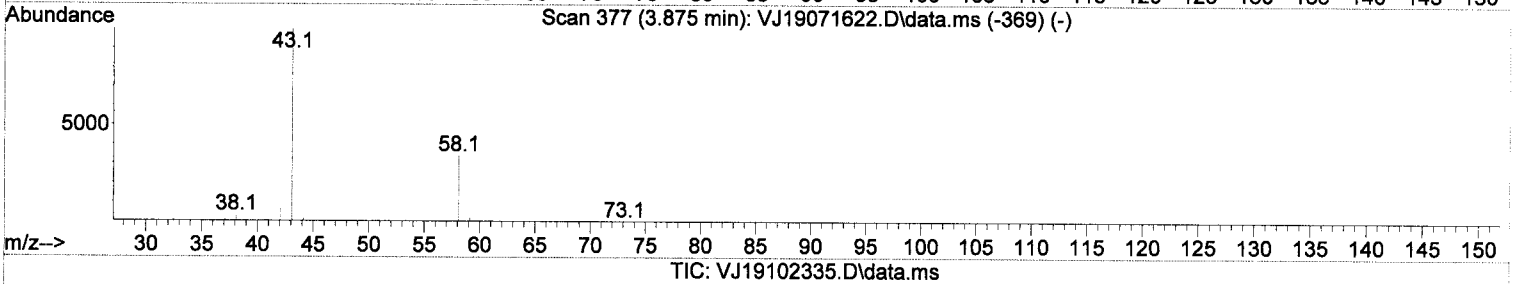

TIC: VJ19102335.D\data.ms

(14) Acetone

3.863min (-0.011) 408.38 ug/L

response 496457

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
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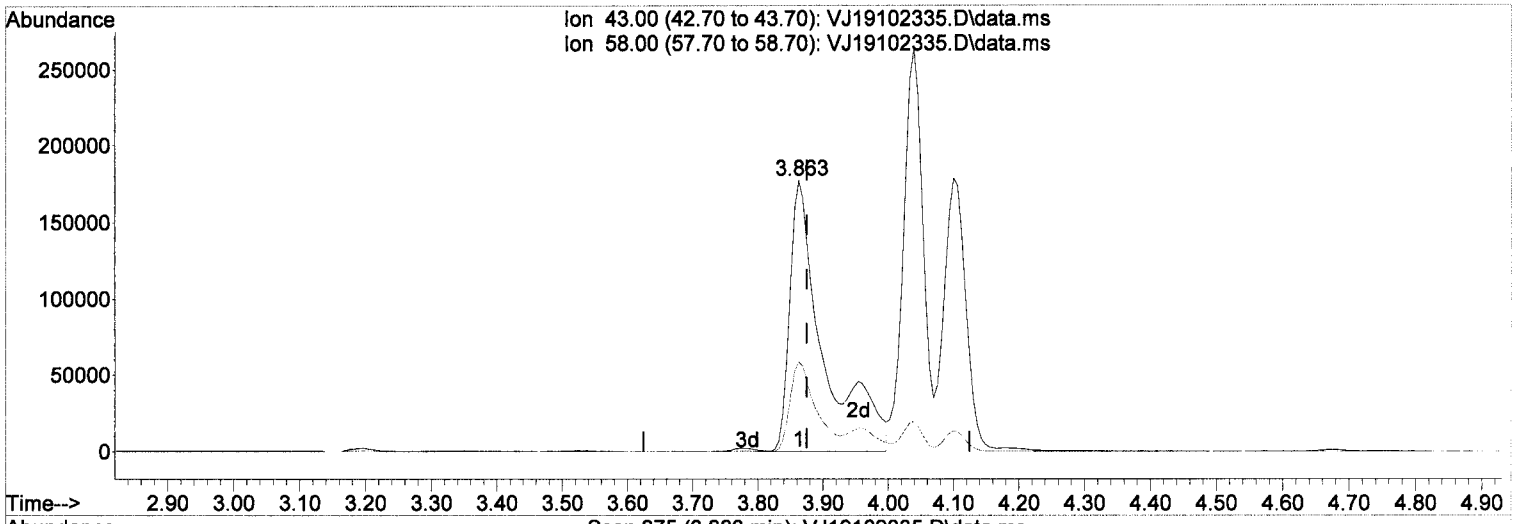

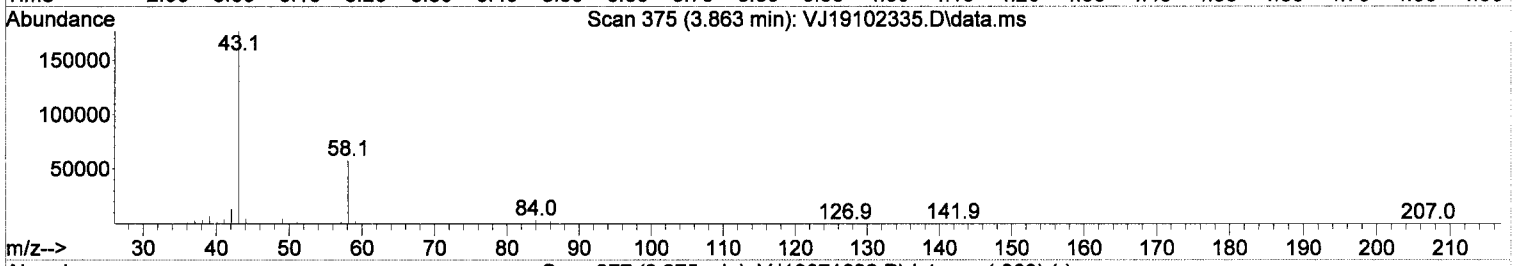

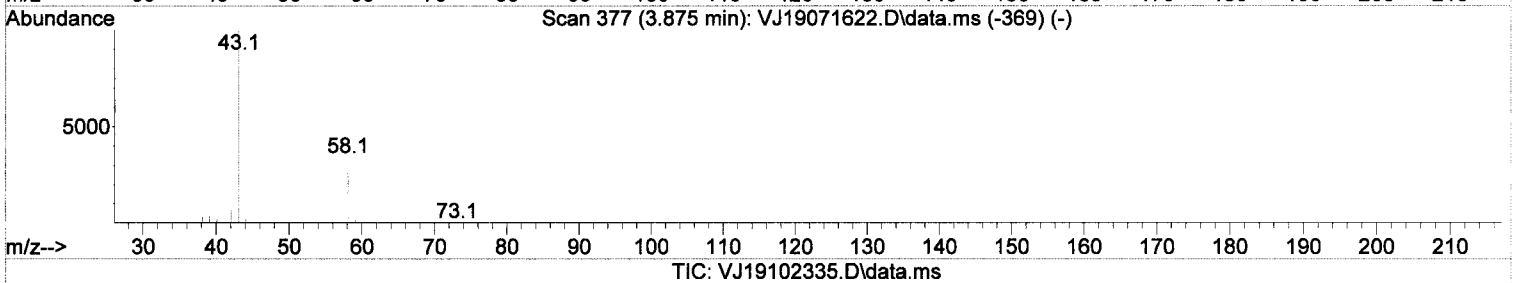

TIC: VJ19102335.D\data.ms

(14) Acetone

3.863min (-0.011) 523.45 ug/L m

response 636343

Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	32.93
0.00	0.00	0.00
0.00	0.00	0.00

M
10/24/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
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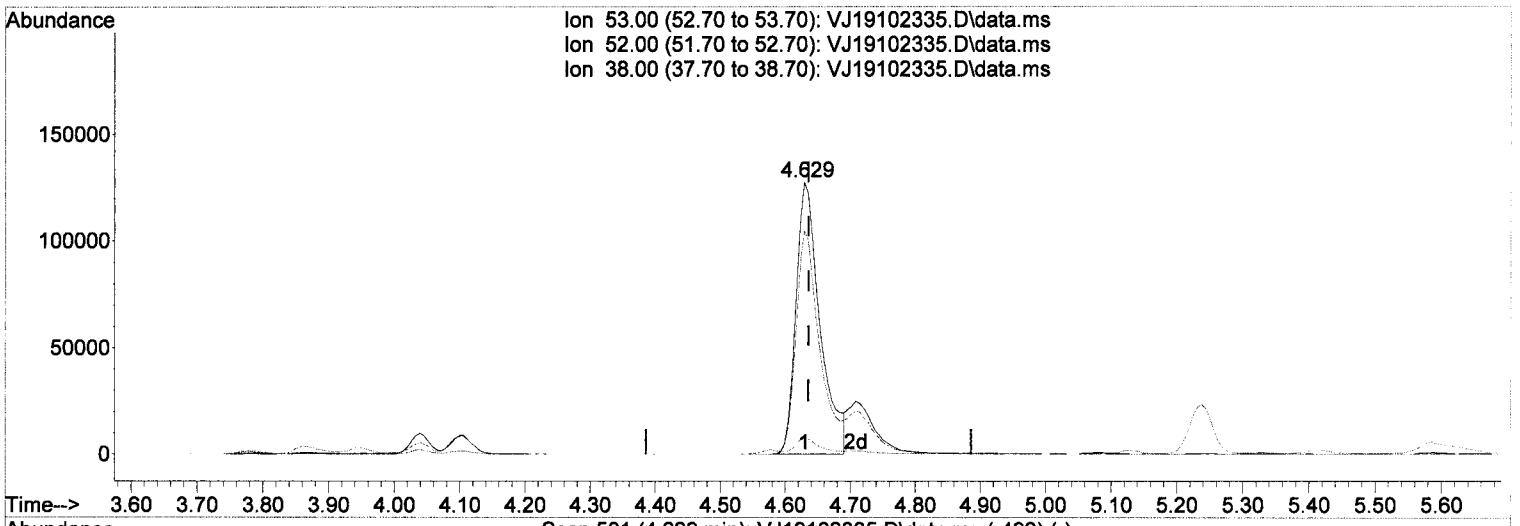

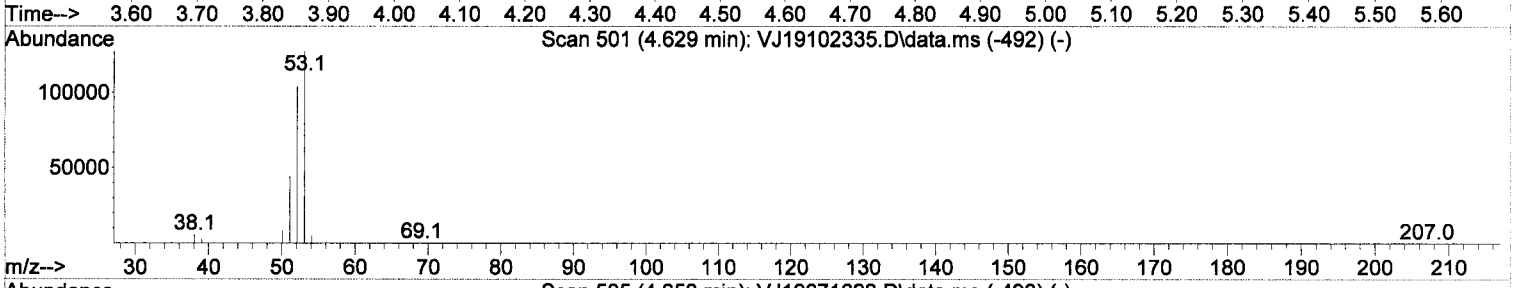

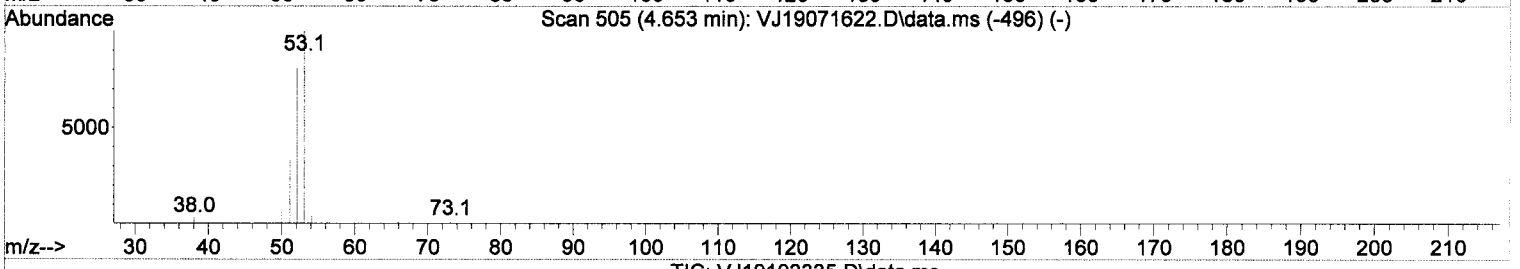

TIC: VJ19102335.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 344.33 ug/L

response 328546

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.87
38.00	5.50	4.78
0.00	0.00	0.00

M.2.

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
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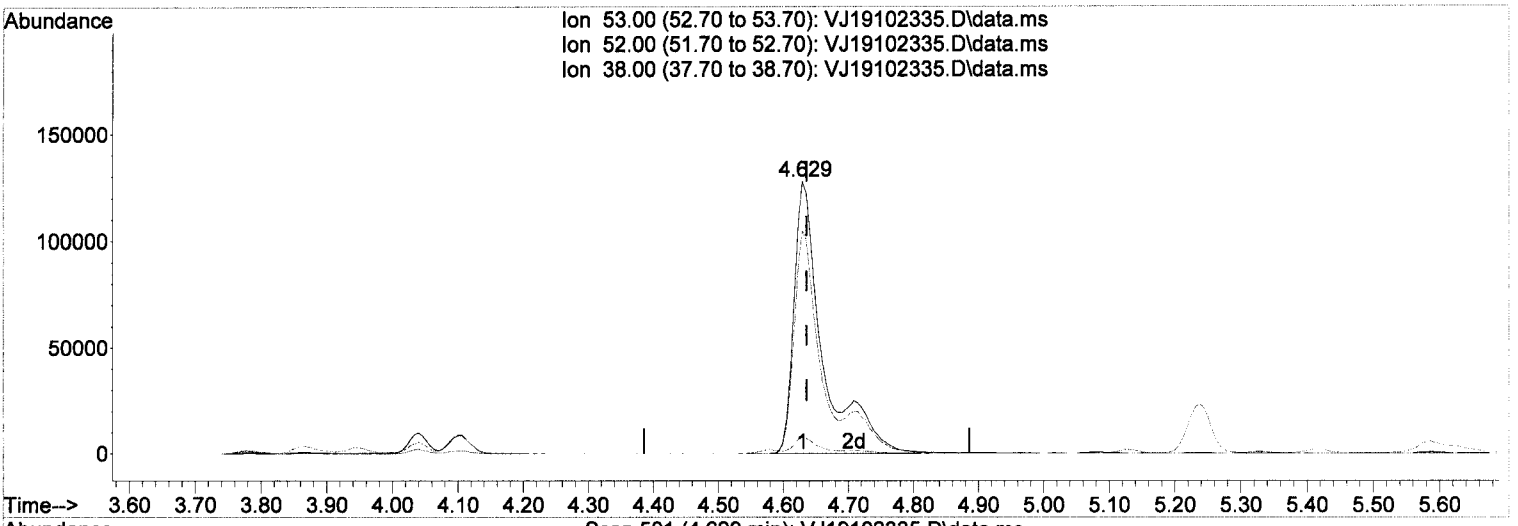
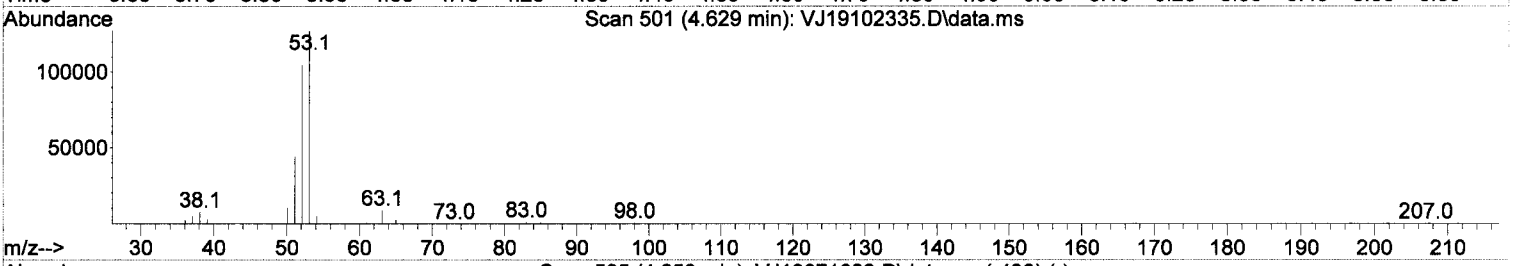
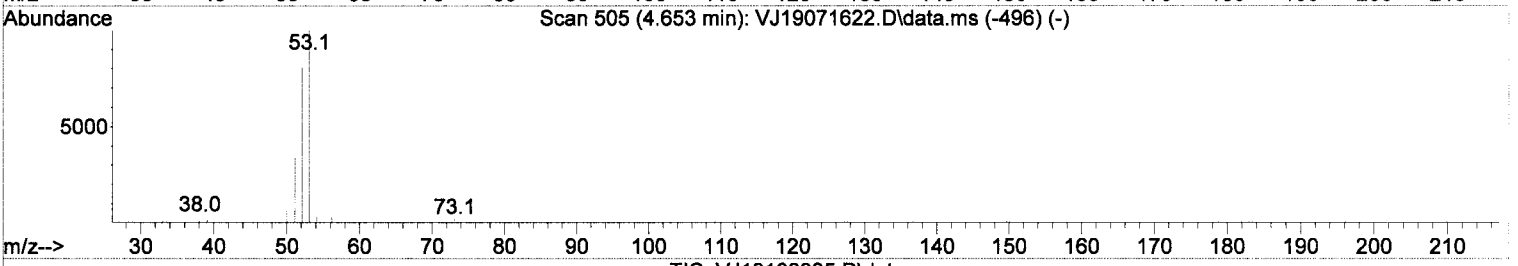
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102335.D\data.ms

(21) Acrylonitrile

4.629min (-0.006) 419.92 ug/L m

response 400678

Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	81.87
38.00	5.50	5.82
0.00	0.00	0.00

10/24/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
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Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
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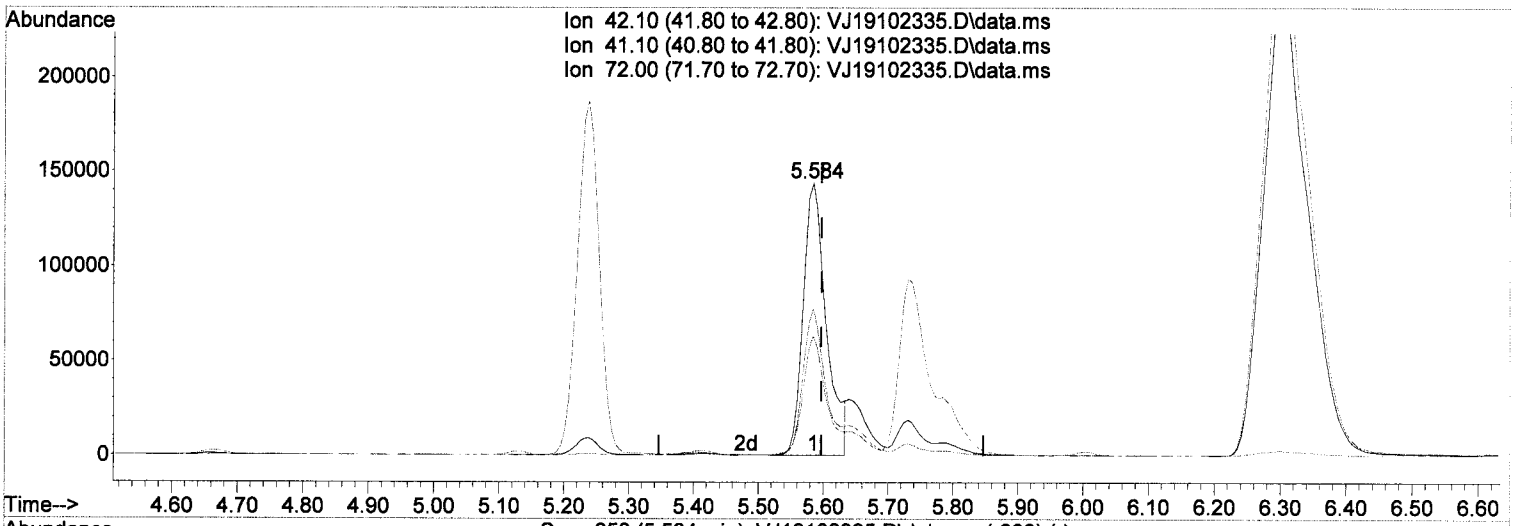

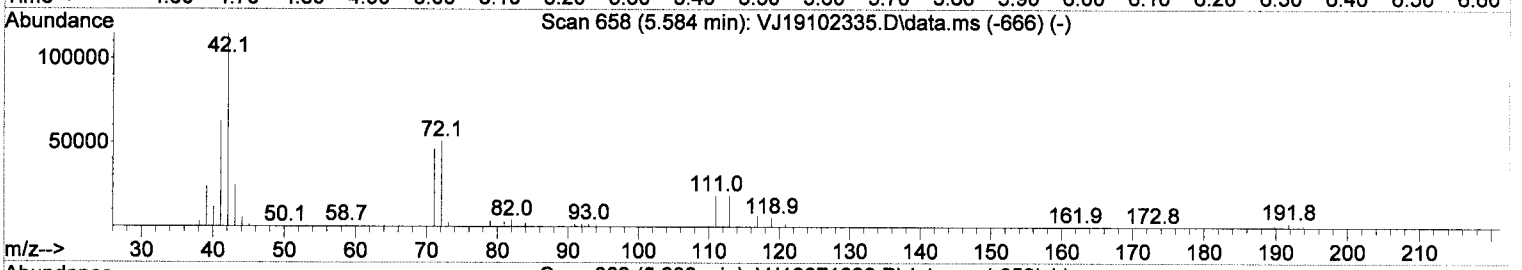

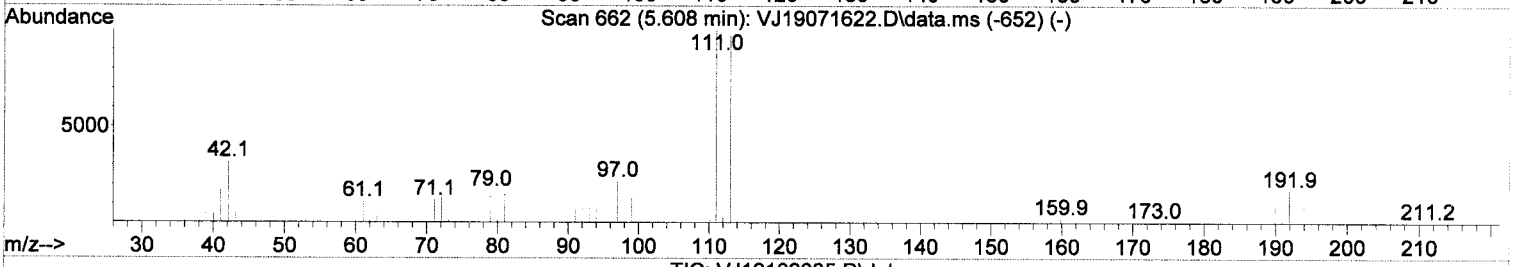

TIC: VJ19102335.D\data.ms

(28) Tetrahydrofuran

5.584min (-0.012) 309.64 ug/L

response 357281

Ion	Exp%	Act%
42.10	100.00	100.00
41.10	52.70	53.96
72.00	40.40	44.03
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
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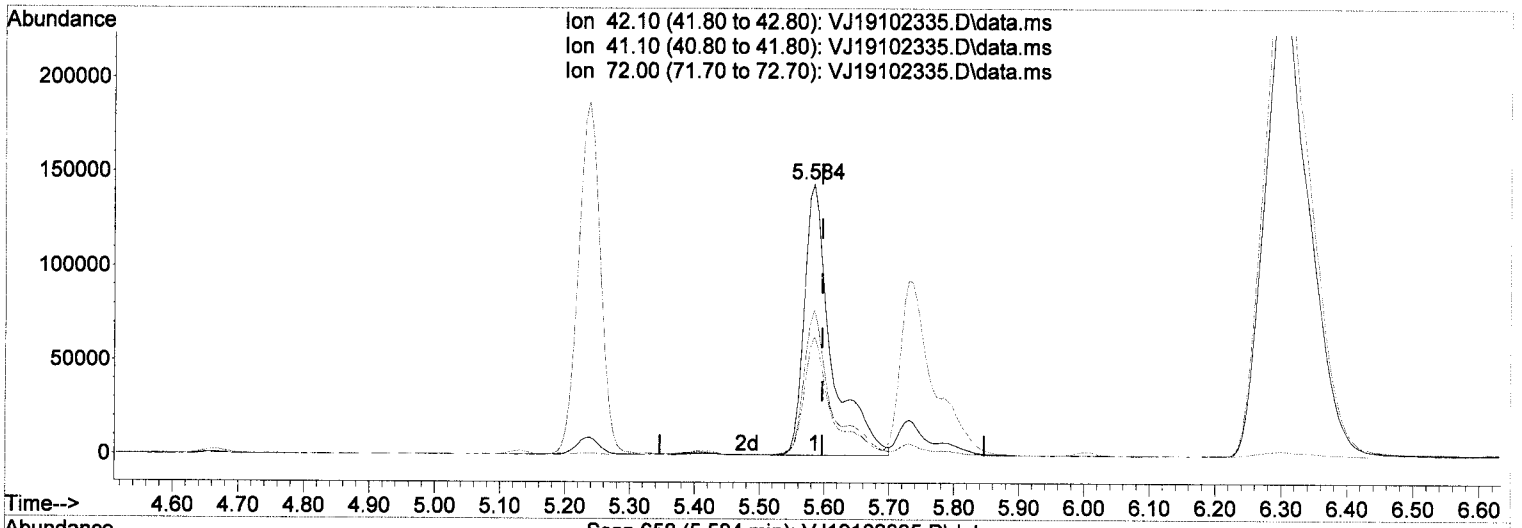

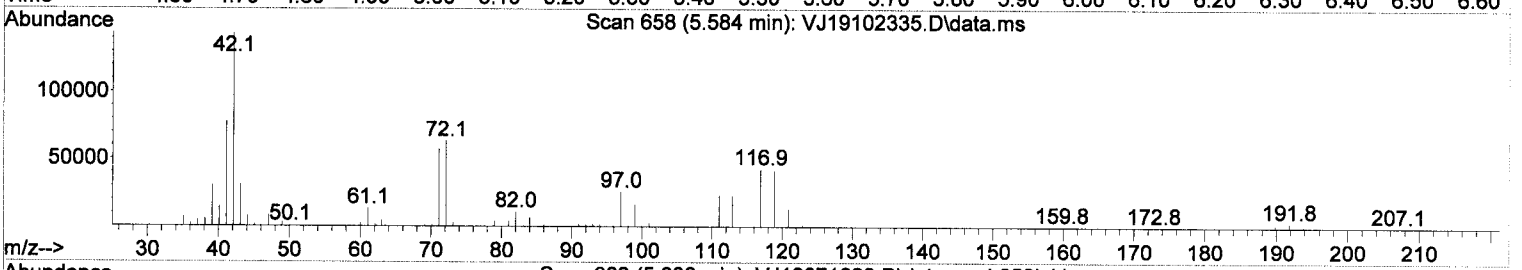

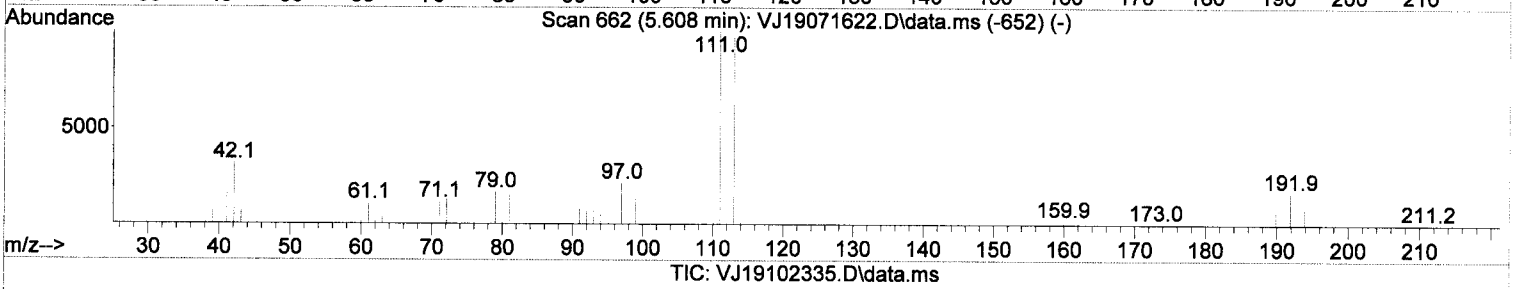

TIC: VJ19102335.D\data.ms

(28) Tetrahydrofuran

5.584min (-0.012) 365.44 ug/L m

response 421666

Ion	Exp%	Act%
42.10	100.00	100.00
41.10	52.70	54.14
72.00	40.40	44.03
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
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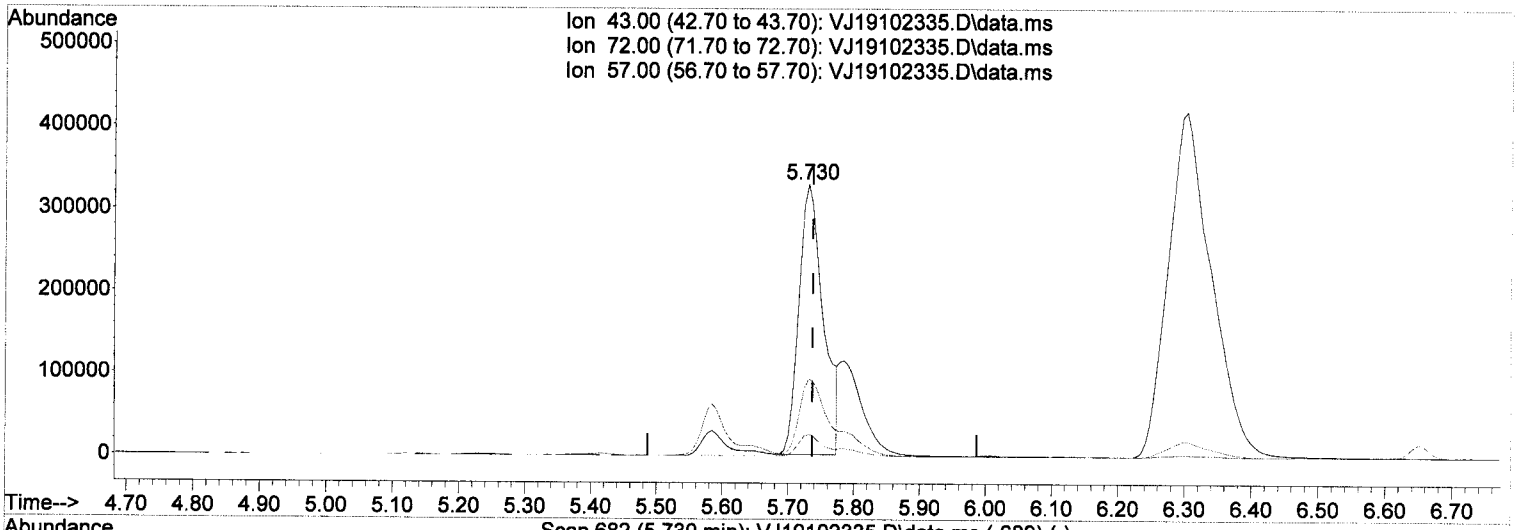

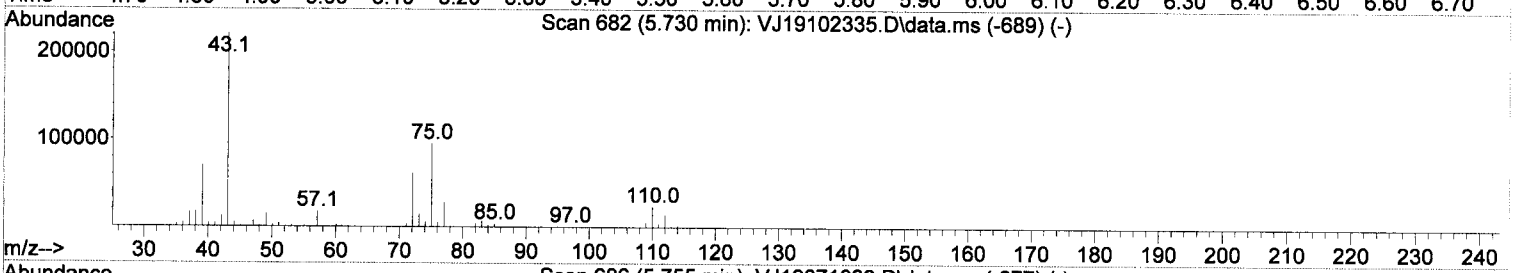

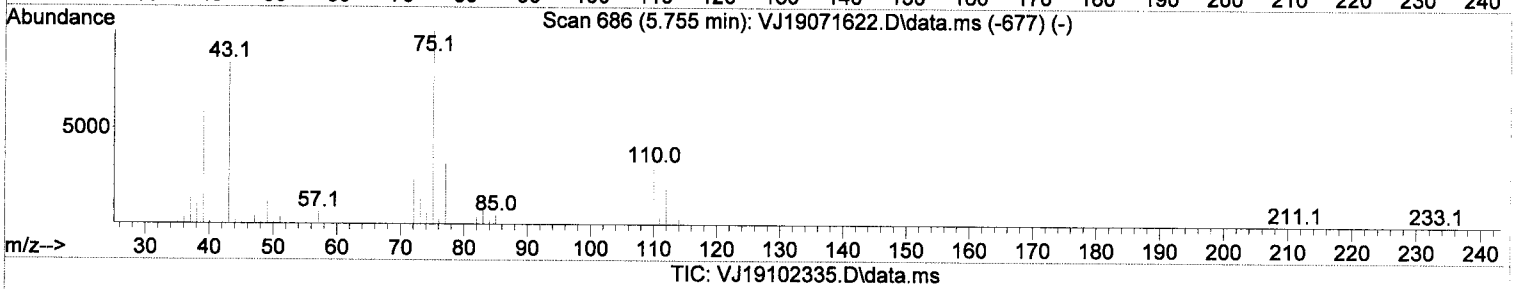

TIC: VJ19102335.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 487.88 ug/L

response 847722

M.2

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	27.19
57.00	7.20	7.98
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
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Misc : 1X 5mL 200/400PPB VOC+MeOH
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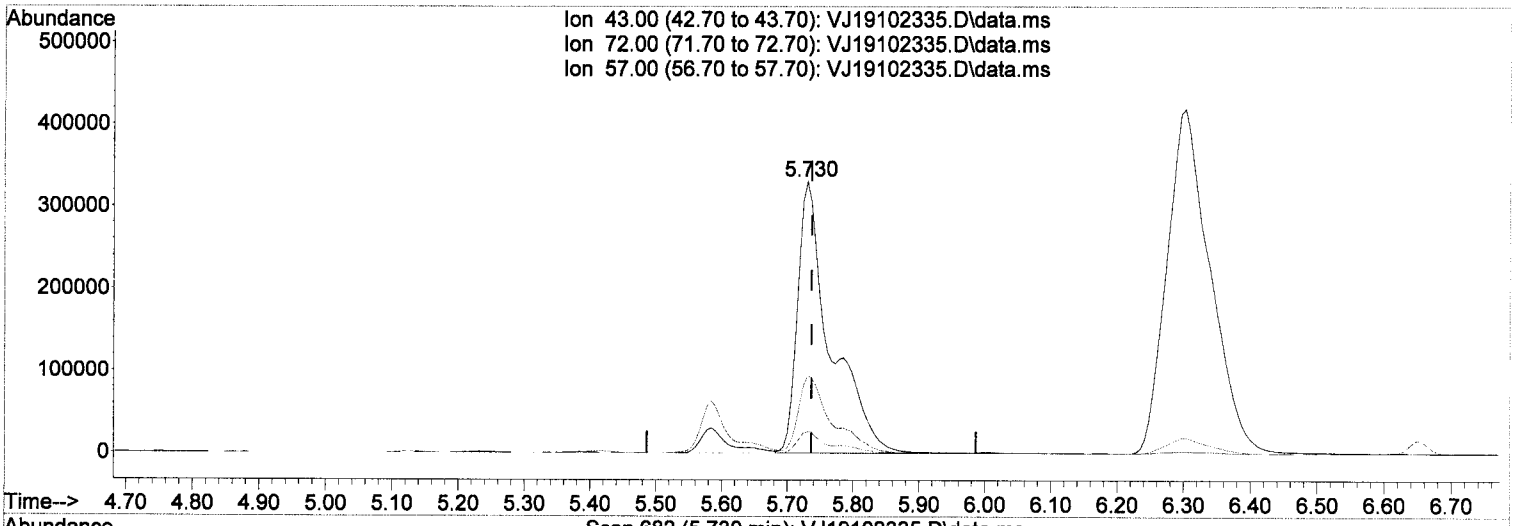
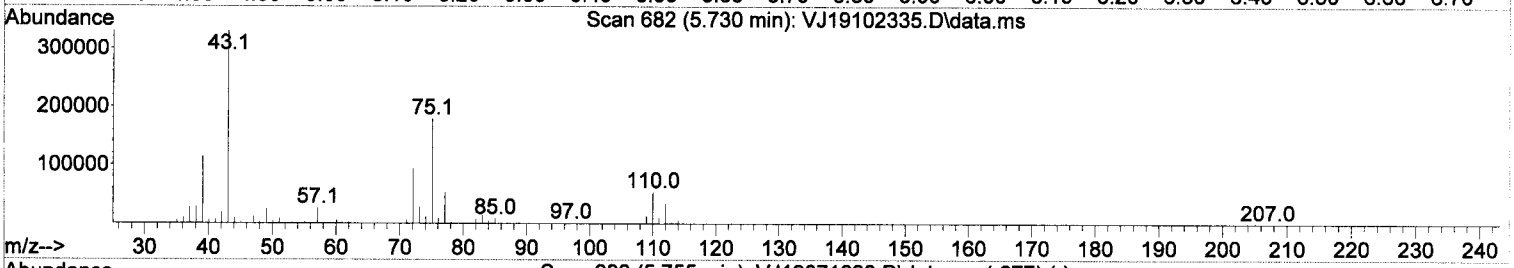
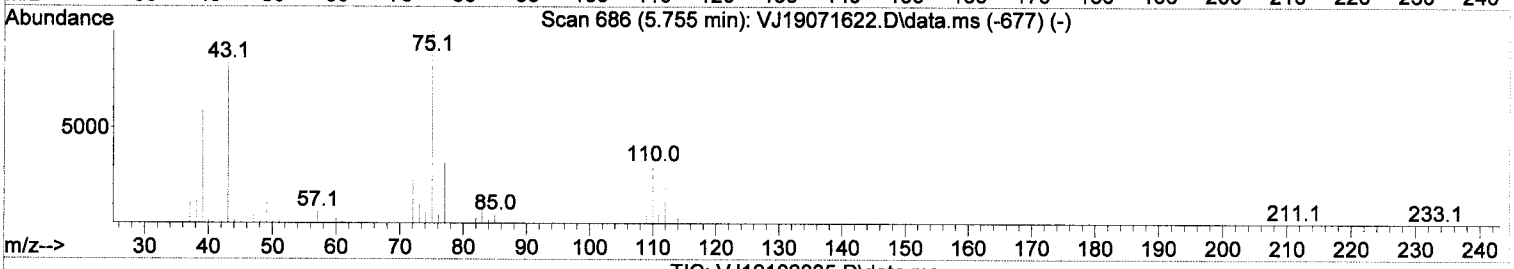
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration







TIC: VJ19102335.D\data.ms

(32) 2-Butanone (MEK)

5.730min (-0.006) 662.17 ug/L m

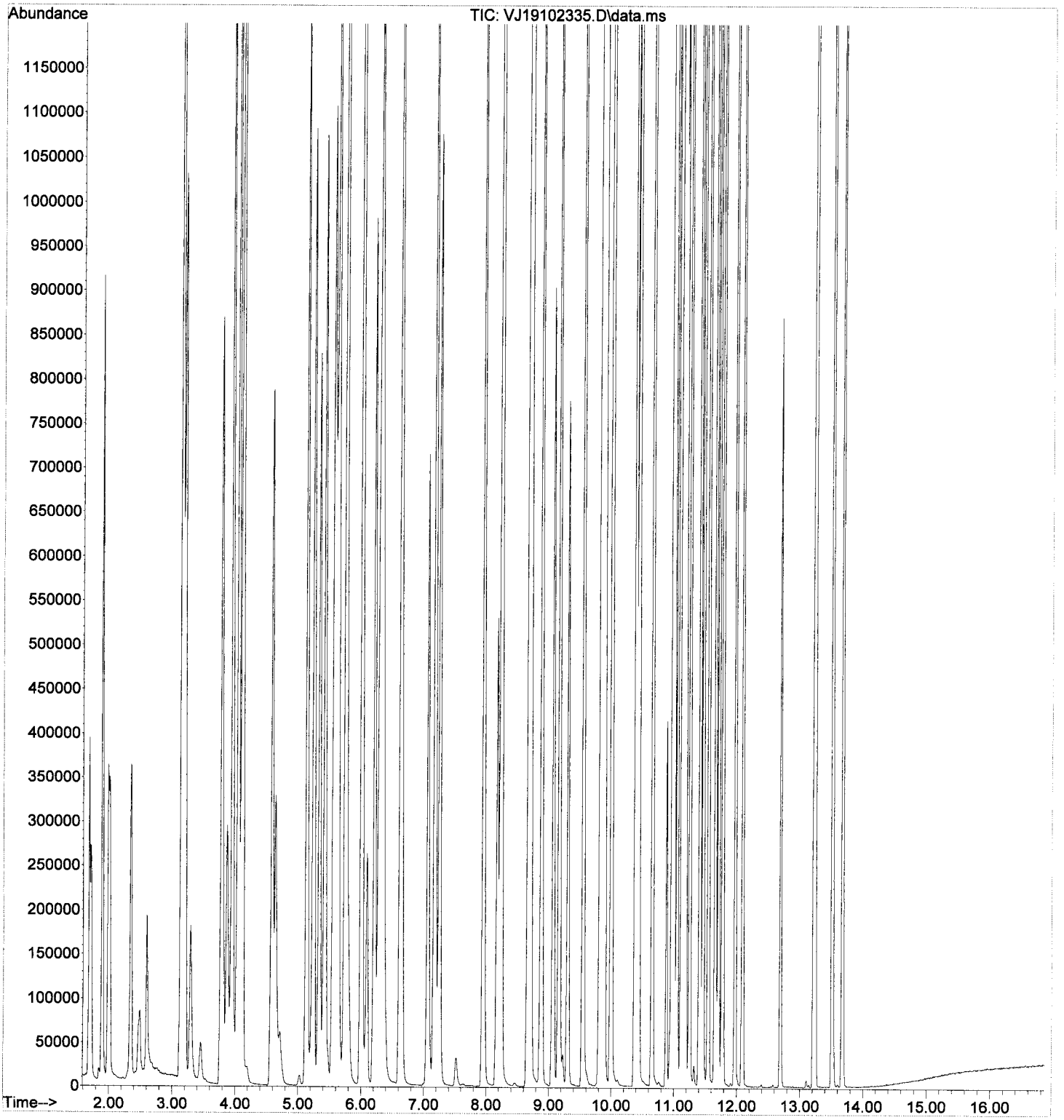
response 1150574

Ion	Exp%	Act%
43.00	100.00	100.00
72.00	29.10	28.15
57.00	7.20	7.93
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102335.D
Acq On : 24 Oct 2019 3:40 am
Operator : MM
Sample : 9J23072-CALB
Misc : 1X 5mL 200/400PPB VOC+MeOH
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 24 08:14:12 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Fri Oct 18 10:09:40 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102336.D
Acq On : 24 Oct 2019 4:07 am
Operator : MM
Sample : 9J23072-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 24 09:41:19 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.095	99	107566	50.00 ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	292494	50.00 ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	122660	50.00 ug/L		0.00
System Monitoring Compounds						
30) Dibromofluoromethane (S)	5.603	111	84793	49.87 ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	333118	50.34 ug/L		0.00
45) Toluene-d8 (S)	8.170	98	410057	50.27 ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	89939	50.78 ug/L		0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.697	85	1579	0.63 ug/L		90
3) Chloromethane	1.898	50	4506	1.07 ug/L		97
4) Vinyl Chloride	1.995	62	838	0.26 ug/L	#	46
5) Bromomethane	2.348	96	6148	2.33 ug/L		96
6) Chloroethane	2.488	64	114	1.48 ug/L	#	63
7) Trichlorofluoromethane	2.603	101	174	0.24 ug/L	#	41
8) Ethanol	3.297	45	4668	Below Cal		87
9) 1,1-Dichloroethene	3.145	61	1317	0.33 ug/L		92
10) Carbon Disulfide	3.163	76	9199	1.23 ug/L		97
11) Freon 113	3.206	101	1568	0.64 ug/L		81
12) Iodomethane	3.297	142	6159	7.56 ug/L		88
13) Methylene Chloride	3.784	84	6521	1.78 ug/L		90
14) Acetone	3.875	43	2258	1.38 ug/L		90
15) t-1,2-Dichloroethene	3.954	61	2151	0.51 ug/L		94
16) n-Hexane	4.051	86	156	0.25 ug/L	#	34
17) Methyl-tert-butyl-ether	4.106	73	1006	0.10 ug/L		57
23) c-1,2-Dichloroethene	5.140	61	752	0.18 ug/L		95
25) Bromochloromethane	5.335	49	439	0.17 ug/L	#	63
27) Carbon Tetrachloride	5.572	117	605	0.19 ug/L		70
28) Tetrahydrofuran	5.590	42	775	0.36 ug/L	#	62
29) 1,1,1-Trichloroethane	5.627	97	479	0.11 ug/L		90
31) 1,1-Dichloropropene	5.749	75	2265	0.54 ug/L		90
32) 2-Butanone (MEK)	5.736	43	2102	0.73 ug/L		52
33) Benzene	6.010	78	2611	0.19 ug/L		93
35) 1,2-Dichloroethane (EDC)	6.211	62	343	0.08 ug/L	#	49
36) iso-Butyl Alcohol	6.327	43	955	2.89 ug/L		93
38) Trichloroethene (TCE)	6.619	130	1181	0.43 ug/L		72
44) c-1,3-Dichloropropene	7.951	75	451	0.10 ug/L	#	56
46) Toluene	8.231	91	3474	0.25 ug/L		88
47) Tetrachloroethene (PCE)	8.681	166	1969	0.78 ug/L		93
49) t-1,3-Dichloropropene	8.705	75	643	0.15 ug/L		69
55) Chlorobenzene	9.819	112	2476	0.32 ug/L	#	66
56) Ethylbenzene	9.861	91	4956	0.37 ug/L		97
58) m,p-Xylenes (2)	9.995	91	7912	0.84 ug/L		96
59) o-Xylene	10.378	91	2358	0.26 ug/L		99
60) Styrene	10.427	104	1491	0.39 ug/L		87
62) Isopropylbenzene	10.652	105	4301	0.40 ug/L		93
65) Bromobenzene	10.968	156	802	0.32 ug/L	#	74
66) n-Propylbenzene	10.999	91	9166	0.69 ug/L		95
68) 2-Chlorotoluene	11.120	126	1193	0.50 ug/L		95
69) 1,3,5-Trimethylbenzene	11.157	105	4619	0.56 ug/L		96
72) 4-Chlorotoluene	11.248	91	4873	0.63 ug/L		92
73) tert-Butylbenzene	11.406	91	2458	0.51 ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102336.D
Acq On : 24 Oct 2019 4:07 am
Operator : MM
Sample : 9J23072-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 24 09:41:19 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

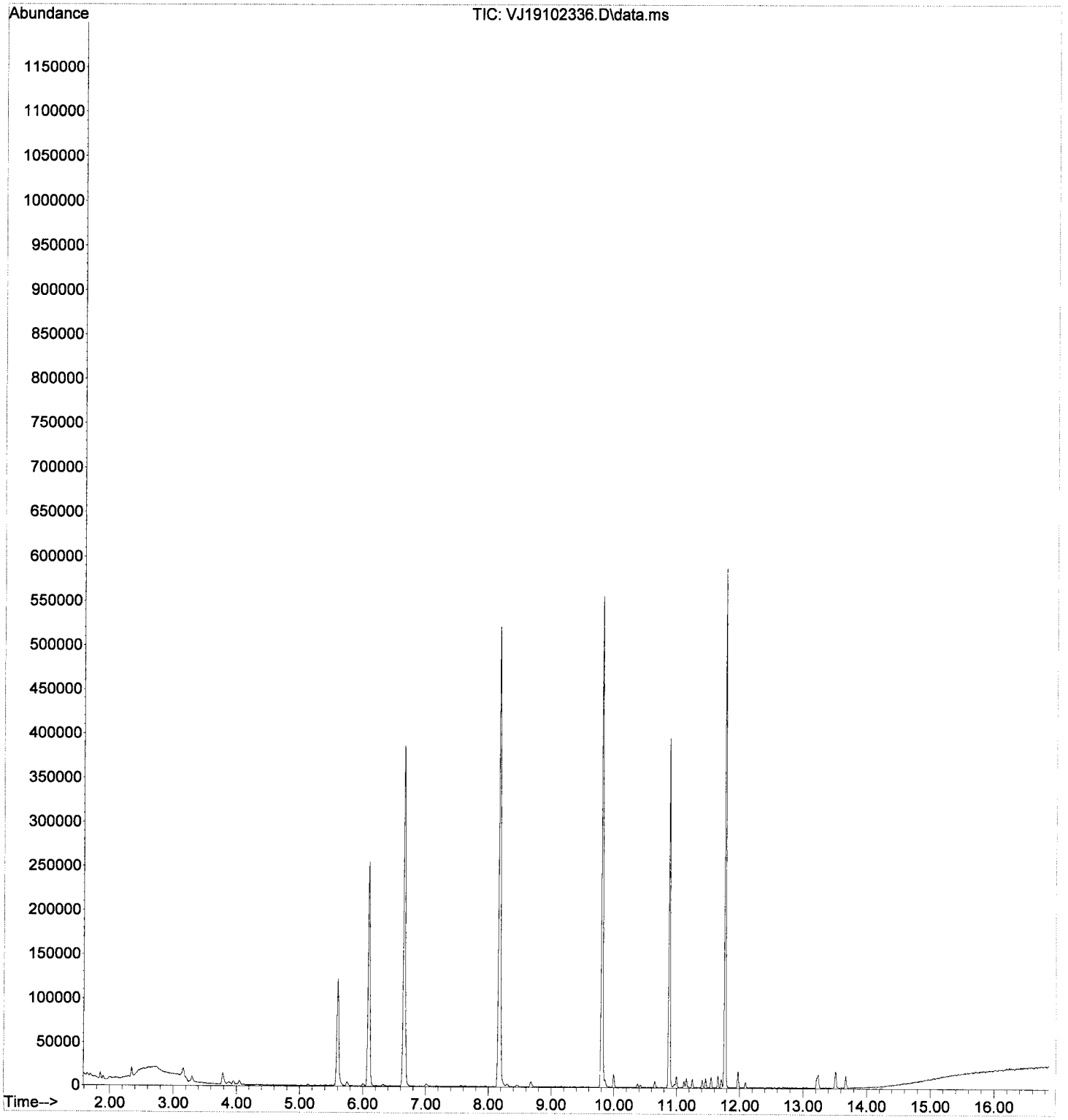
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
74) 1,2,4-Trimethylbenzene	11.461	105	5075	0.61 ug/L	98
75) sec-Butylbenzene	11.546	105	7209	0.69 ug/L	97
76) 4-Isopropyltoluene	11.656	119	6234	0.78 ug/L	95
77) 1,3-Dichlorobenzene	11.711	146	3787	0.82 ug/L	93
78) 1,4-Dichlorobenzene	11.777	146	4050	0.83 ug/L	81
79) n-Butylbenzene	11.972	91	8931	1.15 ug/L	95
80) 1,2-Dichlorobenzene	12.094	146	2355	0.56 ug/L	96
82) Hexachlorobutadiene	13.219	223	1189	2.23 ug/L	91
83) 1,2,4-Trichlorobenzene	13.244	180	4623	1.82 ug/L	89
84) Naphthalene	13.511	128	14934	1.64 ug/L	96
85) 1,2,3-Trichlorobenzene	13.676	180	4240	1.71 ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102336.D
Acq On : 24 Oct 2019 4:07 am
Operator : MM
Sample : 9J23072-IBL4
Misc : 1X 5mL DI+MeOH
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 24 09:41:19 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102337.D
Acq On : 24 Oct 2019 4:34 am
Operator : MM
Sample : 9J23072-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 24 09:41:22 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	108805	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	293706	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	116760	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.603	111	83108	48.32	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	334636	49.99	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	411232	50.21	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	88844	52.70	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	412	0.16	ug/L	#	51
3) Chloromethane	1.898	50	3247	0.76	ug/L		98
5) Bromomethane	2.342	96	4921	1.30	ug/L		95
6) Chloroethane	2.470	64	56	1.35	ug/L	#	62
8) Ethanol	3.327	45	4945	Below Cal			78
9) 1,1-Dichloroethene	3.151	61	337	0.08	ug/L	#	40
10) Carbon Disulfide	3.157	76	3948	0.52	ug/L		90
11) Freon 113	3.206	101	700	0.28	ug/L		87
12) Iodomethane	3.297	142	4186	5.08	ug/L		89
13) Methylene Chloride	3.784	84	5777	1.45	ug/L		91
14) Acetone	3.881	43	1879	1.13	ug/L		92
15) t-1,2-Dichloroethene	3.948	61	731	0.17	ug/L		83
18) tert-Butanol (TBA)	4.252	59	202	0.24	ug/L	#	46
28) Tetrahydrofuran	5.609	42	385	0.17	ug/L	#	30
31) 1,1-Dichloropropene	5.749	75	904	0.21	ug/L	#	61
32) 2-Butanone (MEK)	5.736	43	1096	0.37	ug/L		52
36) iso-Butyl Alcohol	6.327	43	715	2.14	ug/L		78
38) Trichloroethene (TCE)	6.625	130	395	0.14	ug/L	#	74
46) Toluene	8.225	91	1576	0.11	ug/L		86
47) Tetrachloroethene (PCE)	8.675	166	834	0.33	ug/L		97
55) Chlorobenzene	9.825	112	1049	0.13	ug/L	#	58
56) Ethylbenzene	9.855	91	1918	0.14	ug/L		82
58) m,p-Xylenes (2)	9.995	91	3048	0.32	ug/L		95
59) o-Xylene	10.378	91	952	0.11	ug/L		91
60) Styrene	10.427	104	462	0.24	ug/L		66
62) Isopropylbenzene	10.652	105	1652	0.15	ug/L		86
65) Bromobenzene	10.962	156	241	0.10	ug/L		92
66) n-Propylbenzene	10.999	91	3504	0.28	ug/L		91
68) 2-Chlorotoluene	11.114	126	330	0.15	ug/L	#	67
69) 1,3,5-Trimethylbenzene	11.151	105	1691	0.22	ug/L		83
72) 4-Chlorotoluene	11.254	91	1898	0.26	ug/L		97
73) tert-Butylbenzene	11.406	91	704	0.15	ug/L		99
74) 1,2,4-Trimethylbenzene	11.461	105	1813	0.23	ug/L		90
75) sec-Butylbenzene	11.546	105	2505	0.25	ug/L		93
76) 4-Isopropyltoluene	11.656	119	2535	0.33	ug/L		94
77) 1,3-Dichlorobenzene	11.711	146	1436	0.33	ug/L		84
78) 1,4-Dichlorobenzene	11.771	146	1594	0.34	ug/L	#	59
79) n-Butylbenzene	11.972	91	3797	0.52	ug/L		94
80) 1,2-Dichlorobenzene	12.094	146	834	0.21	ug/L		89
82) Hexachlorobutadiene	13.213	223	436	0.86	ug/L	#	76
83) 1,2,4-Trichlorobenzene	13.238	180	1613	0.67	ug/L		92
84) Naphthalene	13.511	128	4574	0.53	ug/L		96
85) 1,2,3-Trichlorobenzene	13.676	180	1311	0.56	ug/L		82

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102337.D
Acq On : 24 Oct 2019 4:34 am
Operator : MM
Sample : 9J23072-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 24 09:41:22 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

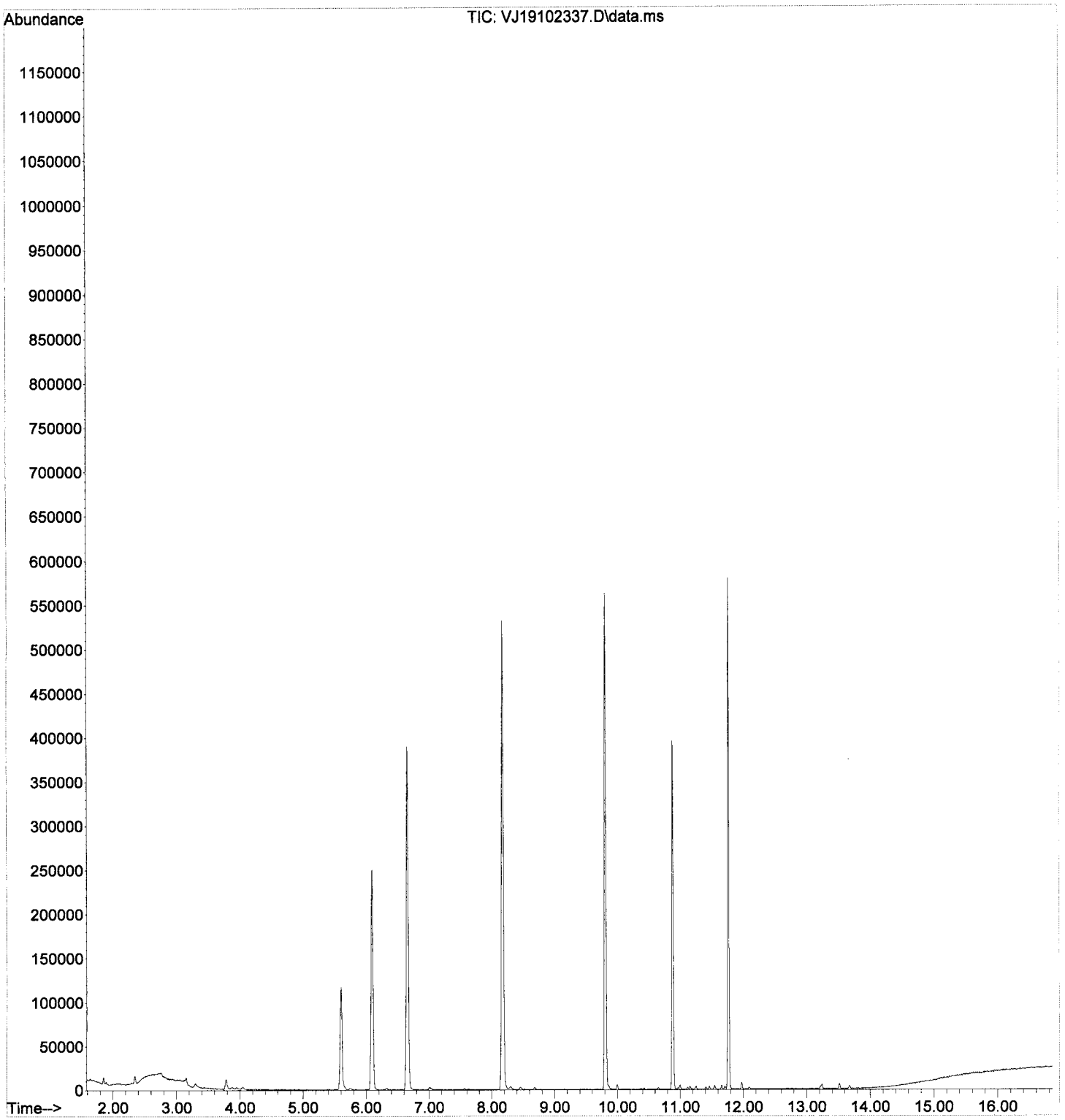
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102337.D
Acq On : 24 Oct 2019 4:34 am
Operator : MM
Sample : 9J23072-IBL5
Misc : 1X 5mL DI+MeOH
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 24 09:41:22 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	99885	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	266896	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	115116	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	78888	49.97	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	309887	50.43	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	374533	50.32	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	83075	49.98	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	55993	24.22	ug/L		99
3) Chloromethane	1.891	50	85783	21.90	ug/L		99
4) Vinyl Chloride	1.983	62	68082	22.53	ug/L		93
5) Bromomethane	2.342	96	32688	25.75	ug/L		97
6) Chloroethane	2.469	64	6942	18.06	ug/L		90
7) Trichlorofluoromethane	2.597	101	13381	19.85	ug/L		99
8) Ethanol	3.327	45	10414	32.82	ug/L		91
9) 1,1-Dichloroethene	3.139	61	70213	18.89	ug/L		96
10) Carbon Disulfide	3.151	76	125587	18.12	ug/L		98
11) Freon 113	3.193	101	44019	19.49	ug/L		83
12) Iodomethane	3.291	142	20945	27.68	ug/L		90
13) Methylene Chloride	3.777	84	51374	21.83	ug/L		91
14) Acetone	3.863	43	49385	32.40	ug/L		97
15) t-1,2-Dichloroethene	3.948	61	80908	20.82	ug/L		97
16) n-Hexane	4.039	86	11211	19.05	ug/L	#	78
17) Methyl-tert-butyl-ether	4.106	73	189730	20.42	ug/L		97
18) tert-Butanol (TBA)	4.264	59	3402	4.34	ug/L	#	88
19) Diisopropyl ether (DIPE)	4.501	45	1037	0.11	ug/L		73
20) 1,1-Dichloroethane	4.580	63	88325	21.54	ug/L		99
21) Acrylonitrile	4.635	53	29602	17.16	ug/L		99
22) Ethyl-tert-butyl ether...	4.872	59	819	0.10	ug/L	#	38
23) c-1,2-Dichloroethene	5.128	61	77472	20.22	ug/L		97
24) 2,2-Dichloropropane	5.237	77	70480	18.16	ug/L		96
25) Bromochloromethane	5.329	49	47873	20.52	ug/L		79
26) Chloroform	5.414	83	93692	21.39	ug/L		95
27) Carbon Tetrachloride	5.554	117	62353	21.54	ug/L		95
28) Tetrahydrofuran	5.590	42	37867	18.68	ug/L		98
29) 1,1,1-Trichloroethane	5.621	97	84455	20.97	ug/L		98
31) 1,1-Dichloropropene	5.748	75	79011	20.19	ug/L		95
32) 2-Butanone (MEK)	5.736	43	101987	37.99	ug/L		95
33) Benzene	6.004	78	255304	19.90	ug/L		99
34) tert-Amyl methyl ether...	6.150	73	1151	0.14	ug/L		71
35) 1,2-Dichloroethane (EDC)	6.211	62	82128	20.79	ug/L		99
36) iso-Butyl Alcohol	6.302	43	169237	551.01	ug/L		98
38) Trichloroethene (TCE)	6.624	130	55394	21.73	ug/L		95
40) Dibromomethane	7.062	93	33554	20.84	ug/L		84
41) 1,2-Dichloropropane	7.172	63	65112	20.51	ug/L		99
42) Bromodichloromethane	7.251	83	66373	21.40	ug/L		97
44) c-1,3-Dichloropropene	7.951	75	84290	21.19	ug/L		98
46) Toluene	8.231	91	252241	20.22	ug/L		96
47) Tetrachloroethene (PCE)	8.681	166	50536	21.83	ug/L		90
48) 4-Methyl-2-Pentanone (...	8.669	43	165334	42.77	ug/L		98
49) t-1,3-Dichloropropene	8.699	75	87854	22.78	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

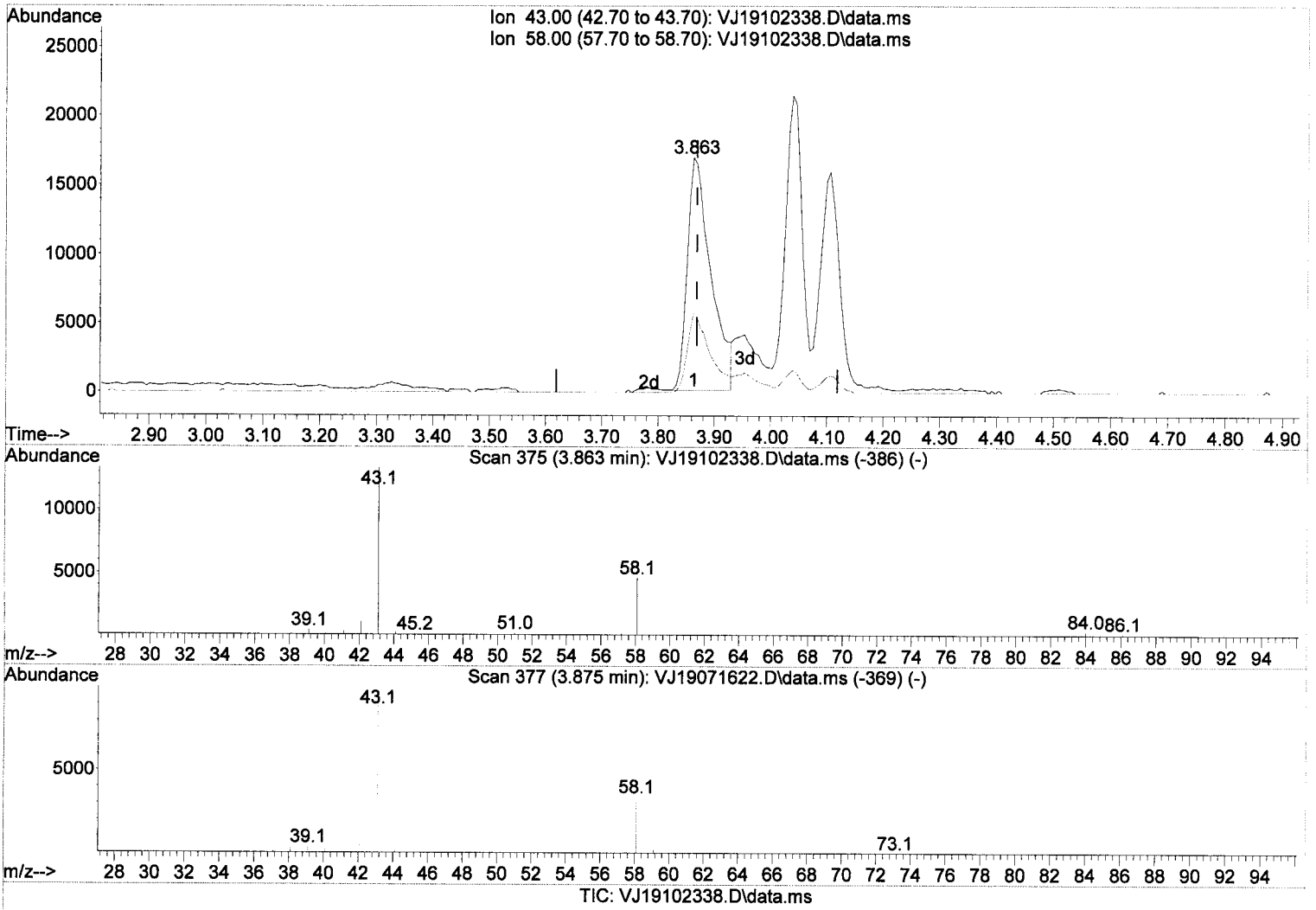
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) 1,1,2-Trichloroethane	8.875	97	55320	21.85	ug/L		96
51) Dibromochloromethane	9.064	129	44137	21.60	ug/L		99
52) 1,3-Dichloropropane	9.161	76	101709	21.39	ug/L		99
53) 1,2-Dibromoethane (EDB)	9.301	107	53497	22.05	ug/L		97
54) 2-Hexanone	9.545	43	121336	42.18	ug/L		99
55) Chlorobenzene	9.824	112	148150	20.82	ug/L		95
56) Ethylbenzene	9.861	91	262531	21.66	ug/L		97
57) 1,1,1,2-Tetrachloroethane	9.885	131	48514	22.01	ug/L		98
58) m,p-Xylenes (2)	9.995	91	382778	44.36	ug/L		98
59) o-Xylene	10.378	91	184849	22.44	ug/L		95
60) Styrene	10.421	104	123362	19.44	ug/L		98
61) Bromoform	10.439	173	28437	19.72	ug/L		98
62) Isopropylbenzene	10.652	105	225170	22.68	ug/L		96
65) Bromobenzene	10.962	156	51305	21.54	ug/L	#	74
66) n-Propylbenzene	10.999	91	271045	21.59	ug/L		95
67) 1,1,2,2-Tetrachloroethane	11.047	83	77823	21.41	ug/L		98
68) 2-Chlorotoluene	11.114	126	48899	21.83	ug/L	#	80
69) 1,3,5-Trimethylbenzene	11.157	105	180309	23.46	ug/L		94
70) 1,2,3-Trichloropropane	11.151	110	25446	21.80	ug/L		96
71) t-1,4-Dichloro-2-butene	11.187	88	9272	19.80	ug/L		92
72) 4-Chlorotoluene	11.248	91	159954	21.99	ug/L		92
73) tert-Butylbenzene	11.406	91	101437	22.26	ug/L		89
74) 1,2,4-Trimethylbenzene	11.461	105	180192	23.21	ug/L		95
75) sec-Butylbenzene	11.546	105	222106	22.61	ug/L		97
76) 4-Isopropyltoluene	11.656	119	175710	23.46	ug/L		96
77) 1,3-Dichlorobenzene	11.710	146	93549	21.70	ug/L		97
78) 1,4-Dichlorobenzene	11.777	146	94625	20.65	ug/L		95
79) n-Butylbenzene	11.972	91	162694	22.40	ug/L		95
80) 1,2-Dichlorobenzene	12.094	146	87423	22.13	ug/L		97
81) 1,2-Dibromo-3-Chloropr...	12.696	157	13552	19.68	ug/L	#	55
82) Hexachlorobutadiene	13.219	223	11551	23.12	ug/L		95
83) 1,2,4-Trichlorobenzene	13.243	180	54107	22.68	ug/L		97
84) Naphthalene	13.517	128	193179	22.57	ug/L		99
85) 1,2,3-Trichlorobenzene	13.675	180	53621	23.09	ug/L		97

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



TIC: VJ19102338.D\data.ms

(14) Acetone

3.863min (-0.005) 32.40 ug/L

response 49385

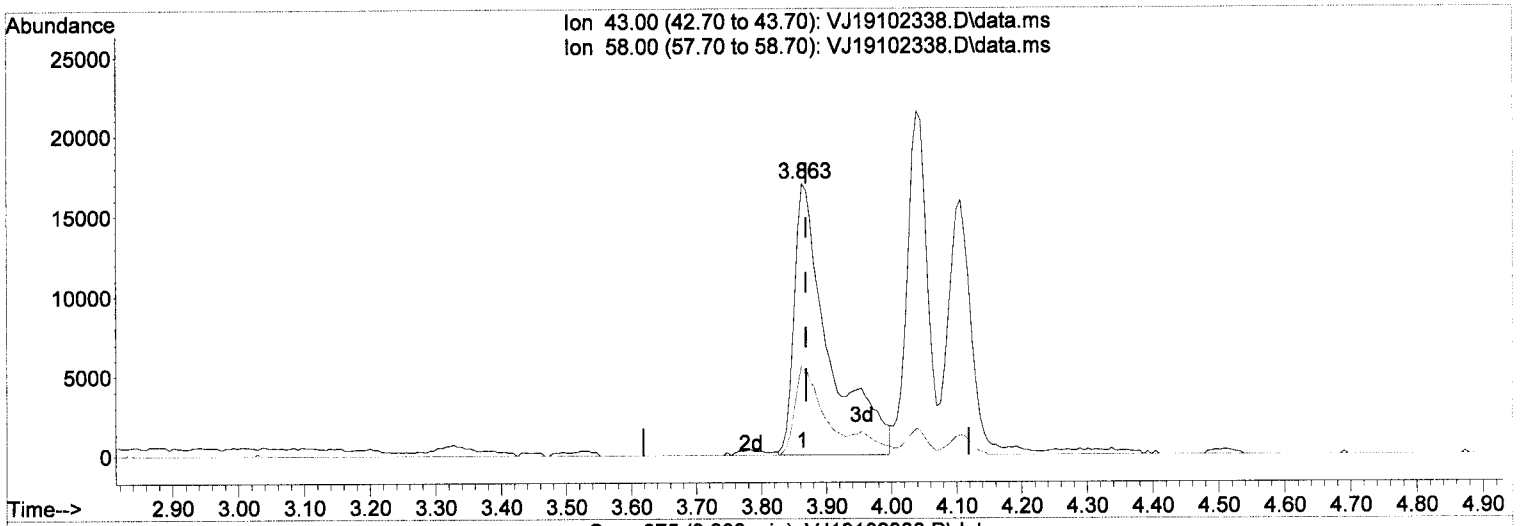
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	34.06
0.00	0.00	0.00
0.00	0.00	0.00

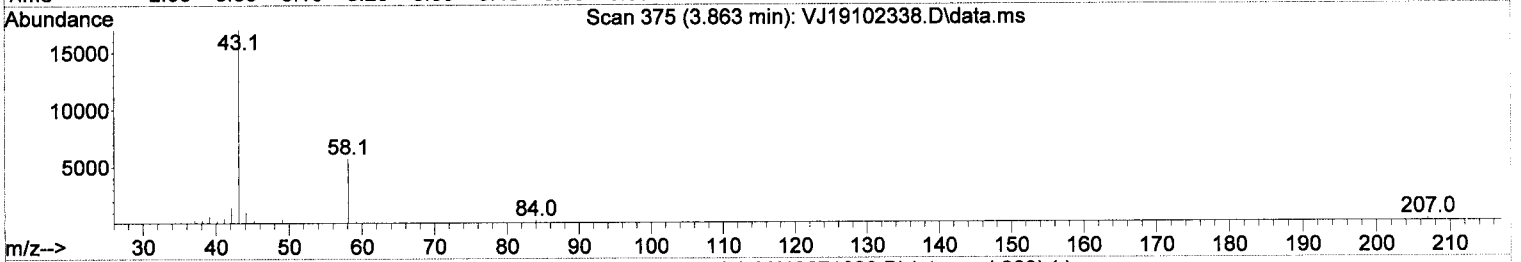
M.2.

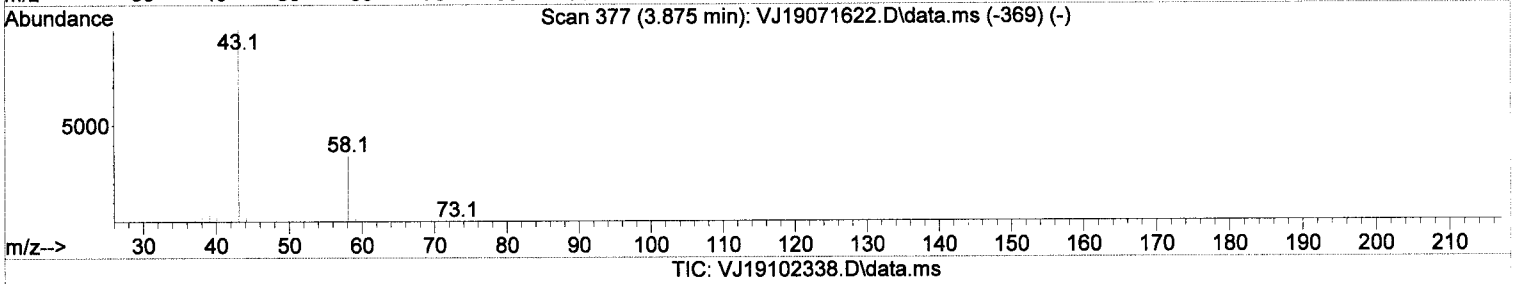
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102338.D\data.ms

(14) Acetone

3.863min (-0.005) 41.33 ug/L (m)

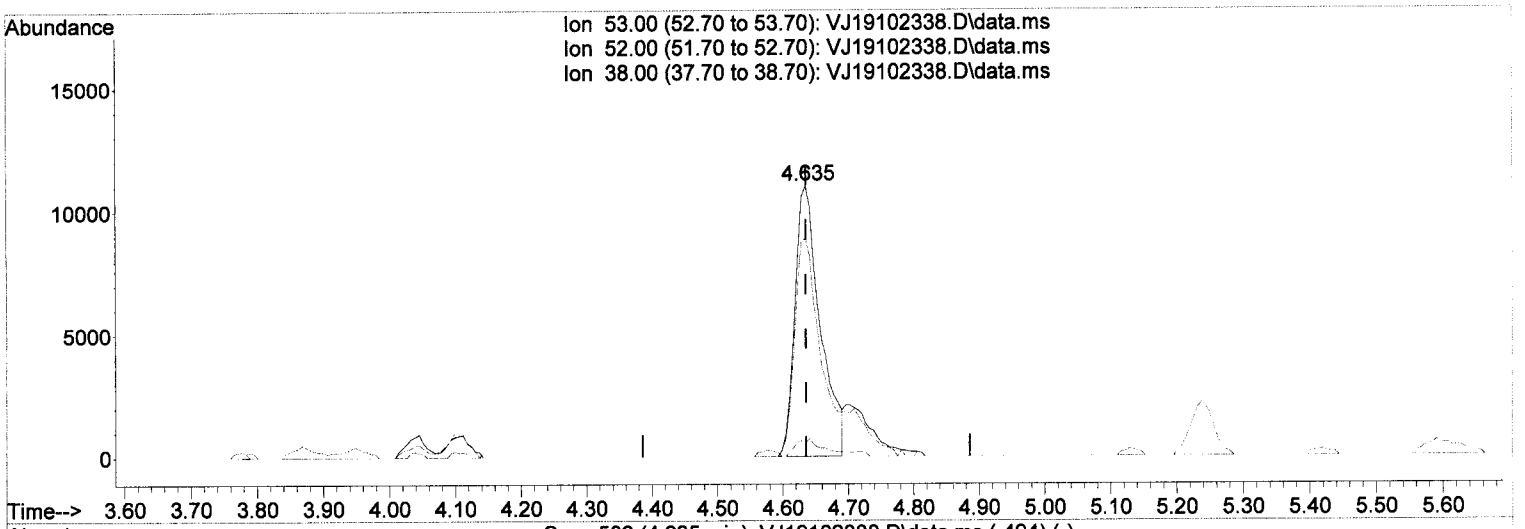
response 63006

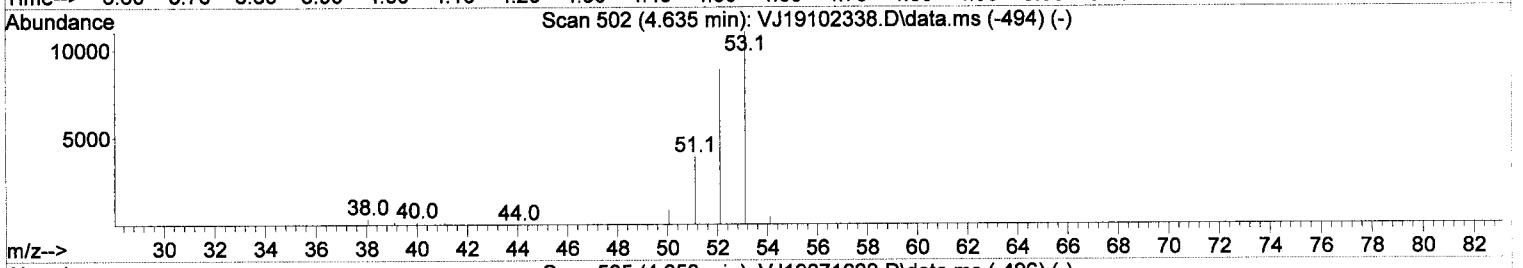
Ion	Exp%	Act%
43.00	100.00	100.00
58.00	32.20	33.75
0.00	0.00	0.00
0.00	0.00	0.00

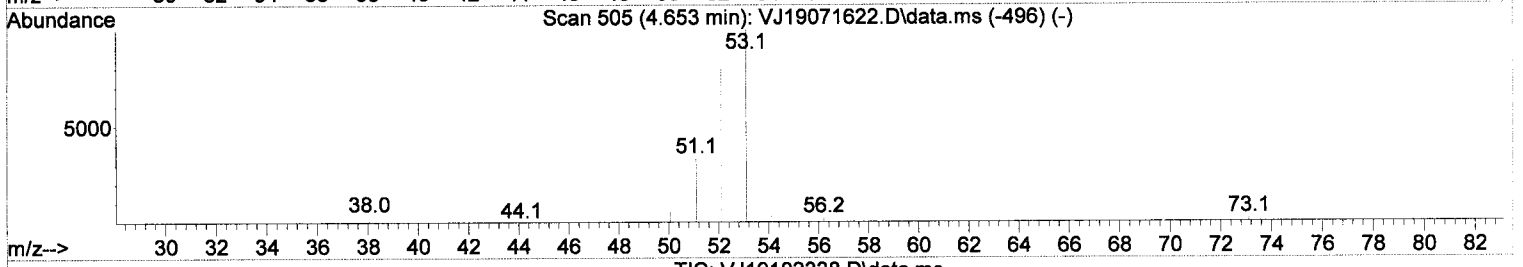
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102338.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 17.16 ug/L

response 29602

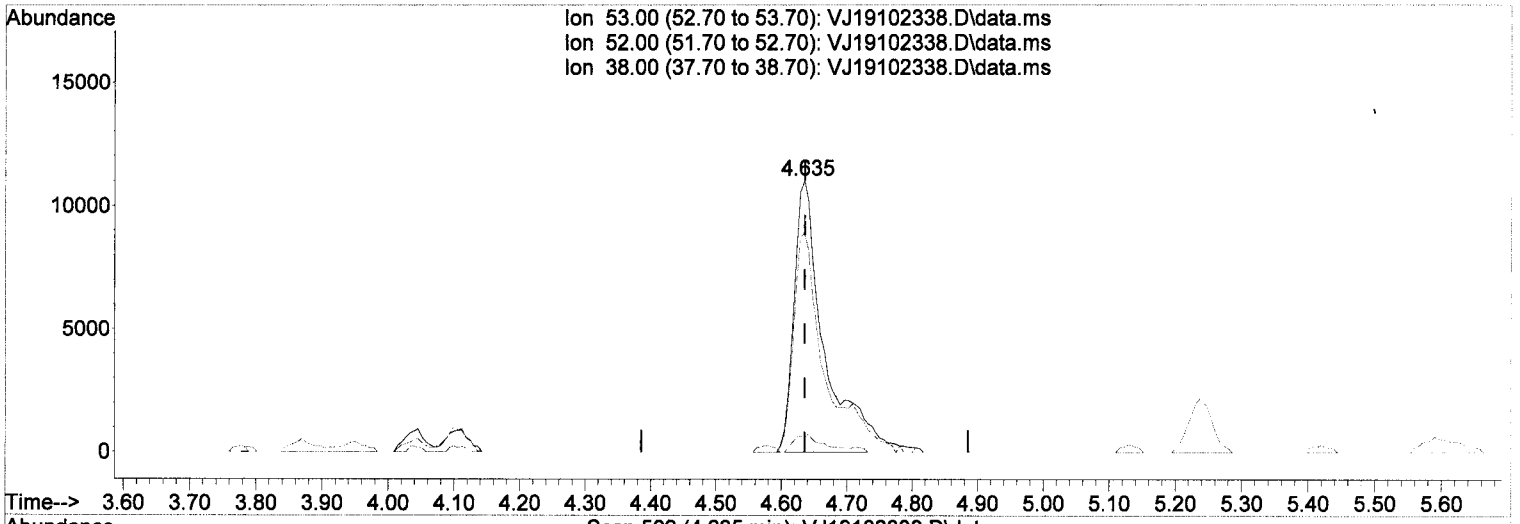
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.51
38.00	5.50	3.81
0.00	0.00	0.00

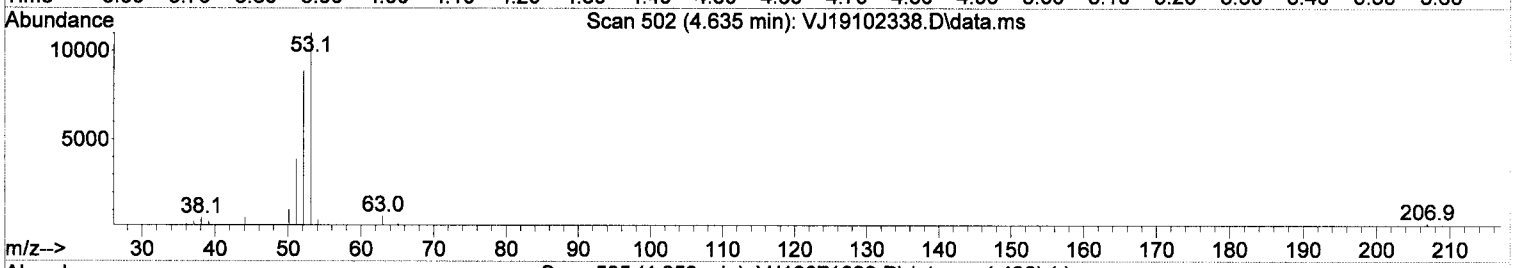
M.2

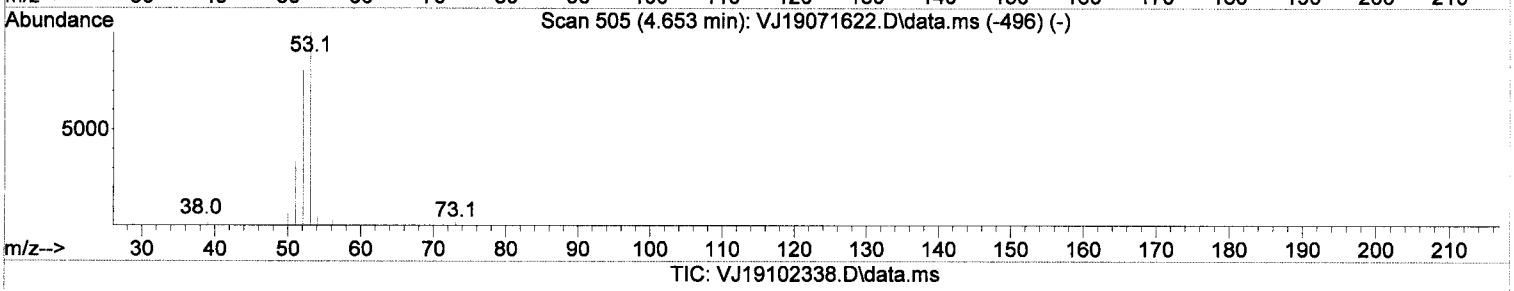
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102338.D\data.ms

(21) Acrylonitrile

4.635min (+ 0.000) 20.87 ug/L m

response 36020

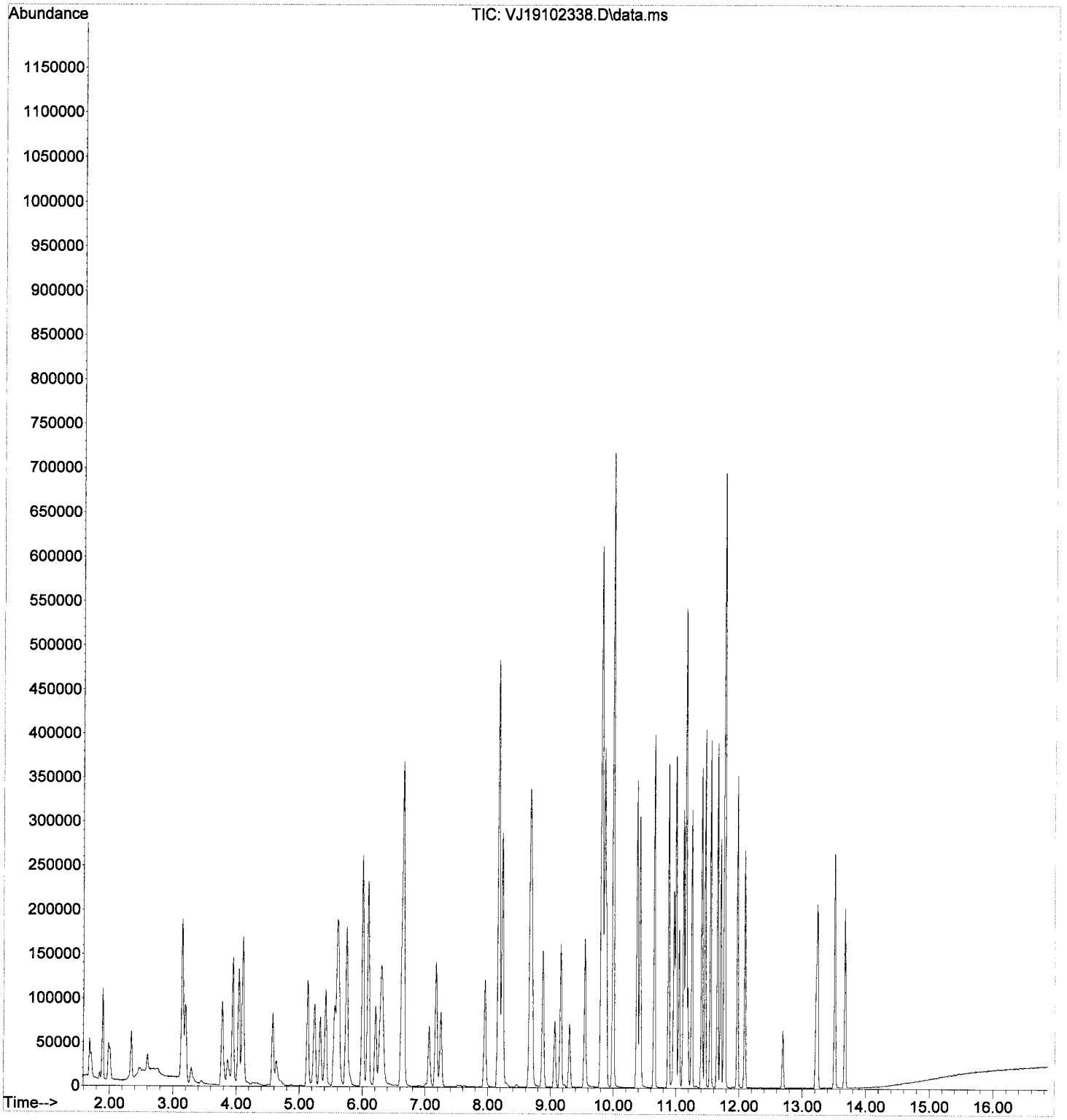
Ion	Exp%	Act%
53.00	100.00	100.00
52.00	79.60	80.51
38.00	5.50	5.37
0.00	0.00	0.00

10/24/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102338.D
Acq On : 24 Oct 2019 5:00 am
Operator : MM
Sample : 9J23072-ICV1
Misc : 1X 5mL 20/40PPB VOC+MeOH
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 24 09:41:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:41:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	102568	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	279935	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	116291	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	81075	50.01	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	318450	50.47	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	392151	50.23	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	85744	51.06	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	360	0.15	ug/L	#	51
3) Chloromethane	1.891	50	3310	0.82	ug/L		94
4) Vinyl Chloride	1.983	62	266	0.09	ug/L	#	46
5) Bromomethane	2.342	96	4390	1.09	ug/L		95
6) Chloroethane	2.463	64	195	1.68	ug/L	#	47
8) Ethanol	3.315	45	132914	1319.11	ug/L		90
9) 1,1-Dichloroethene	3.145	61	879	0.23	ug/L		92
10) Carbon Disulfide	3.157	76	3679	0.52	ug/L		81
11) Freon 113	3.199	101	379	0.16	ug/L	#	73
12) Iodomethane	3.291	142	2820	3.63	ug/L		92
13) Methylene Chloride	3.783	84	2642	0.25	ug/L		98
14) Acetone	3.869	43	2284	1.46	ug/L		94
15) t-1,2-Dichloroethene	3.954	61	1316	0.33	ug/L		92
17) Methyl-tert-butyl-ether	4.106	73	1163	0.12	ug/L		57
18) tert-Butanol (TBA)	4.258	59	505484	~~627.62~~ 1428.86	ug/L	#	89
19) Diisopropyl ether (DIPE)	4.501	45	51568	5.26	ug/L		92
20) 1,1-Dichloroethane	4.580	63	950	0.23	ug/L		91
22) Ethyl-tert-butyl ether...	4.872	59	47320	5.36	ug/L		94
23) c-1,2-Dichloroethene	5.128	61	1019	0.26	ug/L		84
24) 2,2-Dichloropropane	5.244	77	754	0.19	ug/L		66
25) Bromochloromethane	5.329	49	367	0.15	ug/L	#	14
26) Chloroform	5.420	83	1021	0.23	ug/L		88
27) Carbon Tetrachloride	5.554	117	408	0.14	ug/L		90
28) Tetrahydrofuran	5.596	42	364	0.17	ug/L	#	28
29) 1,1,1-Trichloroethane	5.621	97	552	0.13	ug/L		83
31) 1,1-Dichloropropene	5.755	75	1195	0.30	ug/L		90
32) 2-Butanone (MEK)	5.742	43	1199	0.43	ug/L		52
33) Benzene	6.004	78	3439	0.26	ug/L		92
34) tert-Amyl methyl ether...	6.150	73	42189	4.96	ug/L		96
35) 1,2-Dichloroethane (EDC)	6.211	62	507	0.12	ug/L	#	49
36) iso-Butyl Alcohol	6.320	43	1005	3.19	ug/L		88
38) Trichloroethene (TCE)	6.625	130	796	0.30	ug/L		86
39) tert-Amyl ethyl ether ...	6.910	59	31873	5.39	ug/L		89
41) 1,2-Dichloropropane	7.172	63	648	0.20	ug/L	#	40
42) Bromodichloromethane	7.257	83	453	0.14	ug/L		83
44) c-1,3-Dichloropropene	7.963	75	620	0.15	ug/L		70
46) Toluene	8.231	91	3493	0.27	ug/L		96
47) Tetrachloroethene (PCE)	8.675	166	862	0.36	ug/L		74
49) t-1,3-Dichloropropene	8.705	75	446	0.11	ug/L	#	45
52) 1,3-Dichloropropane	9.161	76	422	0.08	ug/L		66
55) Chlorobenzene	9.824	112	2136	0.29	ug/L		94
56) Ethylbenzene	9.855	91	3431	0.27	ug/L		97
57) 1,1,1,2-Tetrachloroethane	9.885	131	365	0.16	ug/L	#	49

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:41:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

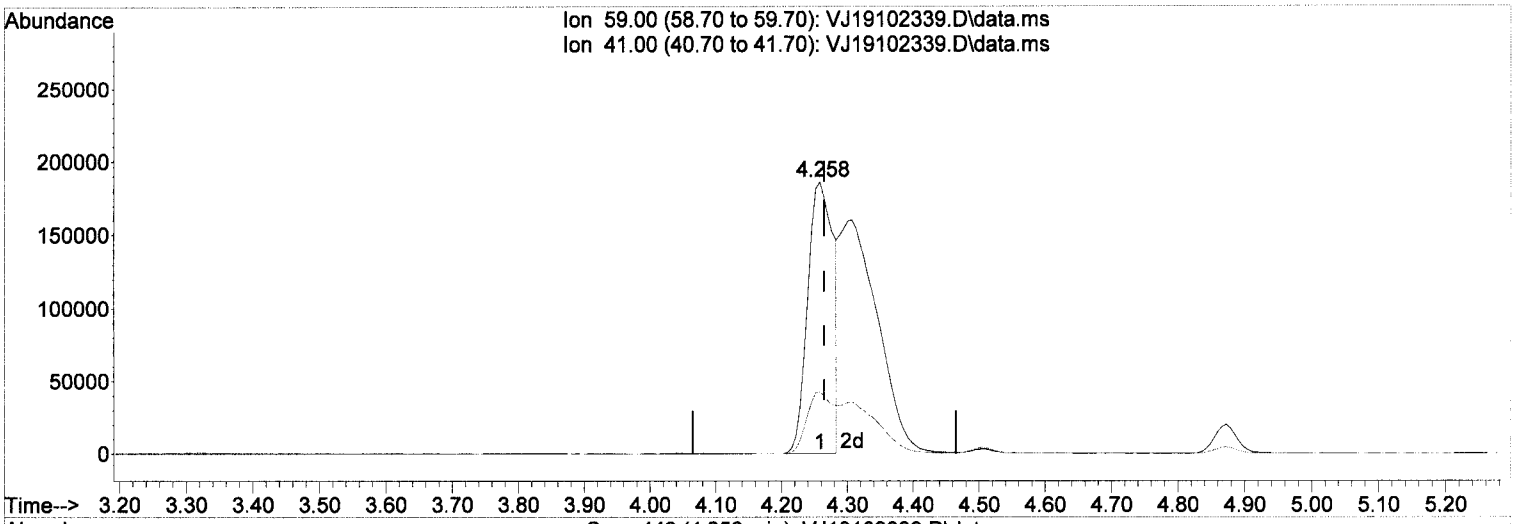
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
58) m,p-Xylenes (2)	9.995	91	4873	0.54 ug/L	94
59) o-Xylene	10.372	91	2135	0.25 ug/L	82
60) Styrene	10.427	104	1126	0.34 ug/L	95
62) Isopropylbenzene	10.652	105	2409	0.23 ug/L	93
65) Bromobenzene	10.968	156	607	0.25 ug/L	93
66) n-Propylbenzene	10.993	91	4033	0.32 ug/L	93
68) 2-Chlorotoluene	11.114	126	692	0.31 ug/L	96
69) 1,3,5-Trimethylbenzene	11.157	105	2252	0.29 ug/L	100
72) 4-Chlorotoluene	11.248	91	2491	0.34 ug/L	96
73) tert-Butylbenzene	11.406	91	1019	0.22 ug/L	94
74) 1,2,4-Trimethylbenzene	11.461	105	2316	0.30 ug/L	97
75) sec-Butylbenzene	11.546	105	2816	0.28 ug/L	96
76) 4-Isopropyltoluene	11.656	119	2479	0.33 ug/L	93
77) 1,3-Dichlorobenzene	11.710	146	1793	0.41 ug/L	97
78) 1,4-Dichlorobenzene	11.777	146	1826	0.39 ug/L	83
79) n-Butylbenzene	11.972	91	3638	0.50 ug/L	93
80) 1,2-Dichlorobenzene	12.094	146	1062	0.27 ug/L	90
82) Hexachlorobutadiene	13.219	223	301	0.60 ug/L #	74
83) 1,2,4-Trichlorobenzene	13.237	180	1525	0.63 ug/L	88
84) Naphthalene	13.517	128	4638	0.54 ug/L	91
85) 1,2,3-Trichlorobenzene	13.675	180	1265	0.54 ug/L	88

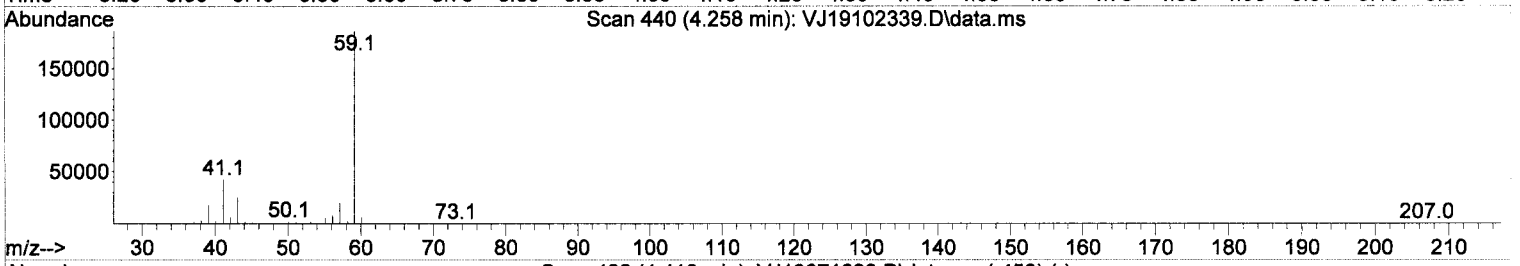
(#) = qualifier out of range (m) = manual integration (+) = signals summed

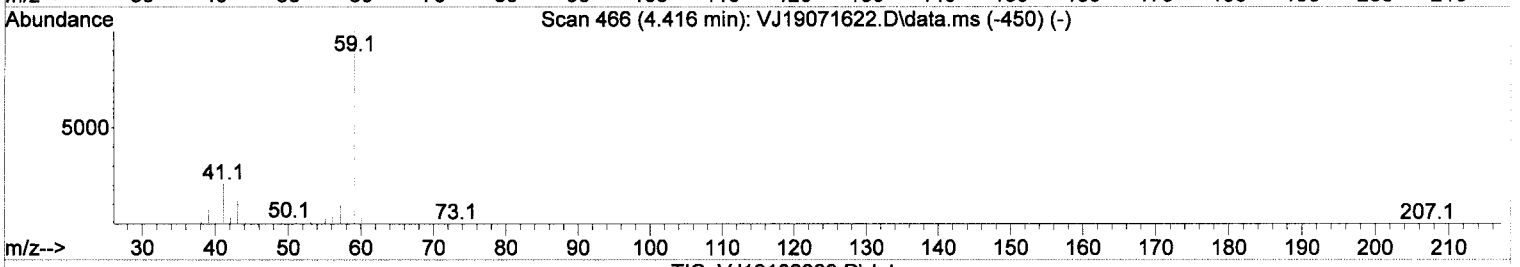
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:41:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102339.D\data.ms

(18) tert-Butanol (TBA)

4.258min (-0.006) 627.62 ug/L

response 505484

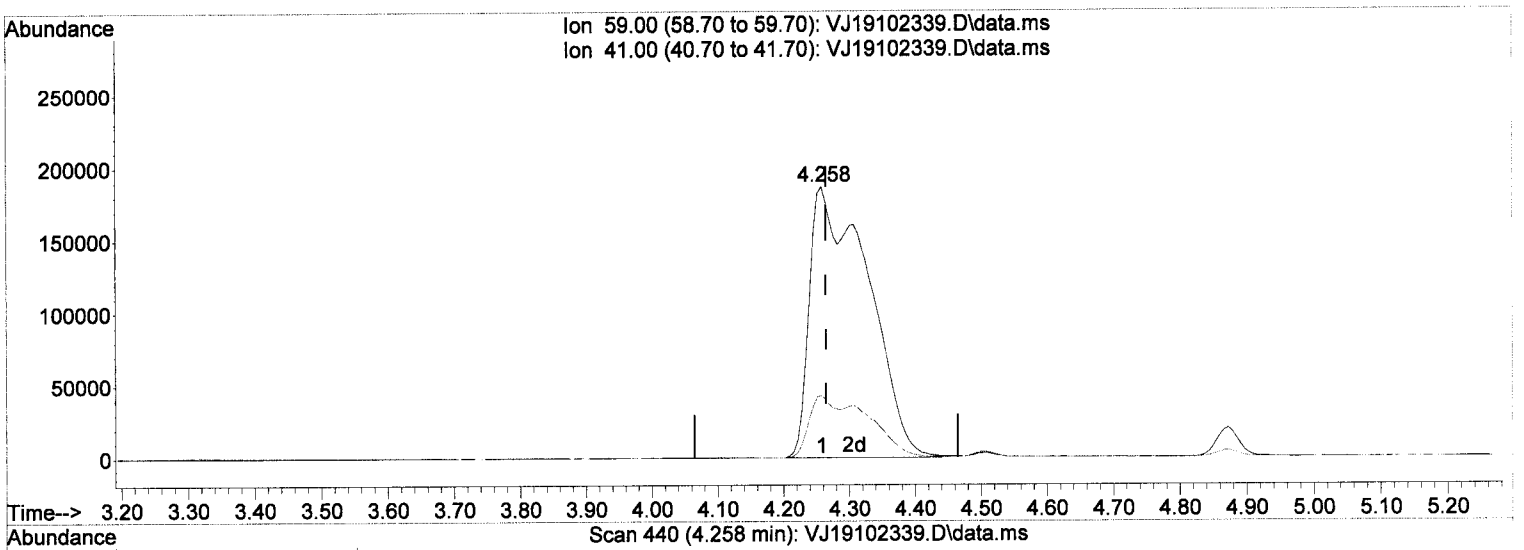
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.78#
0.00	0.00	0.00
0.00	0.00	0.00

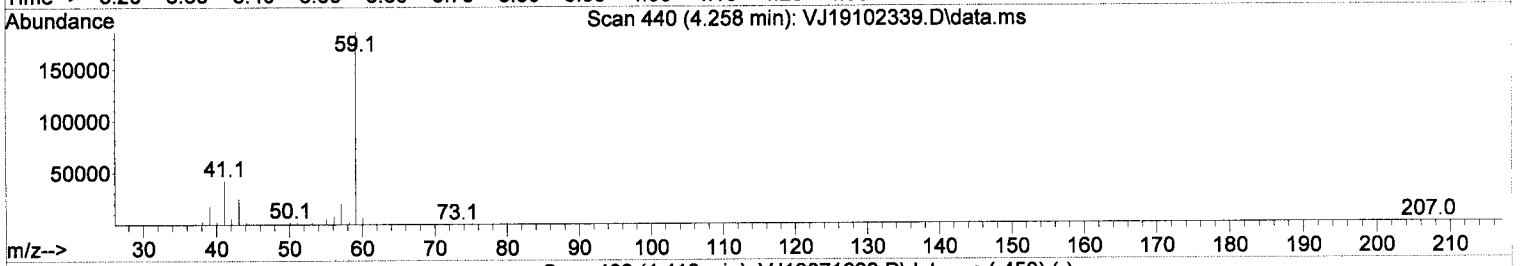
M.T.

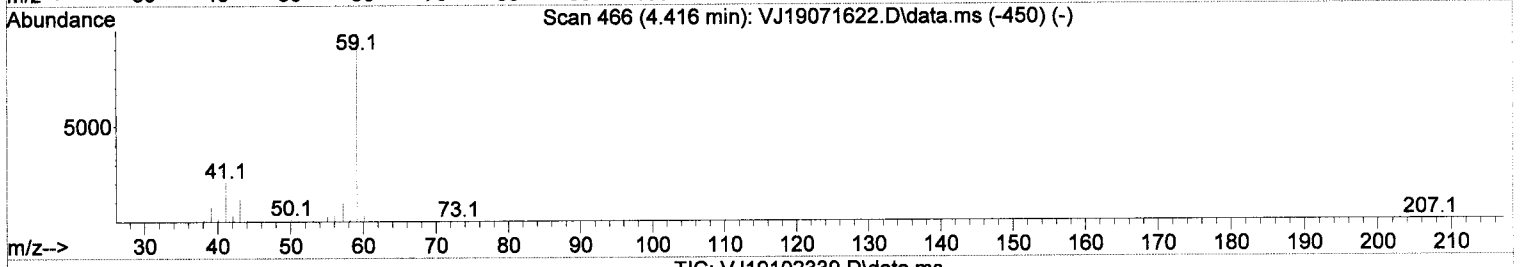
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:41:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration







TIC: VJ19102339.D\data.ms

(18) tert-Butanol (TBA)

4.258min (-0.006) 1428.86 ug/L m

response 1150797

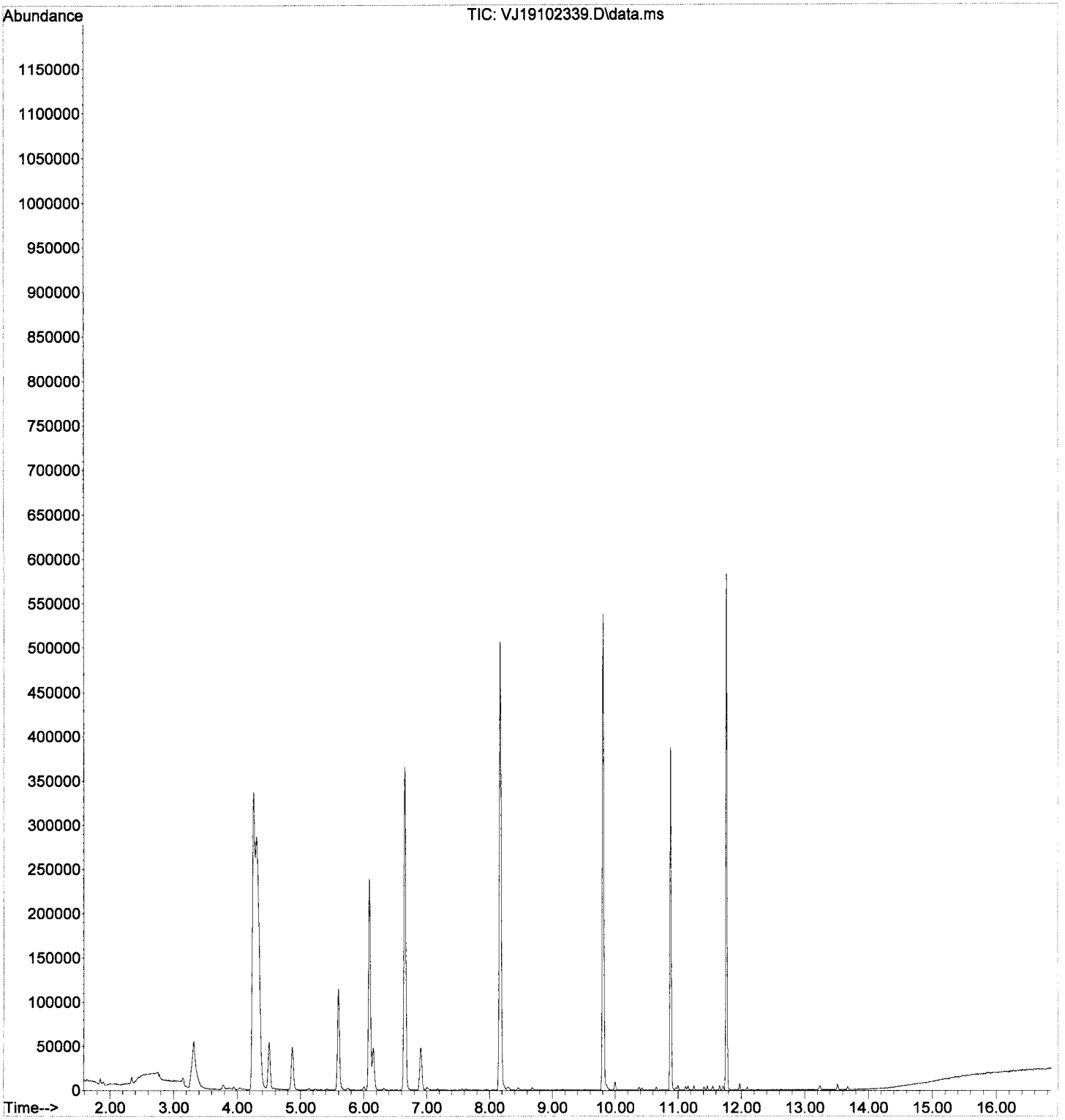
Ion	Exp%	Act%
59.00	100.00	100.00
41.00	28.80	22.78#
0.00	0.00	0.00
0.00	0.00	0.00

M 10/24/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102339.D
Acq On : 24 Oct 2019 5:27 am
Operator : MM
Sample : 9J23072-ICV2
Misc : 1X 5mL 5/1250PPB OXY+MeOH
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 24 09:41:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102340.D
Acq On : 24 Oct 2019 5:54 am
Operator : MM
Sample : 9J23072-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 24 09:41:31 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

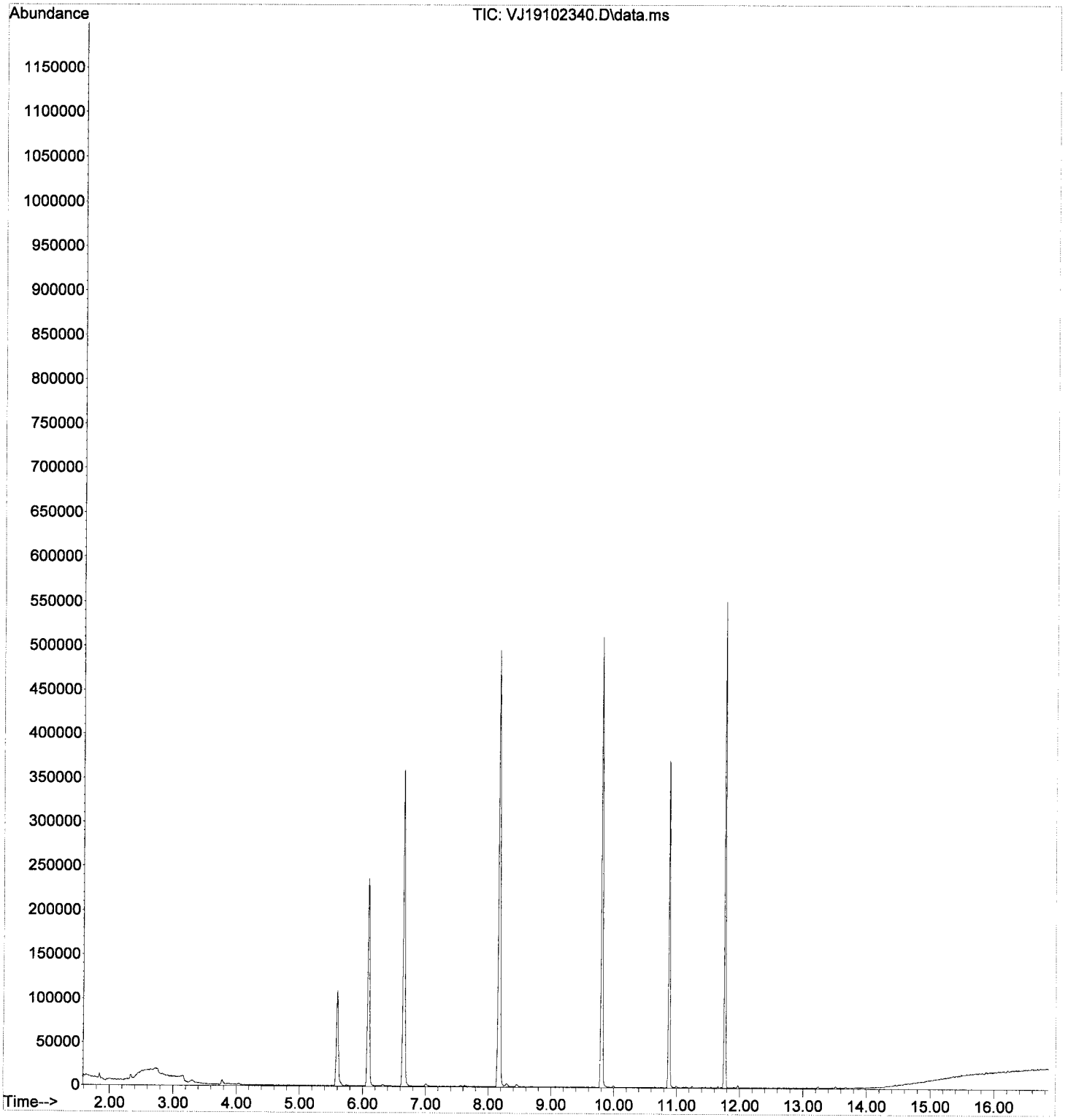
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.089	99	100948	50.00	ug/L		0.00
43) Chlorobenzene-d5 (I)	9.806	117	272905	50.00	ug/L		0.00
63) 1,4-Dichlorobenzene-d4...	11.765	152	112217	50.00	ug/L		0.00
System Monitoring Compounds							
30) Dibromofluoromethane (S)	5.596	111	77569	48.61	ug/L		0.00
37) 1,4-Difluorobenzene (S)	6.655	114	310823	50.05	ug/L		0.00
45) Toluene-d8 (S)	8.170	98	380882	50.05	ug/L		0.00
64) 4-Bromofluorobenzene (S)	10.883	174	82709	51.05	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.892	50	1724	0.44	ug/L		77
5) Bromomethane	2.342	96	3174	0.10	ug/L		93
6) Chloroethane	2.469	64	55	1.35	ug/L	#	68
8) Ethanol	3.315	45	5033	Below Cal			84
10) Carbon Disulfide	3.157	76	1703	0.24	ug/L		45
12) Iodomethane	3.291	142	1937	2.53	ug/L		86
13) Methylene Chloride	3.777	84	2471	0.19	ug/L	#	71
14) Acetone	3.869	43	1441	0.94	ug/L	#	42
28) Tetrahydrofuran	5.590	42	208	0.10	ug/L	#	43
32) 2-Butanone (MEK)	5.749	43	733	0.27	ug/L		52
36) iso-Butyl Alcohol	6.308	43	702	2.26	ug/L		89
58) m,p-Xylenes (2)	9.995	91	1183	0.13	ug/L		90
60) Styrene	10.421	104	205	0.20	ug/L	#	40
66) n-Propylbenzene	10.993	91	1329	0.11	ug/L		89
72) 4-Chlorotoluene	11.248	91	620	0.09	ug/L	#	46
74) 1,2,4-Trimethylbenzene	11.461	105	648	0.09	ug/L		94
75) sec-Butylbenzene	11.546	105	871	0.09	ug/L		68
76) 4-Isopropyltoluene	11.656	119	954	0.13	ug/L		93
77) 1,3-Dichlorobenzene	11.710	146	423	0.10	ug/L		78
78) 1,4-Dichlorobenzene	11.777	146	590	0.13	ug/L	#	54
79) n-Butylbenzene	11.978	91	1462	0.21	ug/L		90
83) 1,2,4-Trichlorobenzene	13.250	180	684	0.29	ug/L	#	61
84) Naphthalene	13.517	128	1765	0.21	ug/L		79
85) 1,2,3-Trichlorobenzene	13.669	180	544	0.24	ug/L	#	58

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102340.D
Acq On : 24 Oct 2019 5:54 am
Operator : MM
Sample : 9J23072-IBL6
Misc : 1X 5mL DI+MeOH
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 24 09:41:31 2019
Quant Method : C:\msdchem\1\methods\VJ191024S.M
Quant Title : EPA 8260C: Volatile Organic Compounds
QLast Update : Thu Oct 24 08:55:09 2019
Response via : Initial Calibration

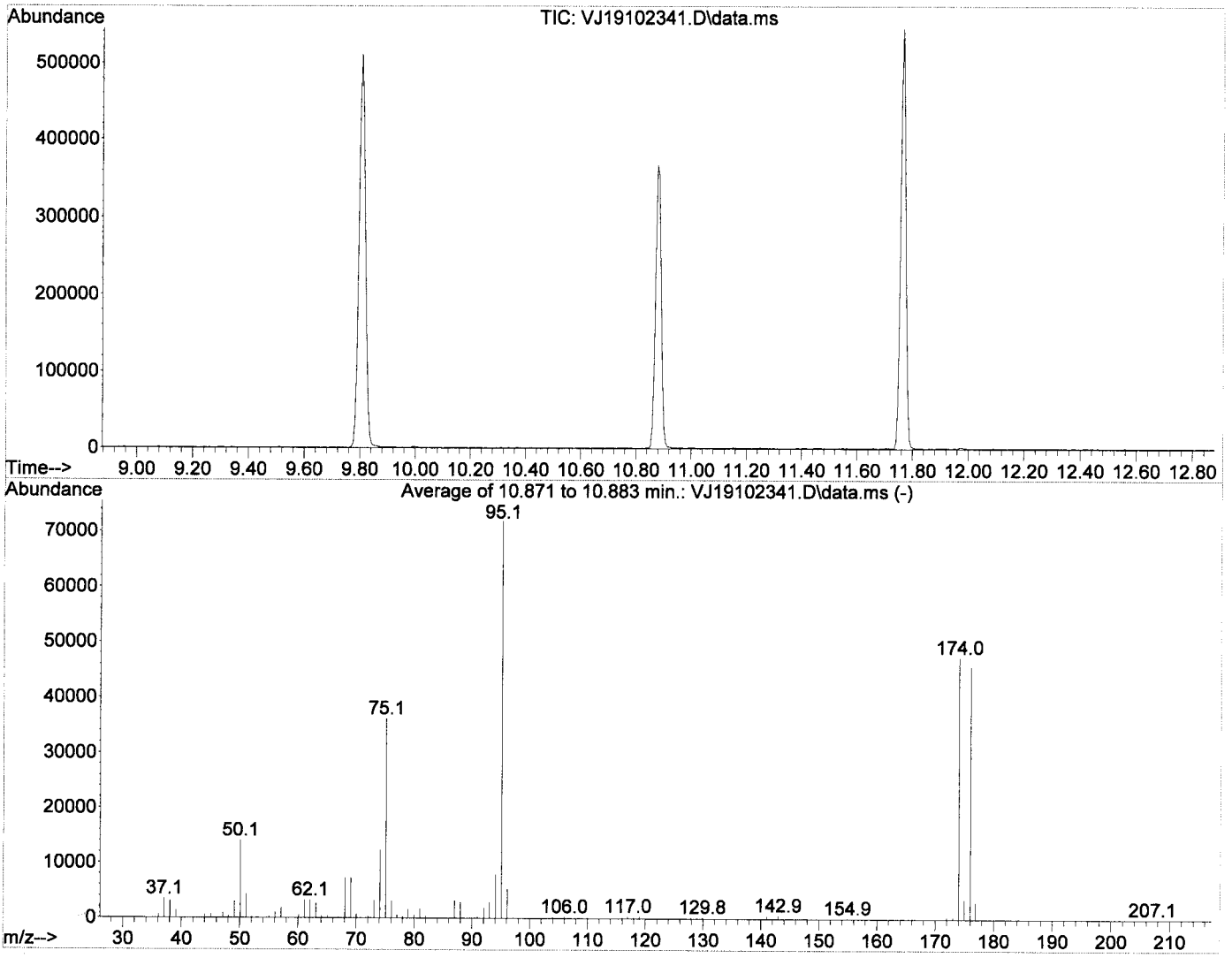


Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102341.D
Acq On : 24 Oct 2019 6:21 am
Operator : MM
Sample : 9J23072-TUN2
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 27 Sample Multiplier: 1

Integration File: APEXG.P

Method : C:\msdchem\1\methods\VJ191024G.M
Title : NWTPH-Gx by GC/MS
Last Update : Thu Oct 24 12:01:51 2019

VJ 10/24/19



AutoFind: Scans 1527, 1528, 1529; Background Corrected with Scan 1521

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	151.6	71859	PASS
96	95	5	9	7.3	5269	PASS
173	174	0.00	2	0.7	332	PASS
174	95	50	200	66.0	47405	PASS
175	174	5	9	7.5	3553	PASS
176	174	95	105	96.5	45755	PASS
177	176	5	10	6.6	2999	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102341.D
Acq On : 24 Oct 2019 6:21 am
Operator : MM
Sample : 9J23072-TUN2
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 24 12:07:29 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

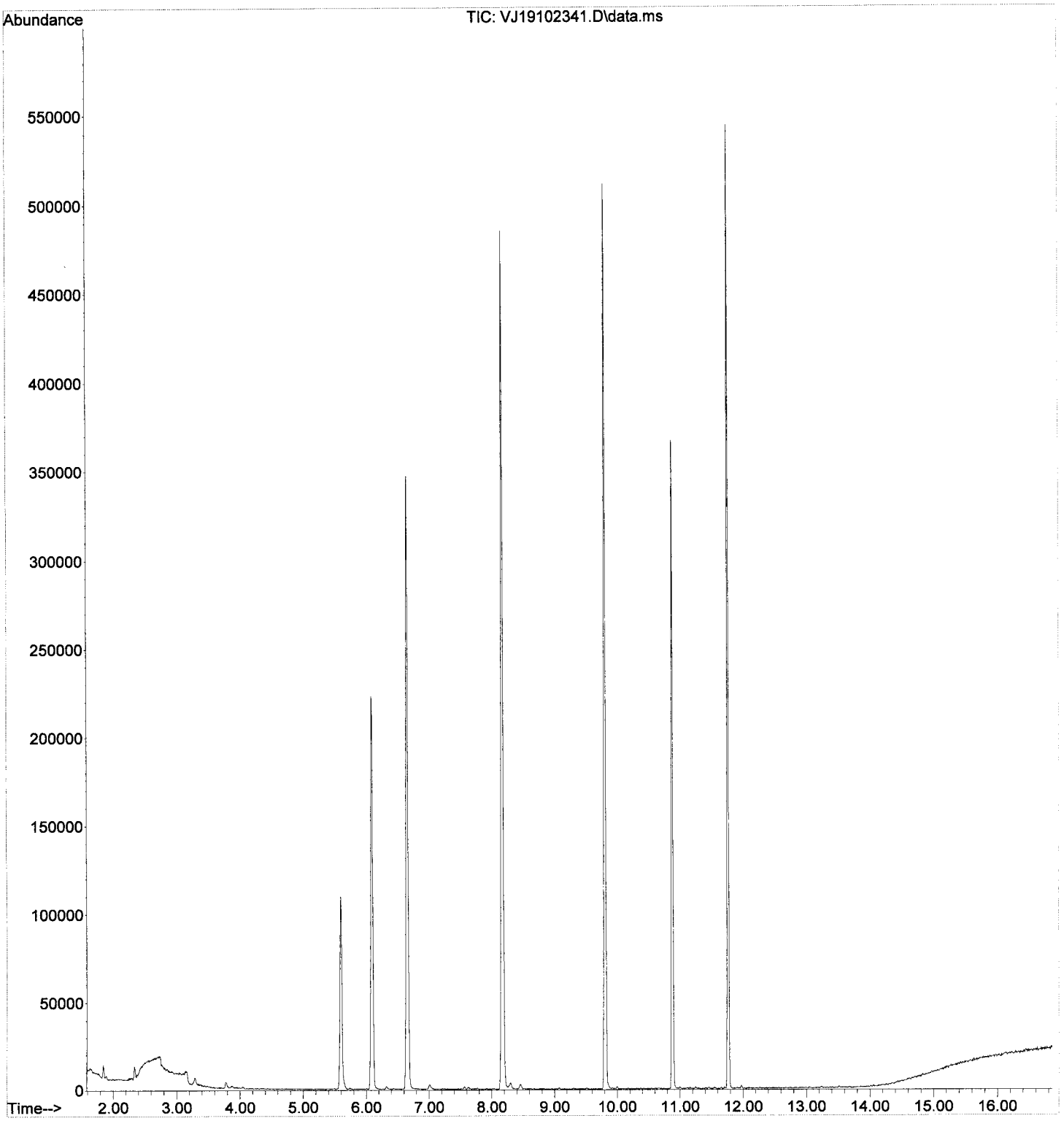
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	157543	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	301152	50.24	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	81118	50.24	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	371145	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	267046	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	173688	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	104995m	16.84	ug/L	
5) TPHg (C5-C9)	9.239	TIC	335883m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	297596m	8.34	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	383945m	Below Cal		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102341.D
Acq On : 24 Oct 2019 6:21 am
Operator : MM
Sample : 9J23072-TUN2
Misc : A19G118 BFB (IS/SURR)
ALS Vial : 27 Sample Multiplier: 1

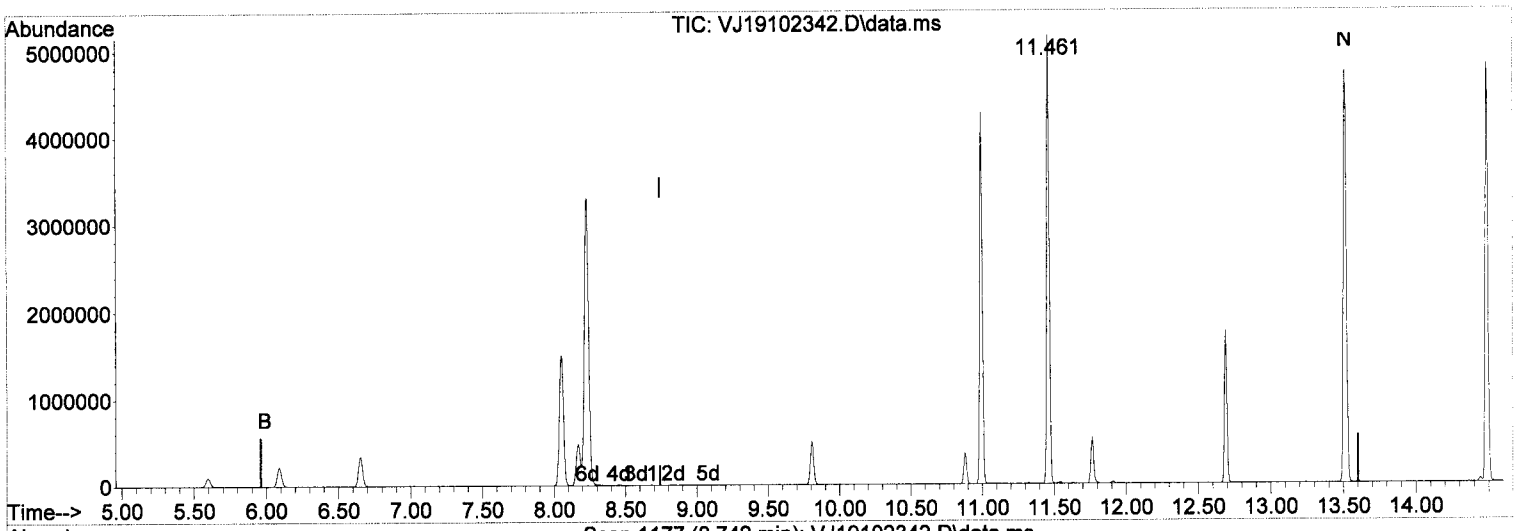
Quant Time: Oct 24 12:07:29 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

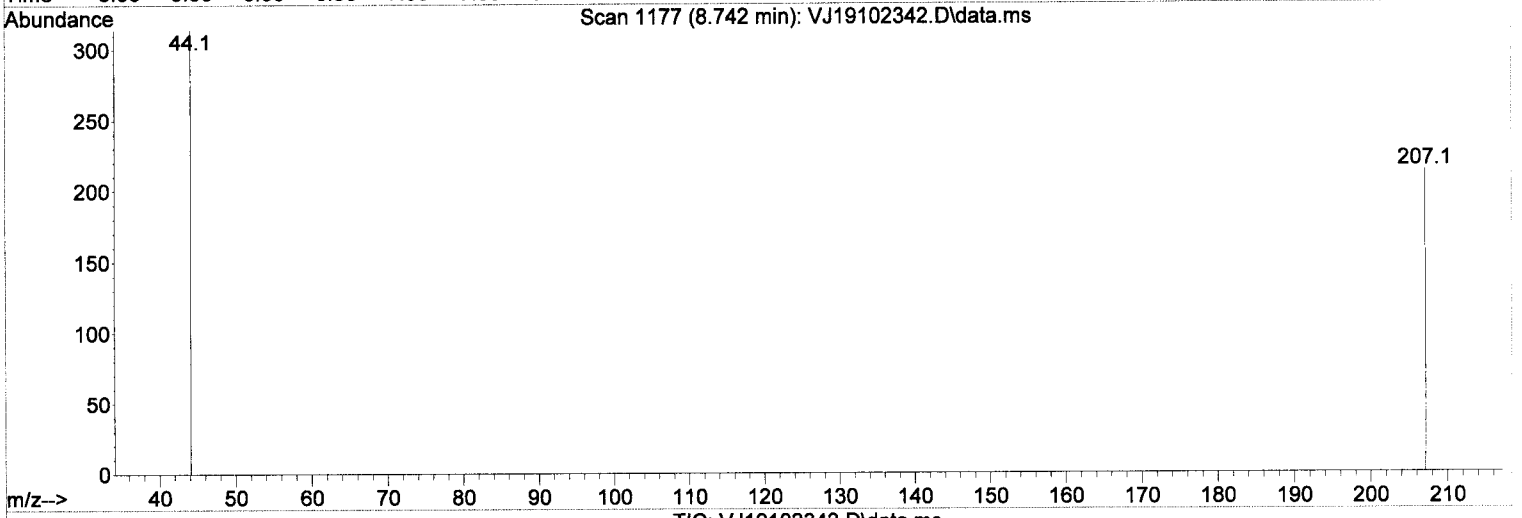


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19102342.D\data.ms

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

8.739min (0.000) 3791.19 ug/L m

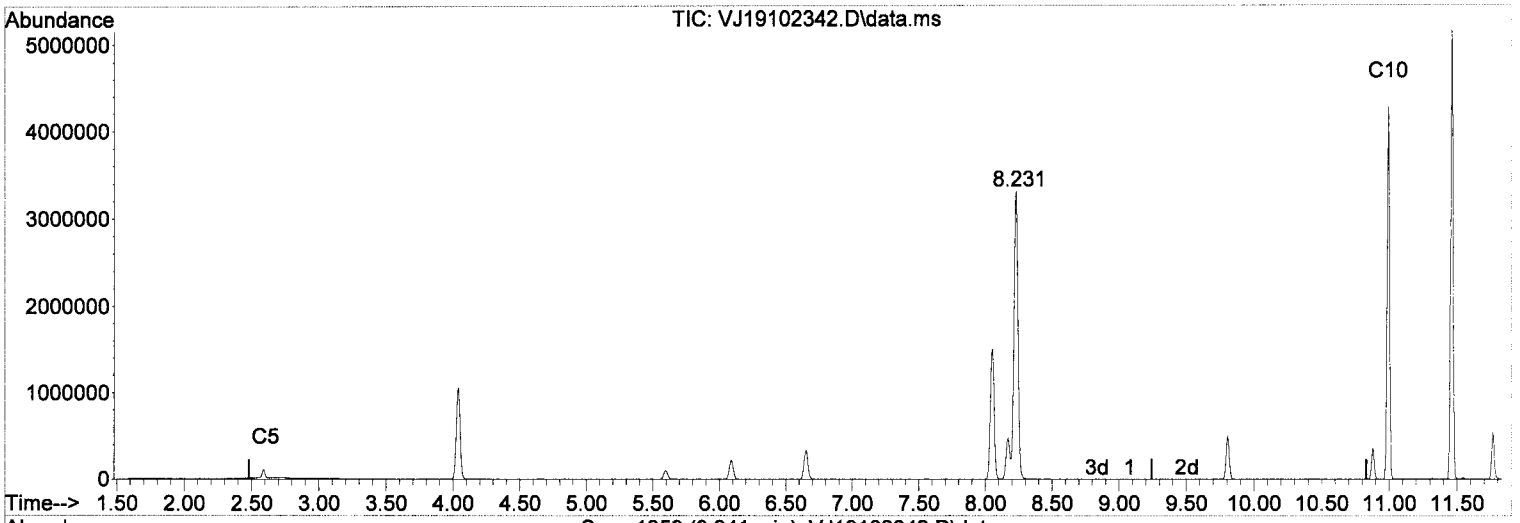
response 30811353

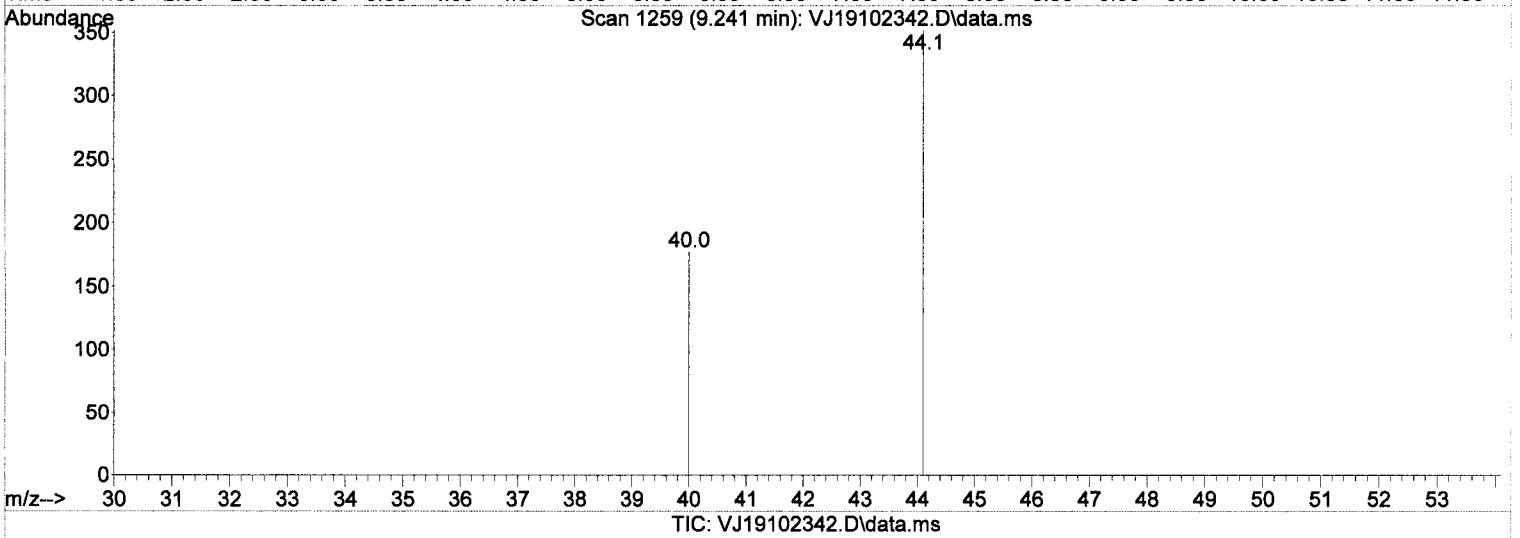
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	0.94#
0.00	0.00	0.75#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19102342.D\data.ms

(5) TPHg (C5-C9) (H)

9.239min (0.000) 1281.09 ug/L m

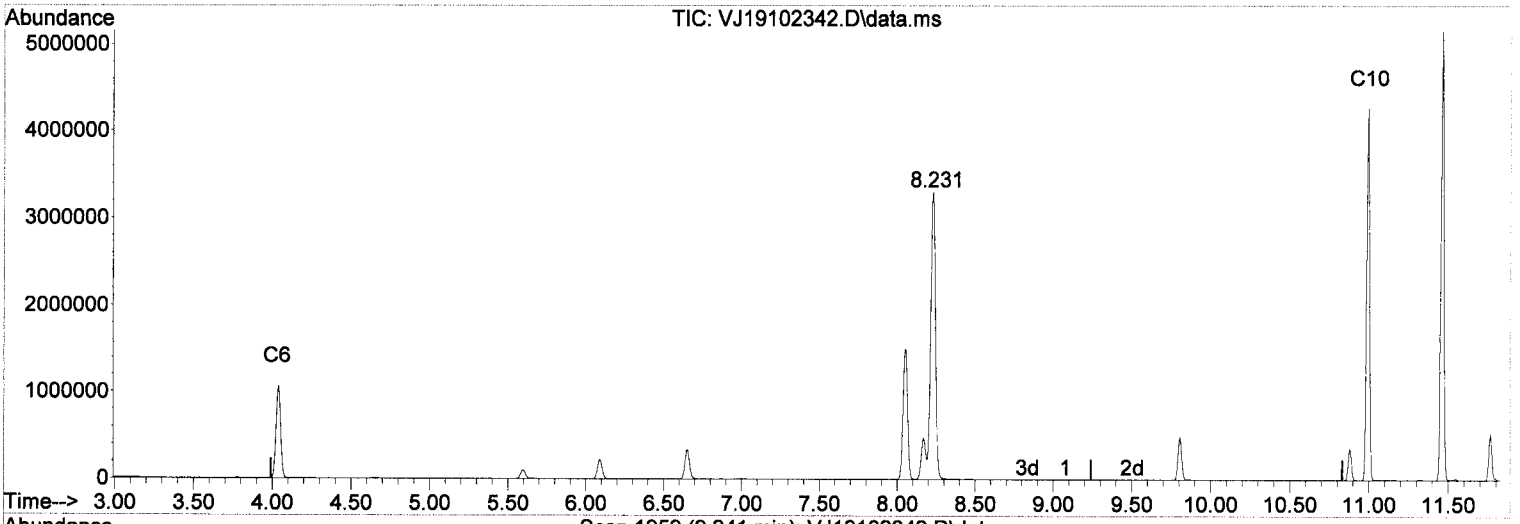
response 12973167

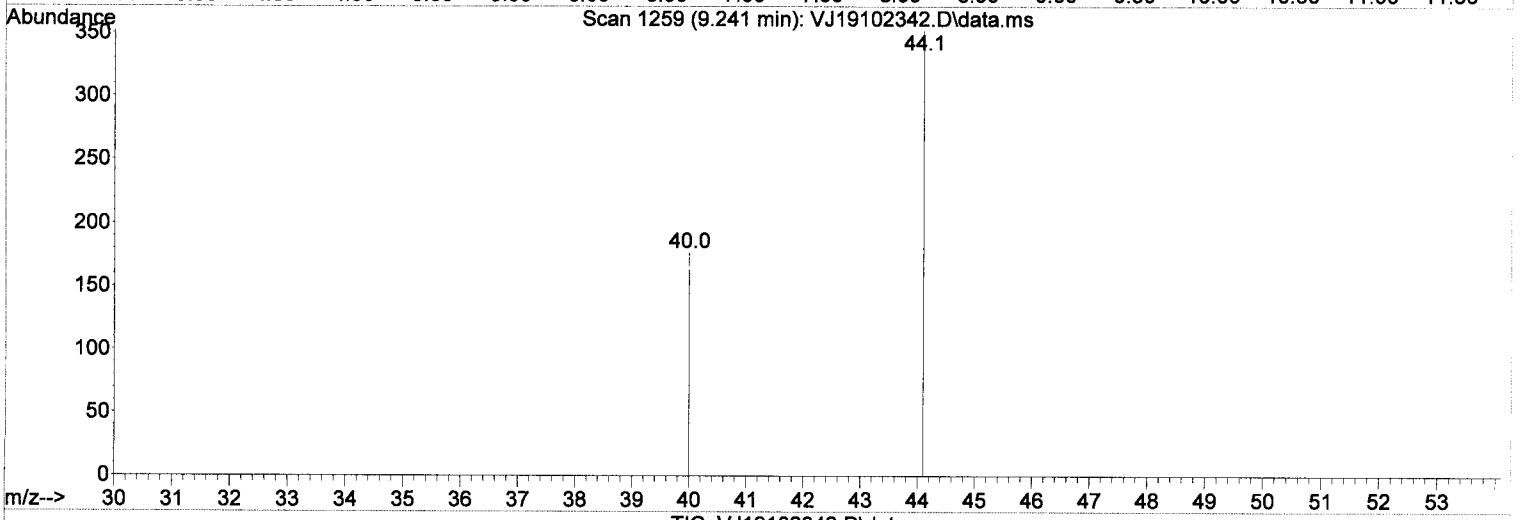
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.23#
0.00	0.00	1.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19102342.D\data.ms

(6) TPHg (C6-C10) (H)

9.239min (0.000) 1426.94 ug/L m

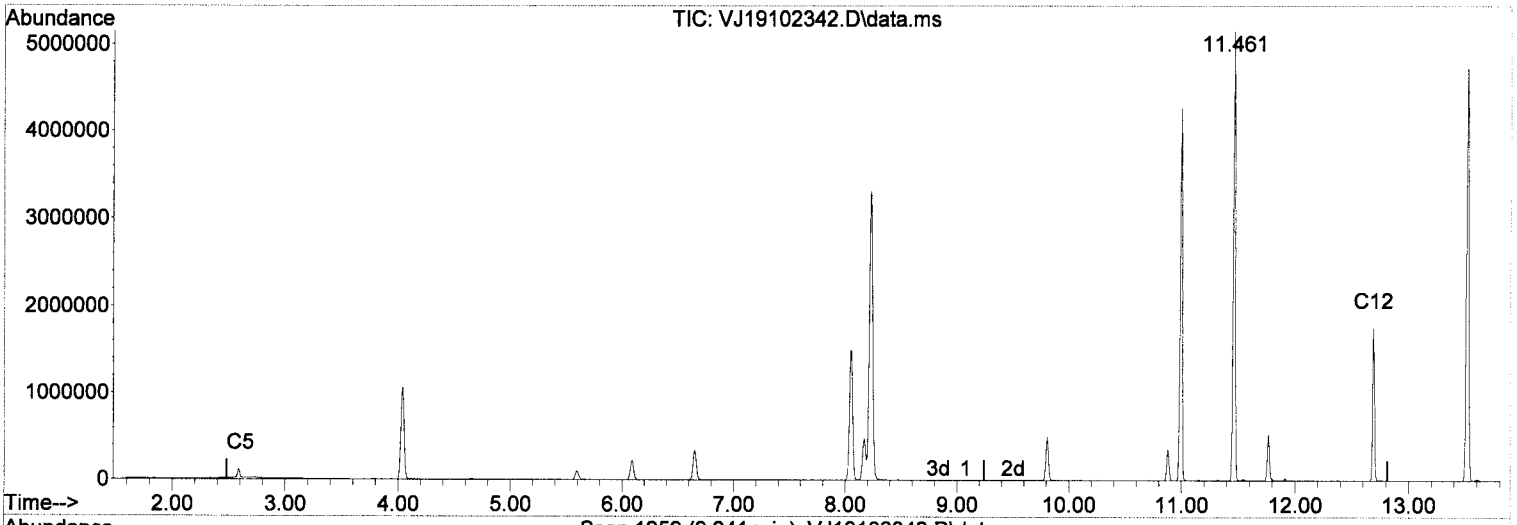
response 12428804

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.33#
0.00	0.00	1.85#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



TIC: VJ19102342.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.239min (0.000) 2235.31 ug/L m

response 26853201

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.08#
0.00	0.00	0.86#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

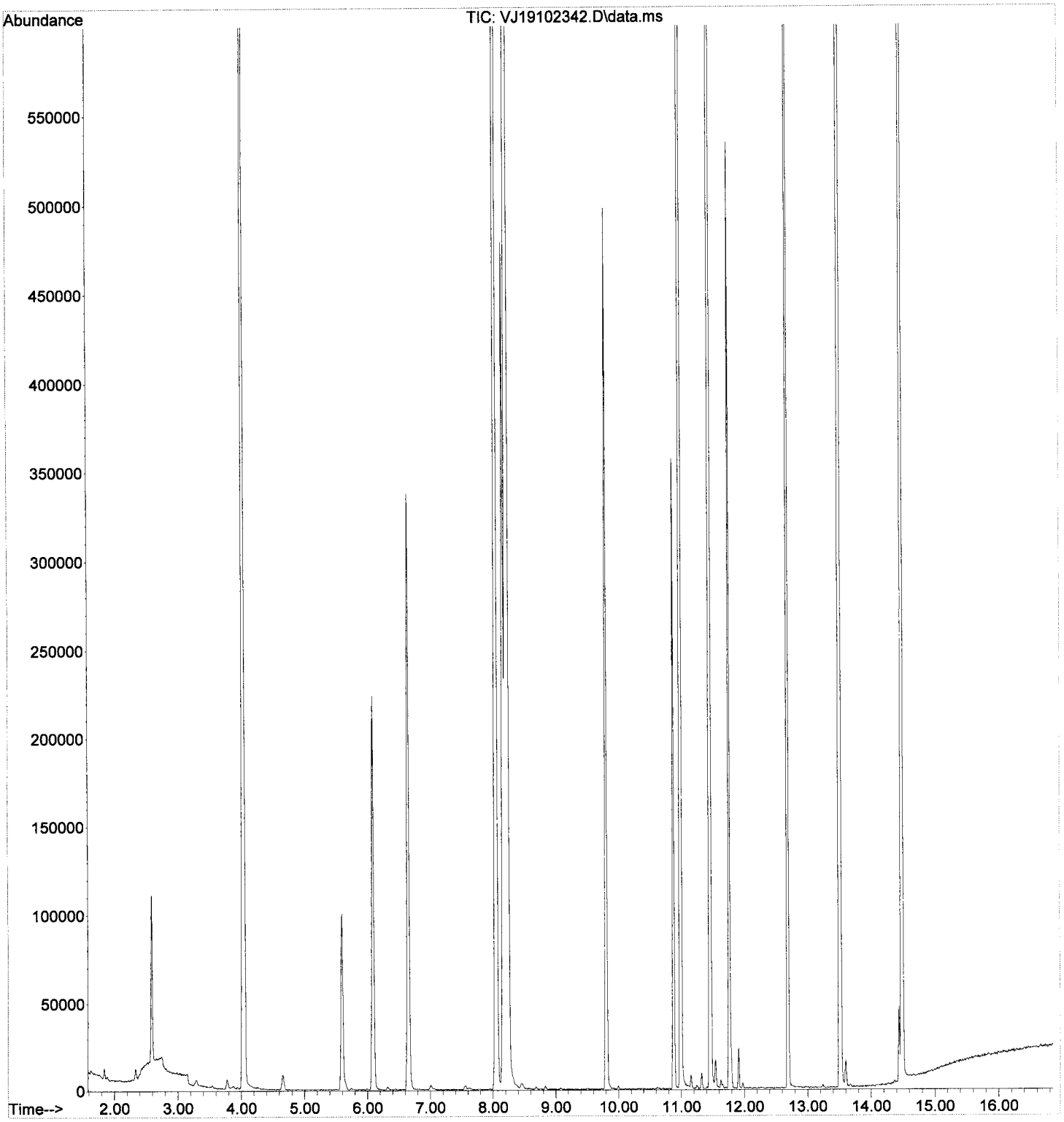
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	152504	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	291705	50.27	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	79181	50.66	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	374151	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	260047	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	178769	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	30811353m	3791.19	ug/L	
5) TPHg (C5-C9)	9.239	TIC	12973167m	1281.09	ug/L	
6) TPHg (C6-C10)	9.239	TIC	12428804m	1426.94	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	26853201m	2235.31	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102342.D
Acq On : 24 Oct 2019 6:48 am
Operator : MM
Sample : 9J23072-RT1
Misc : A19A167 VPH RT STD
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 24 12:07:39 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102343.D
Acq On : 24 Oct 2019 7:14 am
Operator : MM
Sample : 9J23072-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 24 12:08:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

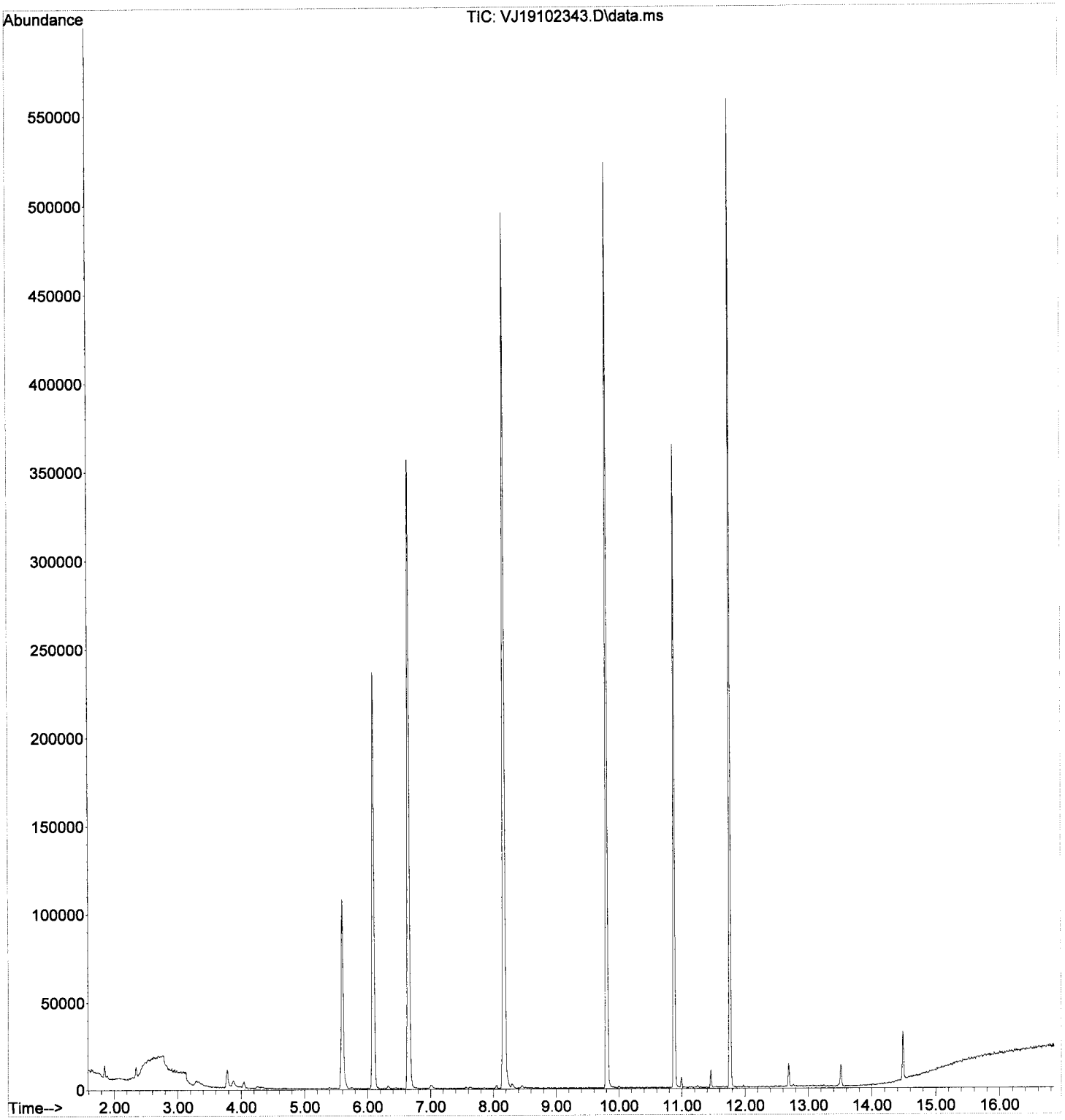
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	162093	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	309916	50.25	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	81881	49.28	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	381407	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	272169	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	173838	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	162878m	23.62	ug/L	
5) TPHg (C5-C9)	9.239	TIC	367418m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	301030m	7.76	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	454097m	4.31	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102343.D
Acq On : 24 Oct 2019 7:14 am
Operator : MM
Sample : 9J23072-IBL7
Misc : 1X 5mL DI+MeOH
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 24 12:08:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102344.D
Acq On : 24 Oct 2019 7:41 am
Operator : MM
Sample : 9J23072-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 24 12:08:40 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

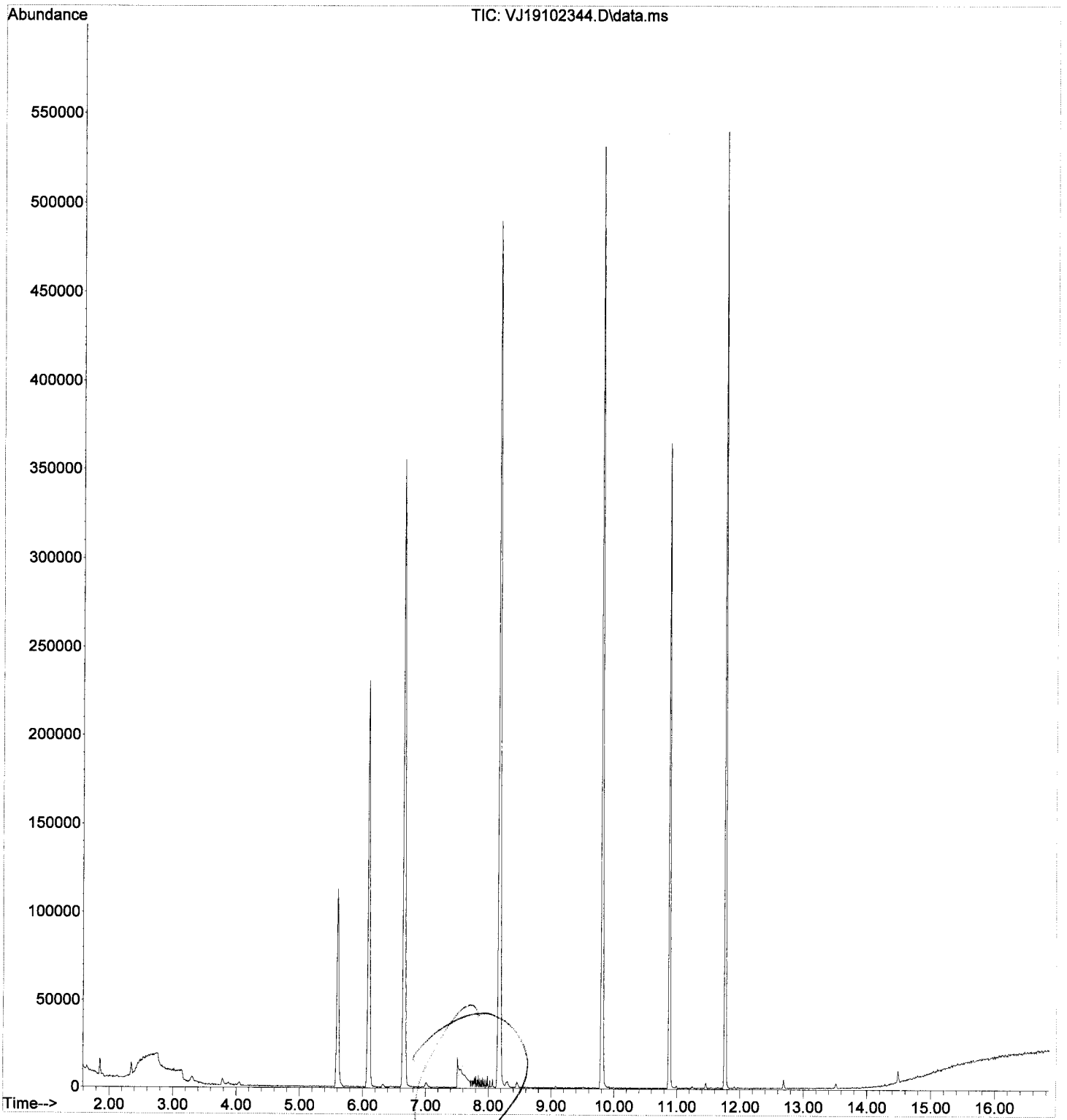
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	157703	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	301697	50.28	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	79924	49.45	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	376233	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	267981	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	171088	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	224158m	31.96	ug/L	
5) TPHg (C5-C9)	9.239	TIC	461564m	6.37	ug/L	
6) TPHg (C6-C10)	9.239	TIC	415558m	21.81	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	511341m	10.14	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102344.D
Acq On : 24 Oct 2019 7:41 am
Operator : MM
Sample : 9J23072-ICB2
Misc : 1X 5mL DI+MeOH
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 24 12:08:40 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 11:56:22 2019
Quant Method : C:\msdchem\1\methods\~~VJ191024~~G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

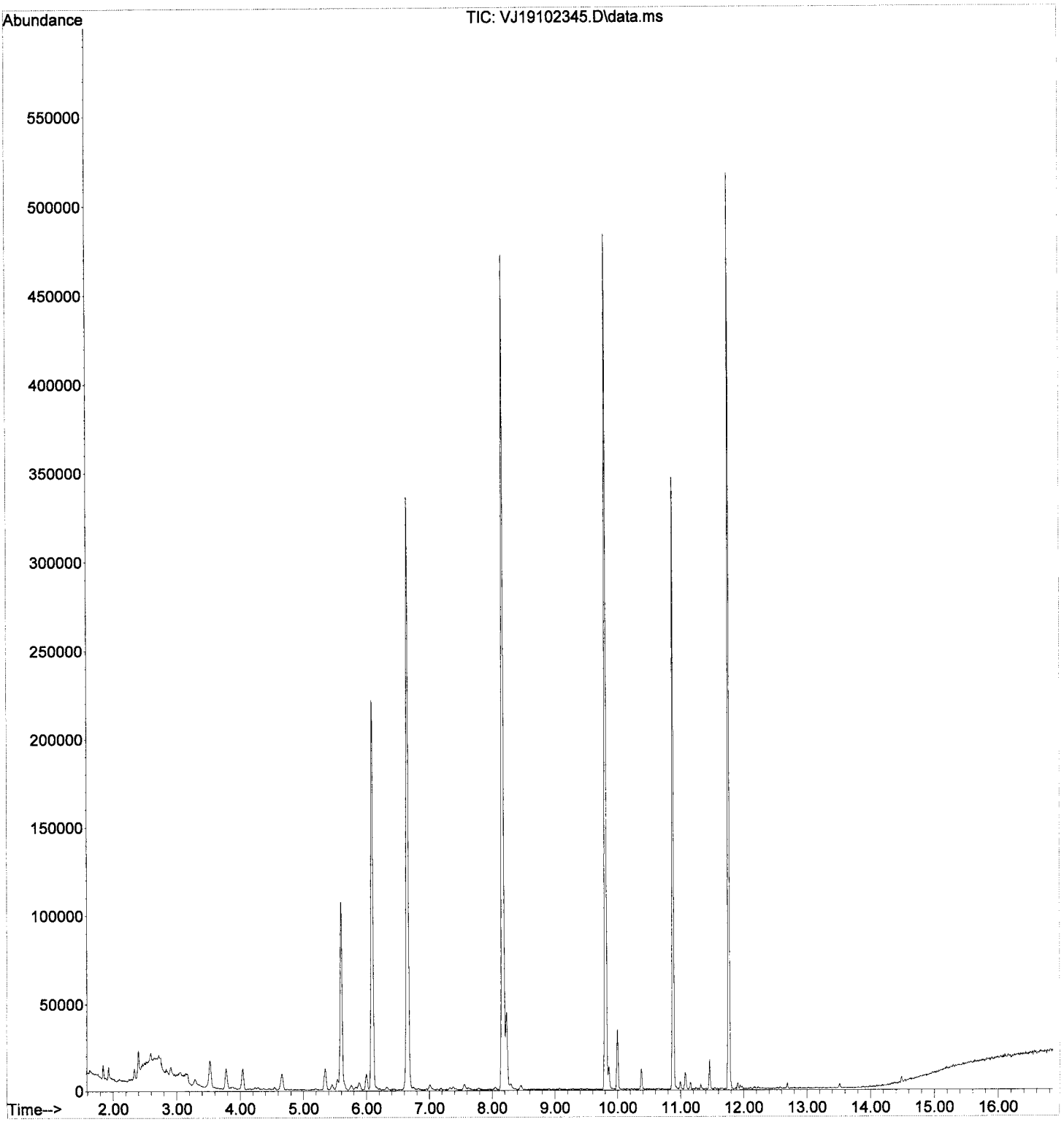
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	152567	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	289686	54.80	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	77731	44.73	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	359519	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	255377	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	164945	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	375320m	73.85	ug/L	
5) TPHg (C5-C9)	9.239	TIC	843934m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	631711m	67.57	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	946025m	Below Cal		
8) Benzene (NR)	5.998	78	4495	No Calib		
10) Toluene (NR)	8.231	91	38006	No Calib		
13) Naphthalene (NR)	13.517	128	2301	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102345.D
Acq On : 24 Oct 2019 8:08 am
Operator : MM
Sample : 9J23072-CALC
Misc : 1X 5mL 50PPB GX+MeOH
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 24 11:56:22 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102346.D
Acq On : 24 Oct 2019 8:35 am
Operator : MM
Sample : 9J23072-CALD
Misc : 1X 5mL 100PPB GX+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 24 11:56:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

MM 10/24/19

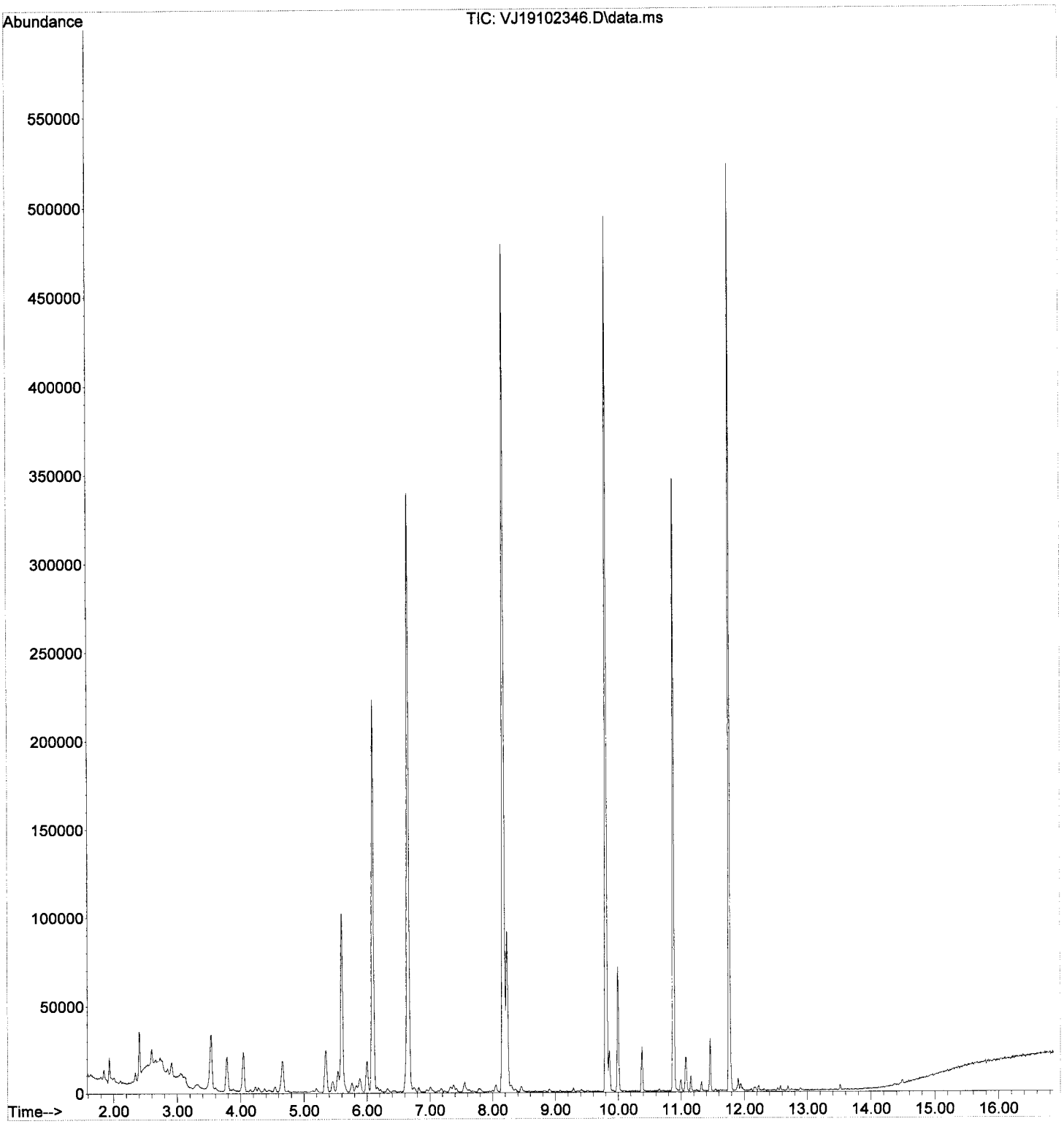
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	153392	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	292121	54.97	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	77996	44.64	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	363344	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	257766	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	166498	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	727259m	112.67	ug/L	
5) TPHg (C5-C9)	9.239	TIC	1427185m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	1074809m	115.74	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	1596035m	6.25	ug/L	
8) Benzene (NR)	6.004	78	8975	No Calib		
10) Toluene (NR)	8.231	91	77585	No Calib		
13) Naphthalene (NR)	13.511	128	2245	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102346.D
Acq On : 24 Oct 2019 8:35 am
Operator : MM
Sample : 9J23072-CALD
Misc : 1X 5mL 100PPB GX+MeOH
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 24 11:56:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102347.D
Acq On : 24 Oct 2019 9:02 am
Operator : MM
Sample : 9J23072-CALE
Misc : 1X 5mL 250PPB GX+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 24 11:56:27 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

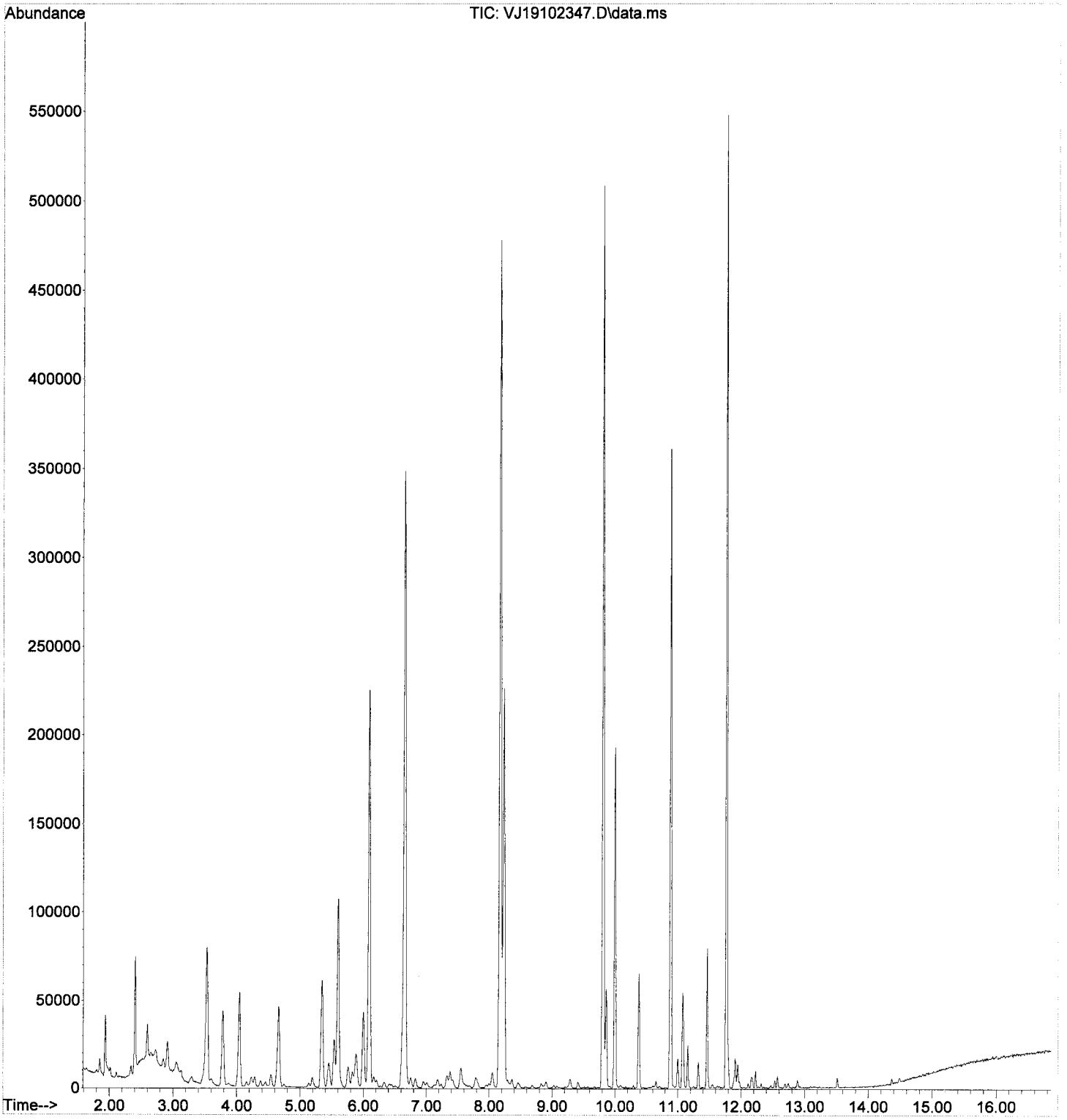
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	155593	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	296265	54.96	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	79823	45.04	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	365297	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	262110	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	171256	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	1852913m	234.60	ug/L	
5) TPHg (C5-C9)	9.239	TIC	2804041m	108.97	ug/L	
6) TPHg (C6-C10)	9.239	TIC	2339645m	250.72	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	3235032m	126.41	ug/L	
8) Benzene (NR)	6.004	78	21544	No Calib		
10) Toluene (NR)	8.231	91	188901	No Calib		
13) Naphthalene (NR)	13.517	128	3700	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102347.D
Acq On : 24 Oct 2019 9:02 am
Operator : MM
Sample : 9J23072-CALE
Misc : 1X 5mL 250PPB GX+MeOH
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 24 11:56:27 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102348.D
Acq On : 24 Oct 2019 9:29 am
Operator : MM
Sample : 9J23072-CALF
Misc : 1X 5mL 500PPB GX+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 24 11:56:29 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

MM 10/24/19

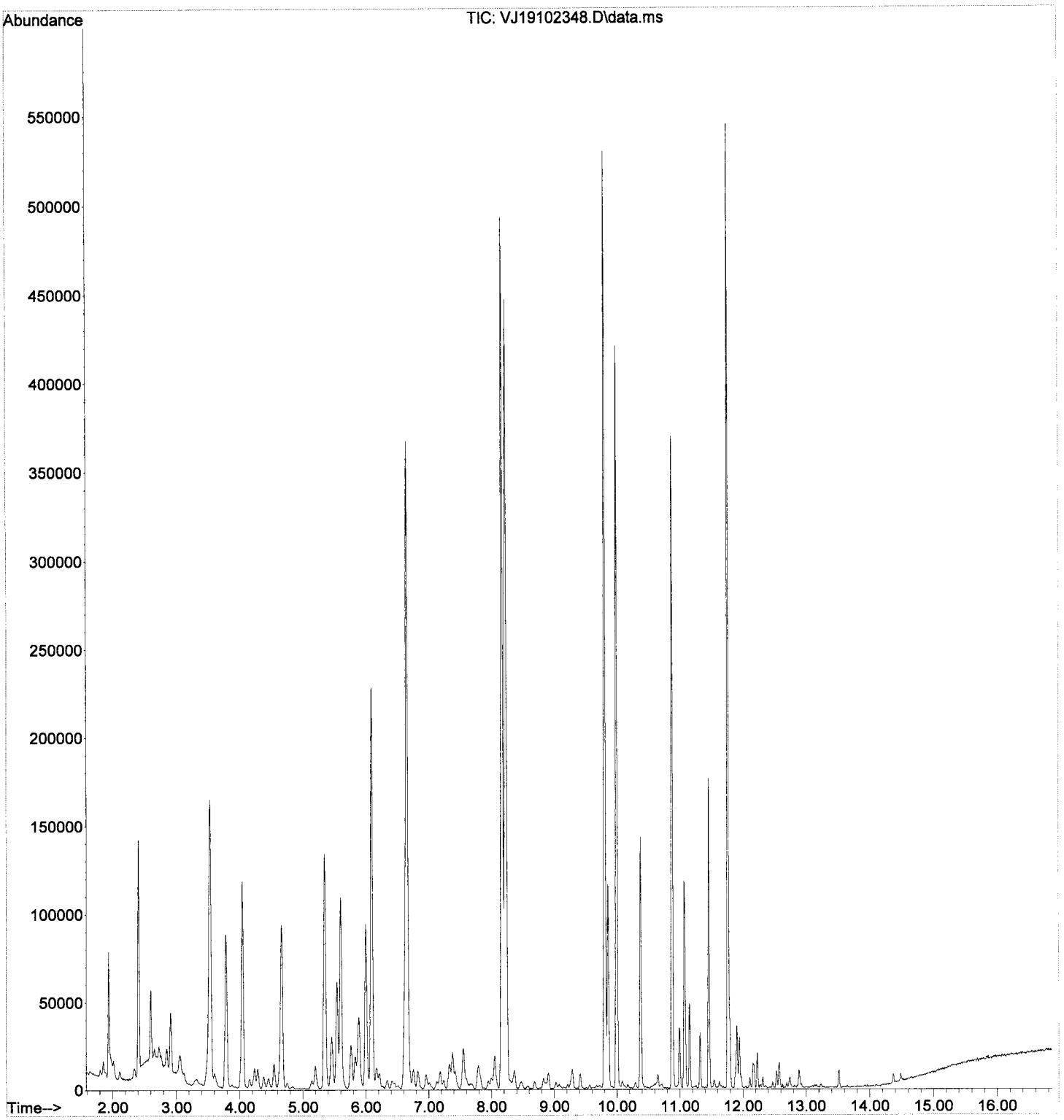
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	159177	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	305907	55.47	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	82765	45.65	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	375068	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	265334	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	174931	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	3865293m	444.99	ug/L	
5) TPHg (C5-C9)	9.239	TIC	5443810m	340.27	ug/L	
6) TPHg (C6-C10)	9.239	TIC	4678414m	492.11	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	6336737m	346.64	ug/L	
8) Benzene (NR)	6.004	78	43809	No Calib		
10) Toluene (NR)	8.231	91	381749	No Calib		
13) Naphthalene (NR)	13.517	128	7126	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102348.D
Acq On : 24 Oct 2019 9:29 am
Operator : MM
Sample : 9J23072-CALF
Misc : 1X 5mL 500PPB GX+MeOH
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 24 11:56:29 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102349.D
Acq On : 24 Oct 2019 9:56 am
Operator : MM
Sample : 9J23072-CALG
Misc : 1X 5mL 1000PPB GX+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Oct 24 11:56:31 2019
Quant Method : C:\msdchem\1\methods\VJ~~191024~~G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

MM 10/24/19

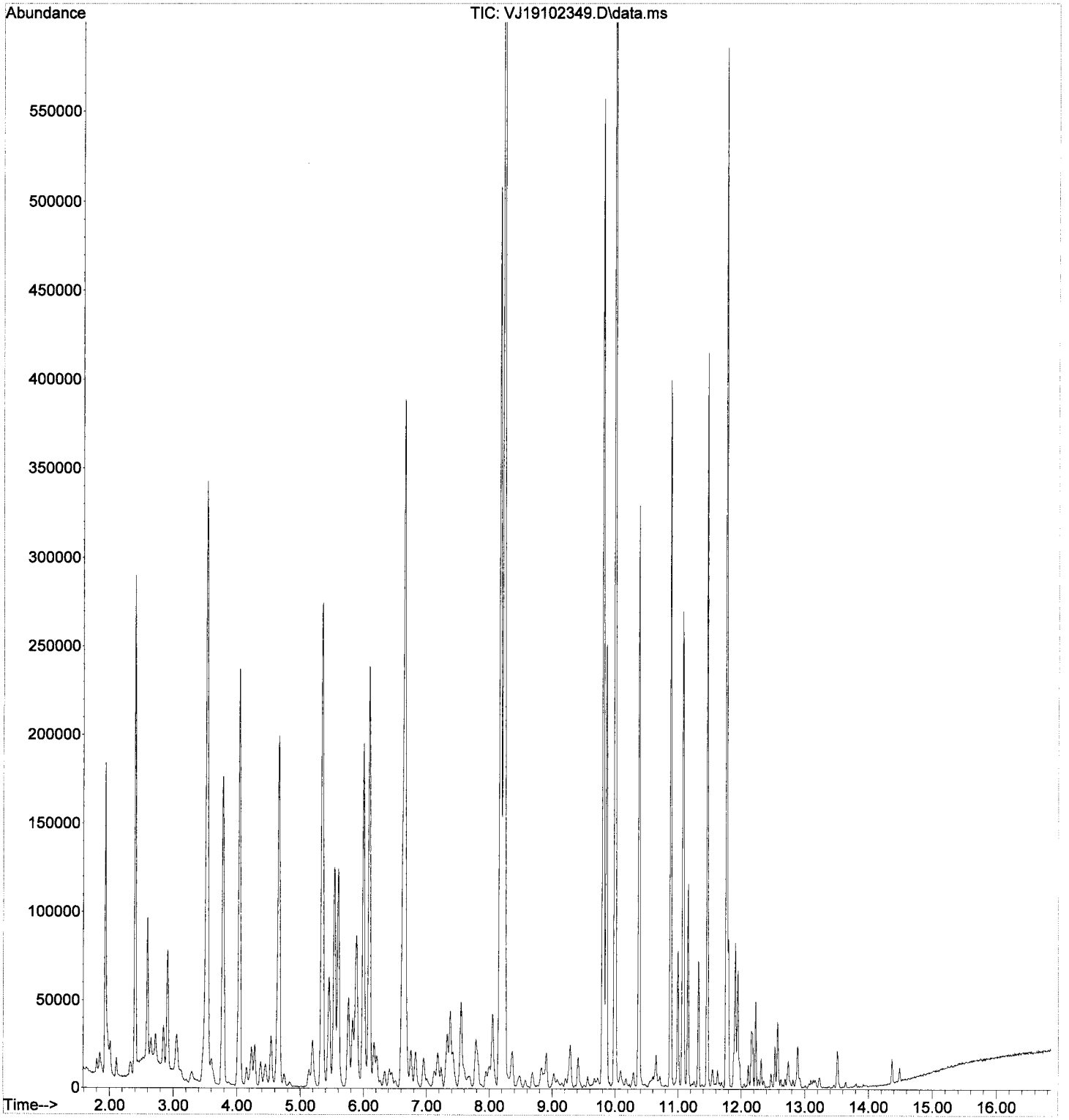
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	167155	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	318452	54.99	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	85756	45.04	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	390339	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	277618	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	186339	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	8482501m	894.38	ug/L	
5) TPHg (C5-C9)	9.239	TIC	11257602m	814.94	ug/L	
6) TPHg (C6-C10)	9.239	TIC	9708618m	975.00	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	13286173m	807.02	ug/L	
8) Benzene (NR)	6.004	78	92658	No Calib		
10) Toluene (NR)	8.231	91	802280	No Calib		
13) Naphthalene (NR)	13.511	128	15467	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102349.D
Acq On : 24 Oct 2019 9:56 am
Operator : MM
Sample : 9J23072-CALG
Misc : 1X 5mL 1000PPB GX+MeOH
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Oct 24 11:56:31 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102350.D
Acq On : 24 Oct 2019 10:23 am
Operator : MM
Sample : 9J23072-CALH
Misc : 1X 5mL 2500PPB GX+MeOH
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Oct 24 11:56:33 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

MM 10/24/19

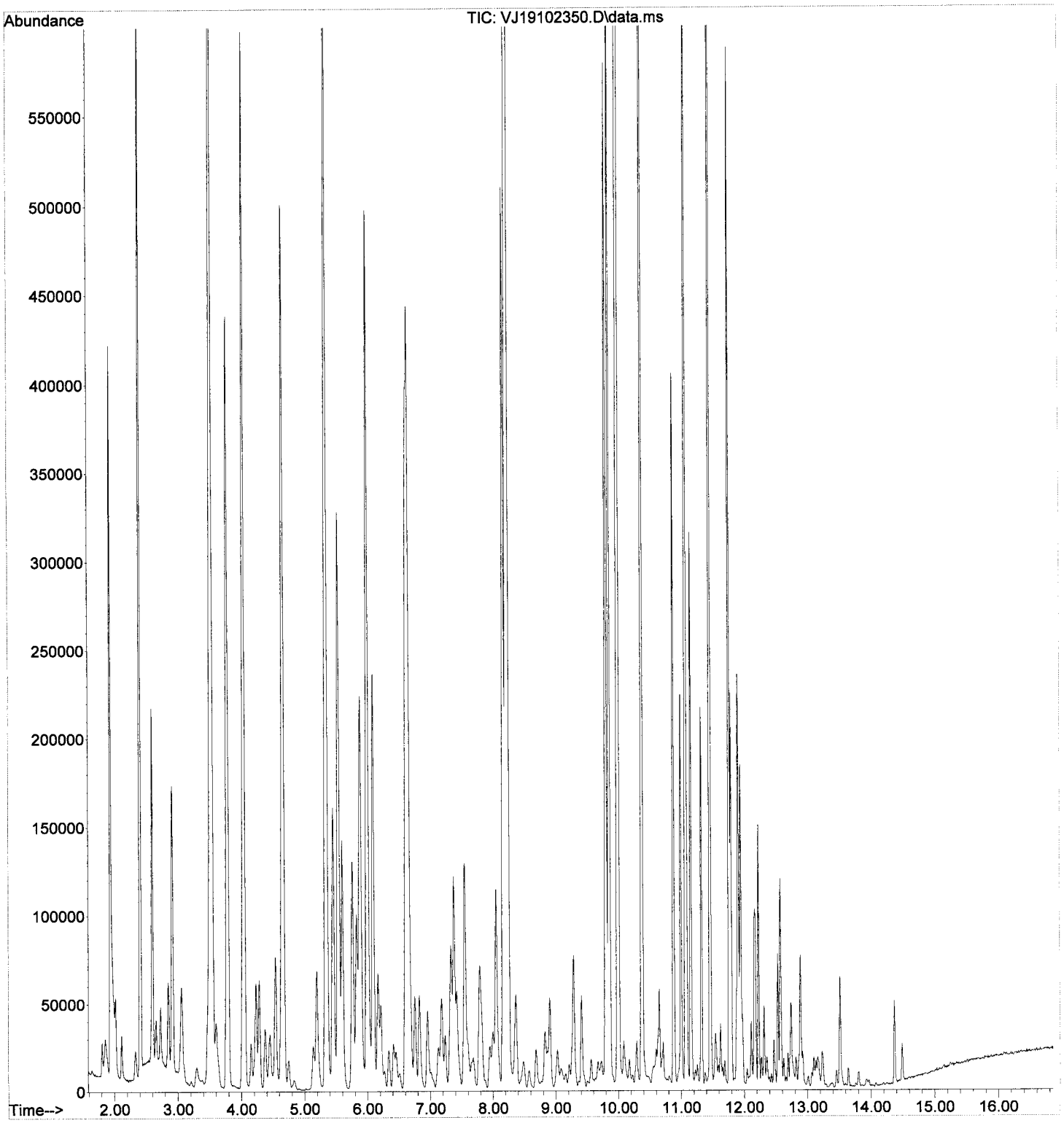
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	165305	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	318152	55.55	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	88206	46.85	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	391013	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	281864	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	191298	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	22541564m	2343.34	ug/L	
5) TPHg (C5-C9)	9.239	TIC	28537427m	2329.09	ug/L	
6) TPHg (C6-C10)	9.239	TIC	24711927m	2517.27	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	33928653m	2274.82	ug/L	
8) Benzene (NR)	6.004	78	233398	No Calib		
10) Toluene (NR)	8.231	91	2066383	No Calib		
13) Naphthalene (NR)	13.511	128	44264	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102350.D
Acq On : 24 Oct 2019 10:23 am
Operator : MM
Sample : 9J23072-CALH
Misc : 1X 5mL 2500PPB GX+MeOH
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Oct 24 11:56:33 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102351.D
Acq On : 24 Oct 2019 10:50 am
Operator : MM
Sample : 9J23072-CALI
Misc : 1X 5mL 5000PPB GX+MeOH
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 24 11:56:35 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	174020	50.00	ug/L	# 0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	330721	54.85	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	88041	44.42	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	401096	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	276544	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	192375	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	46069170m	4501.87	ug/L	
5) TPHg (C5-C9)	9.239	TIC	56741700m	4553.67	ug/L	
6) TPHg (C6-C10)	9.239	TIC	48815780m	4737.90	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	68263618m	4481.96	ug/L	
8) Benzene (NR)	6.004	78	464989	No Calib		
10) Toluene (NR)	8.231	91	3996793	No Calib		
13) Naphthalene (NR)	13.511	128	96059	No Calib		

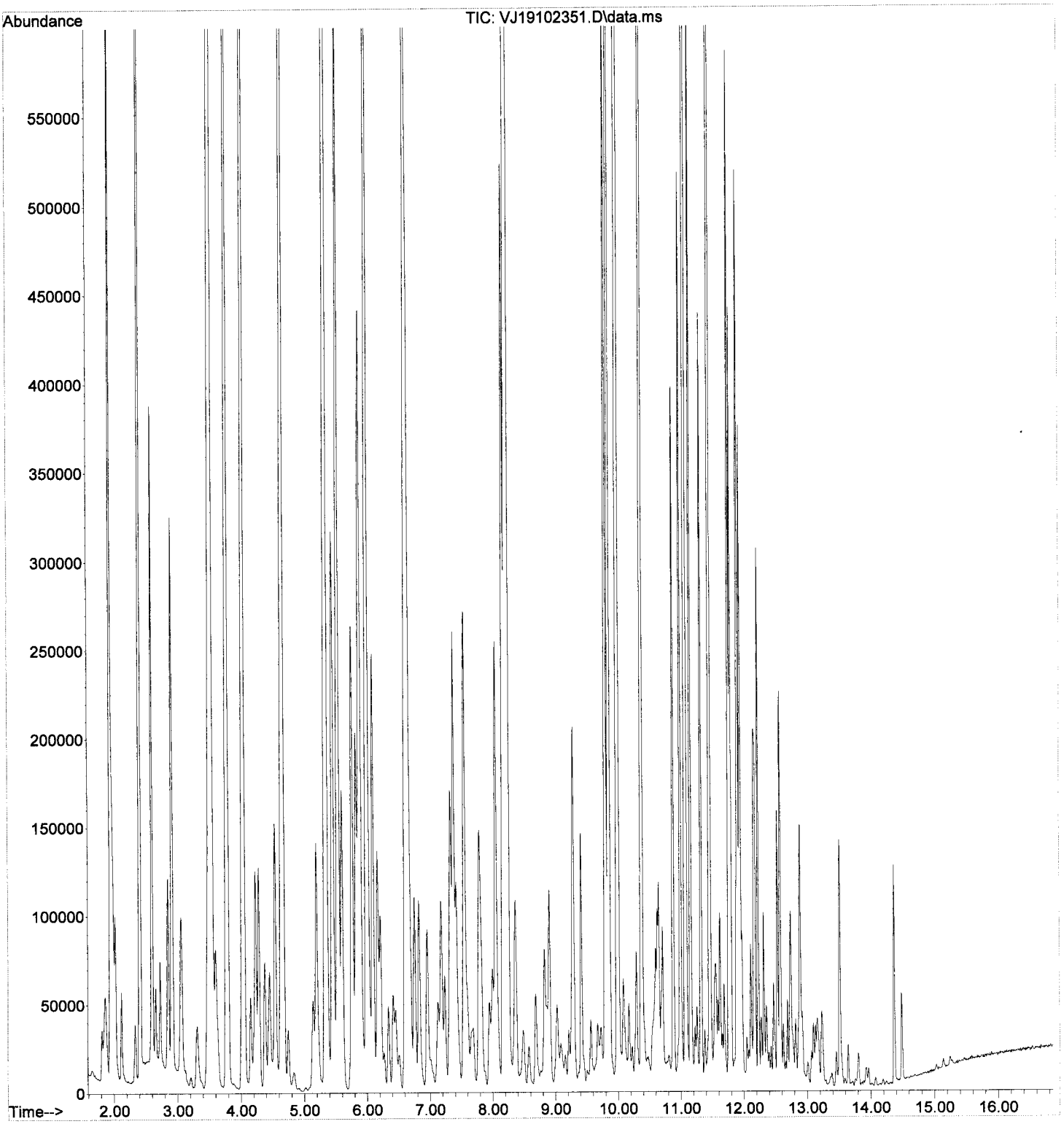
(#) = qualifier out of range (m) = manual integration (+) = signals summed

10/24/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102351.D
Acq On : 24 Oct 2019 10:50 am
Operator : MM
Sample : 9J23072-CALI
Misc : 1X 5mL 5000PPB GX+MeOH
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 24 11:56:35 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102352.D
Acq On : 24 Oct 2019 11:16 am
Operator : MM
Sample : 9J23072-CALJ
Misc : 1X 5mL 10000PPB GX+MeOH
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Oct 24 11:56:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration

VV 10/24/19

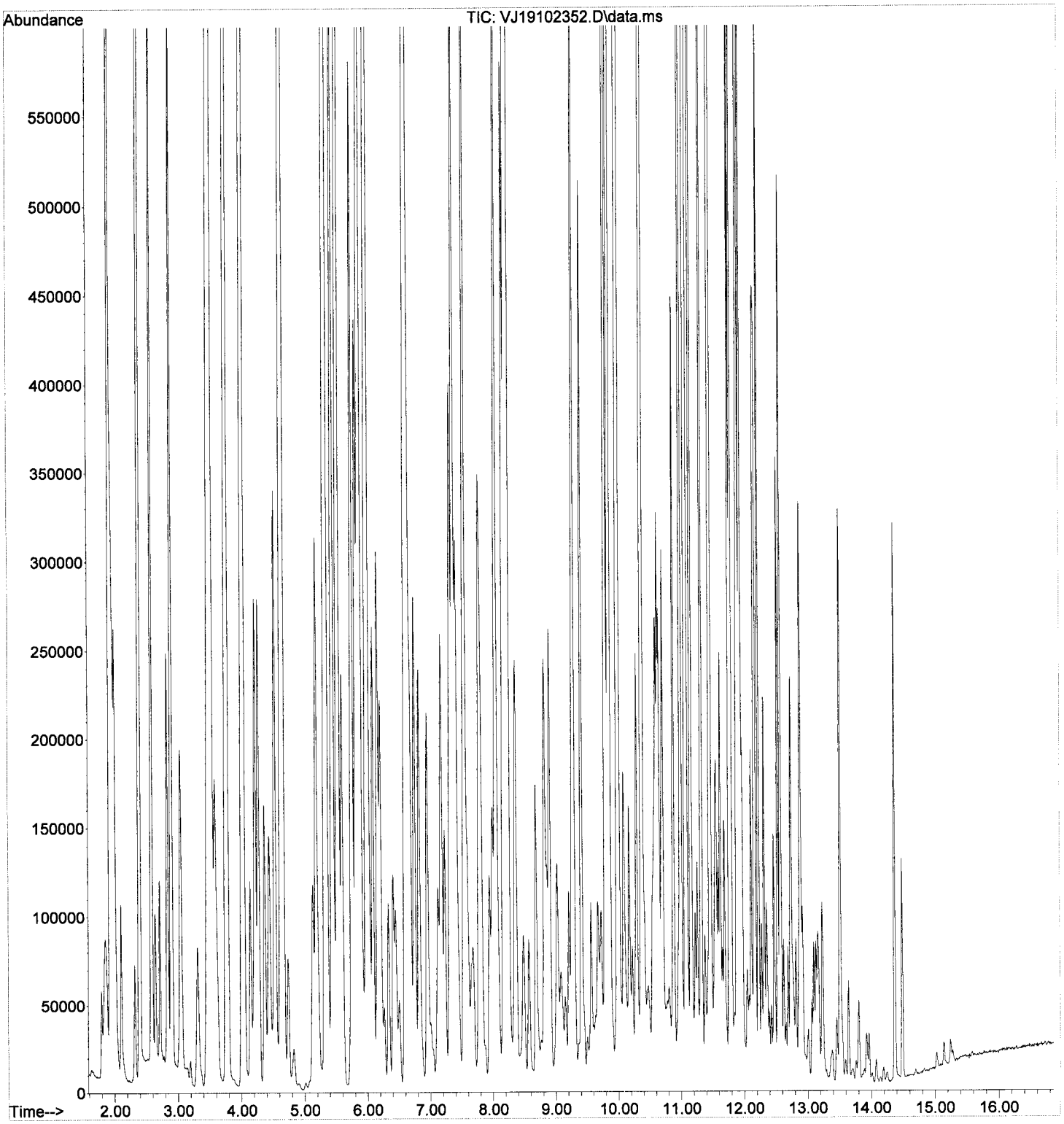
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	181337	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	337220	53.68	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	90011	43.58	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	410077	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	282468	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	197183	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	107284123m	9925.06	ug/L	
5) TPHg (C5-C9)	9.239	TIC	128200060m	10173.08	ug/L	
6) TPHg (C6-C10)	9.239	TIC	110687494m	10382.03	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	154291685m	10024.25	ug/L	
8) Benzene (NR)	5.998	78	1011196	No Calib		
10) Toluene (NR)	8.231	91	8616507	No Calib		
13) Naphthalene (NR)	13.511	128	217422	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102352.D
Acq On : 24 Oct 2019 11:16 am
Operator : MM
Sample : 9J23072-CALJ
Misc : 1X 5mL 10000PPB GX+MeOH
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Oct 24 11:56:37 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 18 13:38:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102353.D
Acq On : 24 Oct 2019 11:43 am
Operator : MM
Sample : 9J23072-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 24 12:08:49 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

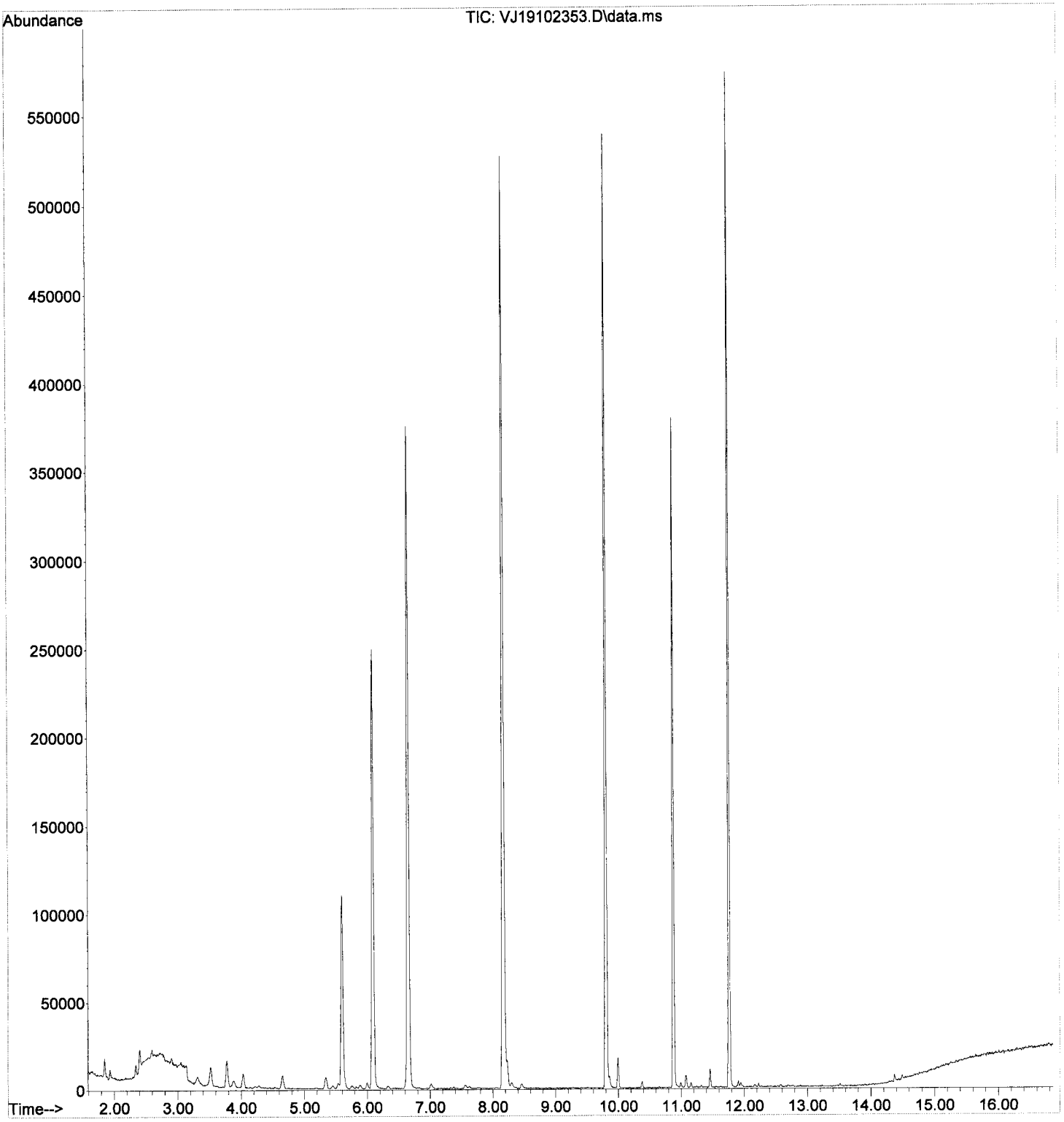
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.095	168	180184	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	335961	49.01	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	86624	46.90	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	412224	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	287061	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	186193	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	258654m	32.24	ug/L	
5) TPHg (C5-C9)	9.239	TIC	598793m	12.60	ug/L	
6) TPHg (C6-C10)	9.239	TIC	506930m	25.02	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	690694m	17.94	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102353.D
Acq On : 24 Oct 2019 11:43 am
Operator : MM
Sample : 9J23072-IBL8
Misc : 1X 5mL DI+MeOH
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 24 12:08:49 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102354.D
Acq On : 24 Oct 2019 12:10 pm
Operator : MM
Sample : 9J23072-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 24 13:07:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

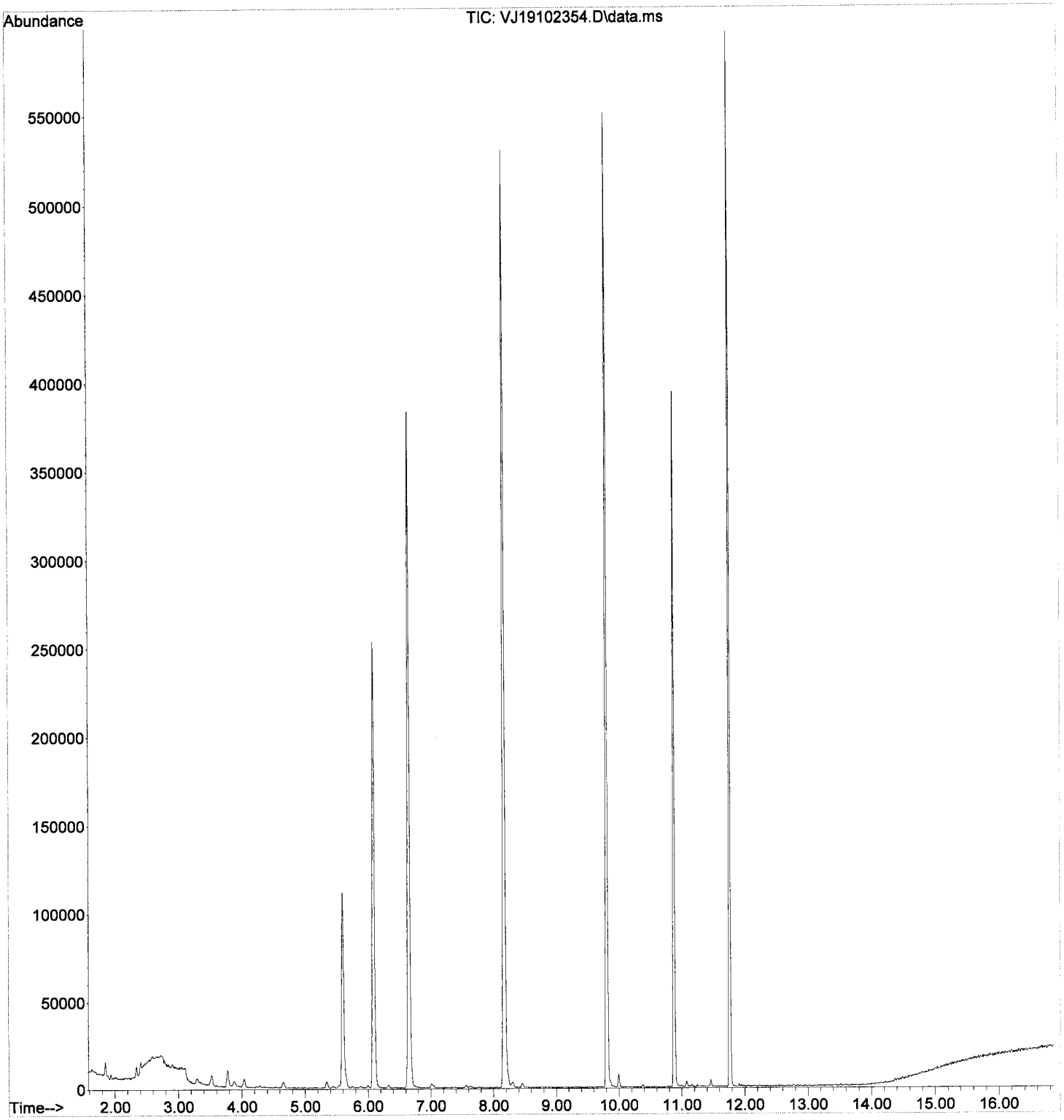
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	182663	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	342782	49.32	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	89835	47.98	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	418445	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	293118	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	192417	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	142810m	19.15	ug/L	
5) TPHg (C5-C9)	9.239	TIC	449208m	Below Cal		
6) TPHg (C6-C10)	9.239	TIC	373549m	11.15	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	516394m	4.65	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102354.D
Acq On : 24 Oct 2019 12:10 pm
Operator : MM
Sample : 9J23072-IBL9
Misc : 1X 5mL DI+MeOH
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 24 13:07:25 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102355.D
Acq On : 24 Oct 2019 12:37 pm
Operator : MM
Sample : 9J23072-ICV3
Misc : 1X 5mL 500PPB GX+MeOH
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Oct 24 13:07:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration

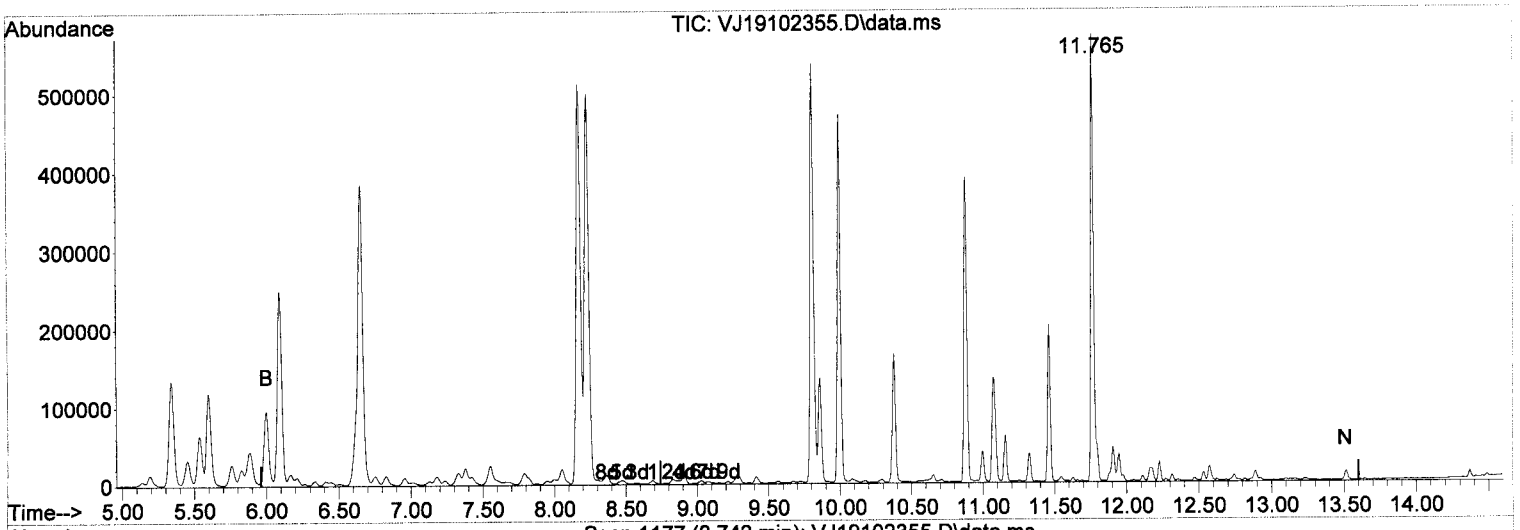
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.089	168	177331	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.655	114	333318	49.40	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.883	174	87092	47.92	ug/L	0.00
9) Toluene-d8 (NR)	8.170	98	404431	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.806	117	284724	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.765	150	189269	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	8.739	TIC	4329987m	488.49	ug/L	
5) TPHg (C5-C9)	9.239	TIC	5778816m	470.46	ug/L	
6) TPHg (C6-C10)	9.239	TIC	5020099m	483.25	ug/L	
7) CA-LUFT (C5-C12)	9.239	TIC	6839068m	474.17	ug/L	

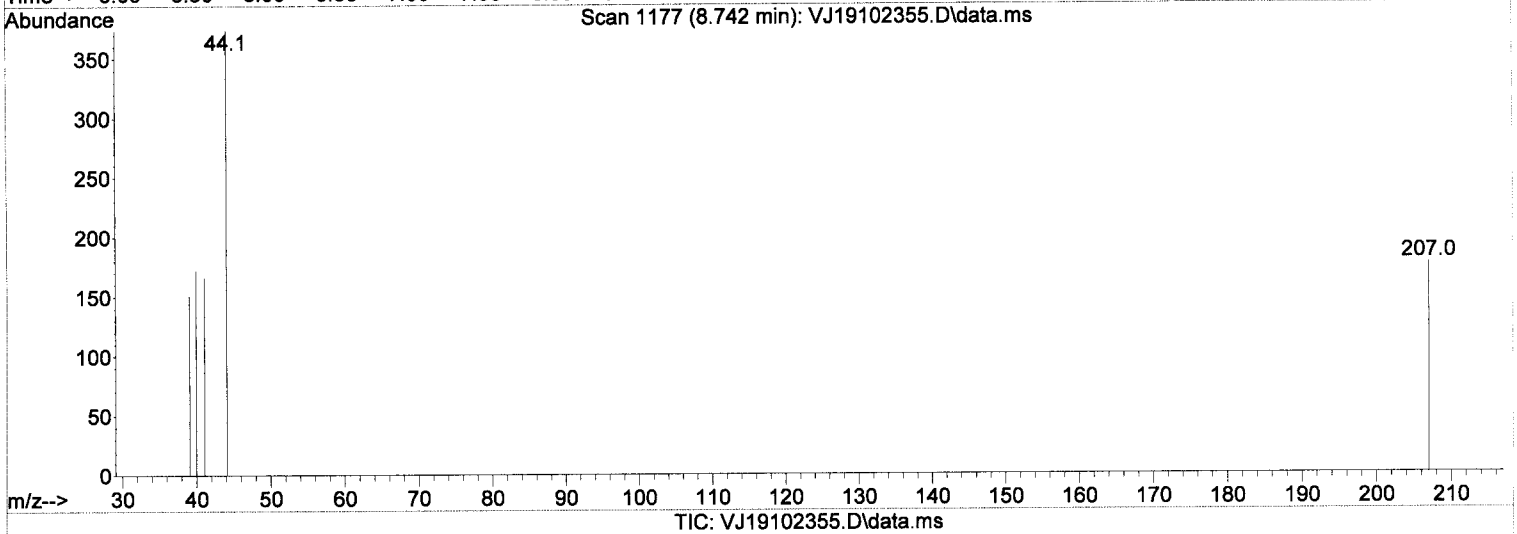
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102355.D
Acq On : 24 Oct 2019 12:37 pm
Operator : MM
Sample : 9J23072-ICV3
Misc : 1X 5mL 500PPB GX+MeOH
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Oct 24 13:07:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration





TIC: VJ19102355.D\data.ms

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

8.739min (0.000) 488.49 ug/L m

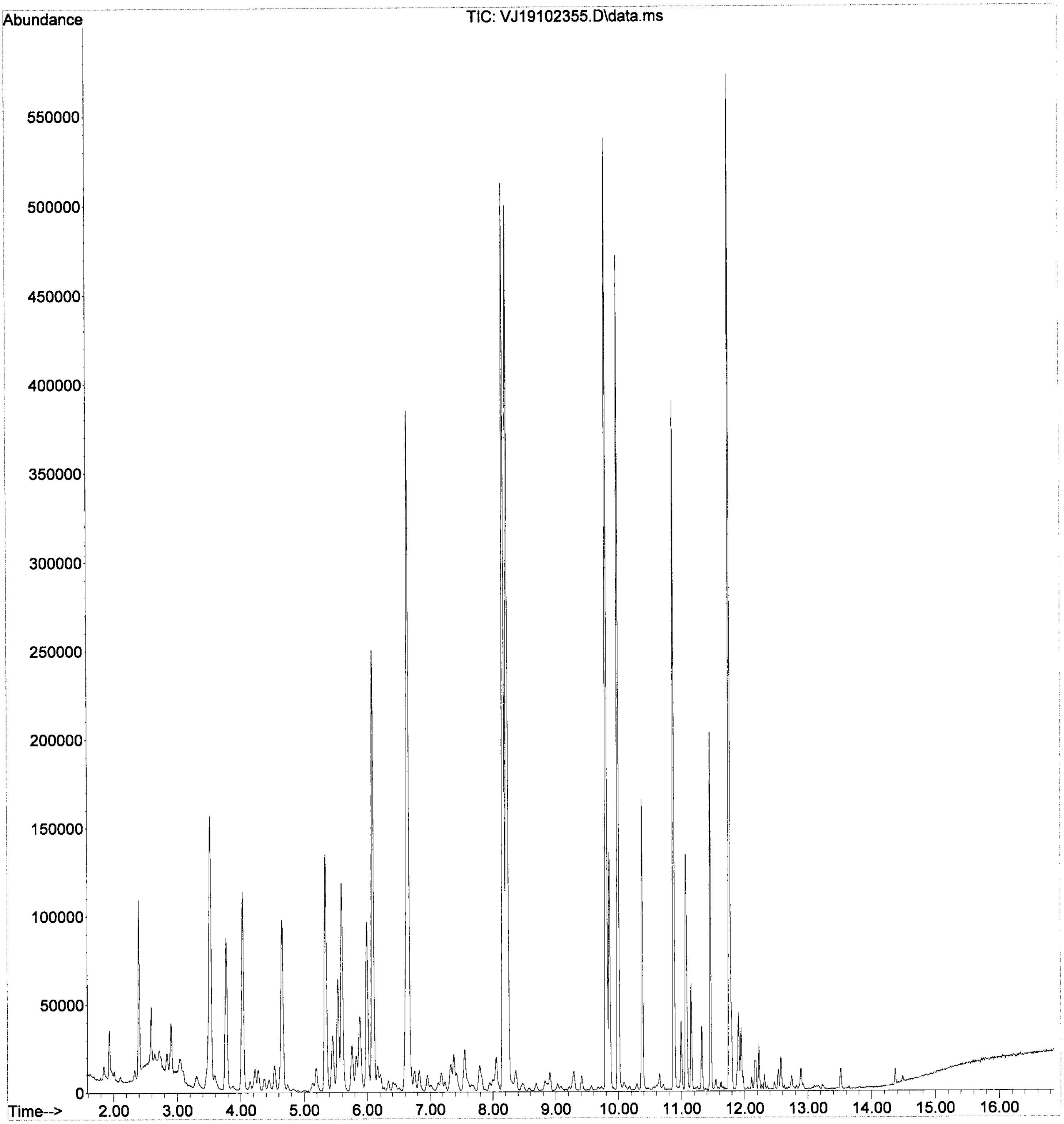
response 4329987

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

Quantitation Report (Not Reviewed)

```
Data Path : C:\msdchem\1\data\2019-10\9J23072\
Data File : VJ19102355.D
Acq On    : 24 Oct 2019  12:37 pm
Operator  : MM
Sample    : 9J23072-ICV3
Misc      : 1X   5mL   500PPB GX+MeOH
ALS Vial  : 41   Sample Multiplier: 1

Quant Time: Oct 24 13:07:28 2019
Quant Method : C:\msdchem\1\methods\VJ191024G.M
Quant Title  : NWTPH-Gx by GC/MS
QLast Update : Thu Oct 24 12:01:51 2019
Response via : Initial Calibration
```



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

Volatile Organic Compounds by EPA 8260C
Benchsheet & Analysis Sequence Data

Batch 9110473
Sequence 9K13033 (A9K0332-01,02,03)

PREPARATION BENCH SHEET

BATCH #: 9110473 (Water)

Apex Laboratories

Prep Method: EPA 5030B

Lab Number	Cont.	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
9110473-BLK1		QC	11/13/19 09:00	5	5							
9110473-BS1		QC	11/13/19 09:00	5	5	A19K181		5				
9110473-BS2		QC	11/13/19 09:00	5	5	A19K086		5				
A9K0266-01RE1	B	8260C Halogenated VOCs	11/13/19 10:44	5	5					Drum #4	1X RR-01	<2
A9K0292-01RE1	B	8260C BTEX	11/13/19 10:44	5	5					2019	1X RR-01 HS	<2
A9K0327-01	A	624 TCE+Naphthalene	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
A9K0327-01	A	624 Volatiles	11/13/19 10:44	5	5					Wastewater	Custom: BTEX compounds	<2
A9K0327-01	A	8260C Full List	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
A9K0327-01	A	8260C BTEX	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
A9K0327-01	A	8260C BTEX+N	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
A9K0327-01	A	8260C Halogenated VOCs	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
A9K0327-01	A	NWTPH-Gx	11/13/19 10:44	5	5					Wastewater	Added for BatchQC in: 9110473	<2
9110473-MS1		QC	11/13/19 10:44	5	5	A19K181	A9K0327-01	5				<2
A9K0332-01	A	8260C Full List	11/13/19 10:44	5	5					PDI-FB-1911121146	Custom List from 4C	<2
A9K0332-02	A	8260C Full List	11/13/19 10:44	5	5					PDI-RB-1911120944	Custom List from 4C	<2
A9K0332-03	A	8260C Full List	11/13/19 10:44	5	5					PDI-TB-1911071515	Custom List from 4C	<2
A9K0336-01	A	624 TCE+Naphthalene	11/13/19 10:44	5	5					Wastewater-Grab		<2
A9K0336-01	A	624 Volatiles	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2
A9K0336-01	A	8260C Full List	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2
A9K0336-01	A	8260C BTEX	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2
A9K0336-01	A	8260C BTEX+N	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2
A9K0336-01	A	8260C Halogenated VOCs	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2

Prepared By: 11/14/19 Date

Reviewed By: 11/14/19 Date

PREPARATION BENCH SHEET

BATCH #: 9110473 (Water)

Apex Laboratories

Prep Method: EPA 5030B

Lab Number	Cont.	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
A9K0336-01	A	NWTPH-Gx	11/13/19 10:44	5	5					Wastewater-Grab	Added for BatchQC in: 9110473	<2
9110473-DUP1		QC	11/13/19 10:44	5	5		A9K0336-01					<2
A9K0350-01	A	8260C BTEX+N	11/13/19 10:44	5	5					MW-8		<2
A9K0350-01	A	NWTPH-Gx	11/13/19 10:44	5	5					MW-8		<2
A9K0350-02	A	8260C BTEX+N	11/13/19 10:44	5	5					MW-14		<2
A9K0350-02	A	NWTPH-Gx	11/13/19 10:44	5	5					MW-14		<2
A9K0350-03	A	8260C BTEX+N	11/13/19 10:44	5	5					MW-15		<2
A9K0350-03	A	NWTPH-Gx	11/13/19 10:44	5	5					MW-15		<2
A9K0350-04	A	8260C BTEX+N	11/13/19 10:44	5	5					MW-13		<2
A9K0350-04	A	NWTPH-Gx	11/13/19 10:44	5	5					MW-13		<2

*pH <2 verified 11/14/19 bnl

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K086	04/21/20	Prim NWTPH-Gx Spike (500 ug/mL)
A19K181	12/11/19	8260 Cal. Std. B VOCR+OXY Spike (20-40ug/r

Surrogate(s)

Std ID	Exp. Date	Description

GCMS9

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	9K13033	Instrument:	VOA-GCMS9
Date:	11/13/19 08:30	Calibration:	A9J2503

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K13033-IBL1	Water	QC	QC			A19I040	
2	9K13033-IBL2	Water	QC	QC			A19I040	
3	9K13033-TUN1	Water	QC	QC			A19I040	
4	9K13033-CCV1	Water	QC	QC			A19I040	
5	9110473-BS1	Water	QC	QC		9110473	A19I040	
6	9K13033-CCV2	Water	QC	QC			A19I040	
7	9110473-BS2	Water	QC	QC		9110473	A19I040	
8	9110473-BLK1	Water	QC	QC		9110473	A19I040	
9	A9K0292-01RE1	Water	8260C BTEX		11/19/19	9110473	A19I040	
10	9K13033-IBL3	Water	QC	QC			A19I040	
11	A9K0266-01RE1	Water	8260C Halogenated VOCs		11/15/19	9110473	A19I040	
12	9K13033-IBL4	Water	QC	QC			A19I040	
13	A9K0327-01	Water	624 Volatiles		11/20/19	9110473	A19I040	
"	"	Water	624 TCE+Naphthalene	(QC Source)		9110473	A19I040	
"	"	Water	8260C Full List	(QC Source)		9110473	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9110473	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9110473	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9110473	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9110473	A19I040	
14	9110473-MS1	Water	QC	QC		9110473	A19I040	
15	9K13033-IBL5	Water	QC	QC			A19I040	
16	A9K0332-01	Water	8260C Full List	Anchor QEA, LLC	11/25/19	9110473	A19I040	
17	A9K0332-02	Water	8260C Full List	Anchor QEA, LLC	11/25/19	9110473	A19I040	
18	A9K0332-03	Water	8260C Full List	Anchor QEA, LLC	11/25/19	9110473	A19I040	
19	A9K0336-01	Water	624 TCE+Naphthalene	Steelscape	11/26/19	9110473	A19I040	
"	"	Water	624 Volatiles	(QC Source)		9110473	A19I040	
"	"	Water	8260C Full List	(QC Source)		9110473	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9110473	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9110473	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9110473	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9110473	A19I040	
20	9110473-DUP1	Water	QC	QC		9110473	A19I040	
21	9K13033-IBL6	Water	QC	QC			A19I040	
22	A9K0350-01	Water	8260C BTEX+N		11/20/19	9110473	A19I040	
"	"	Water	NWTPH-Gx	"	11/20/19	9110473	A19I040	
23	A9K0350-02	Water	8260C BTEX+N		11/20/19	9110473	A19I040	
"	"	Water	NWTPH-Gx	"	11/20/19	9110473	A19I040	
24	A9K0350-03	Water	8260C BTEX+N		11/20/19	9110473	A19I040	
"	"	Water	NWTPH-Gx	"	11/20/19	9110473	A19I040	
25	A9K0350-04	Water	8260C BTEX+N		11/20/19	9110473	A19I040	
"	"	Water	NWTPH-Gx	"	11/20/19	9110473	A19I040	
26	9K13033-IBL7	Water	QC	QC			A19I040	

Comments: DCM → MDL ↑ MRL ↑ to 2.5ppb/5ppb
A9K0327 → 624 BTEX only
A9K0332 → Custom list

Data Entered By: 11/13/19 fml

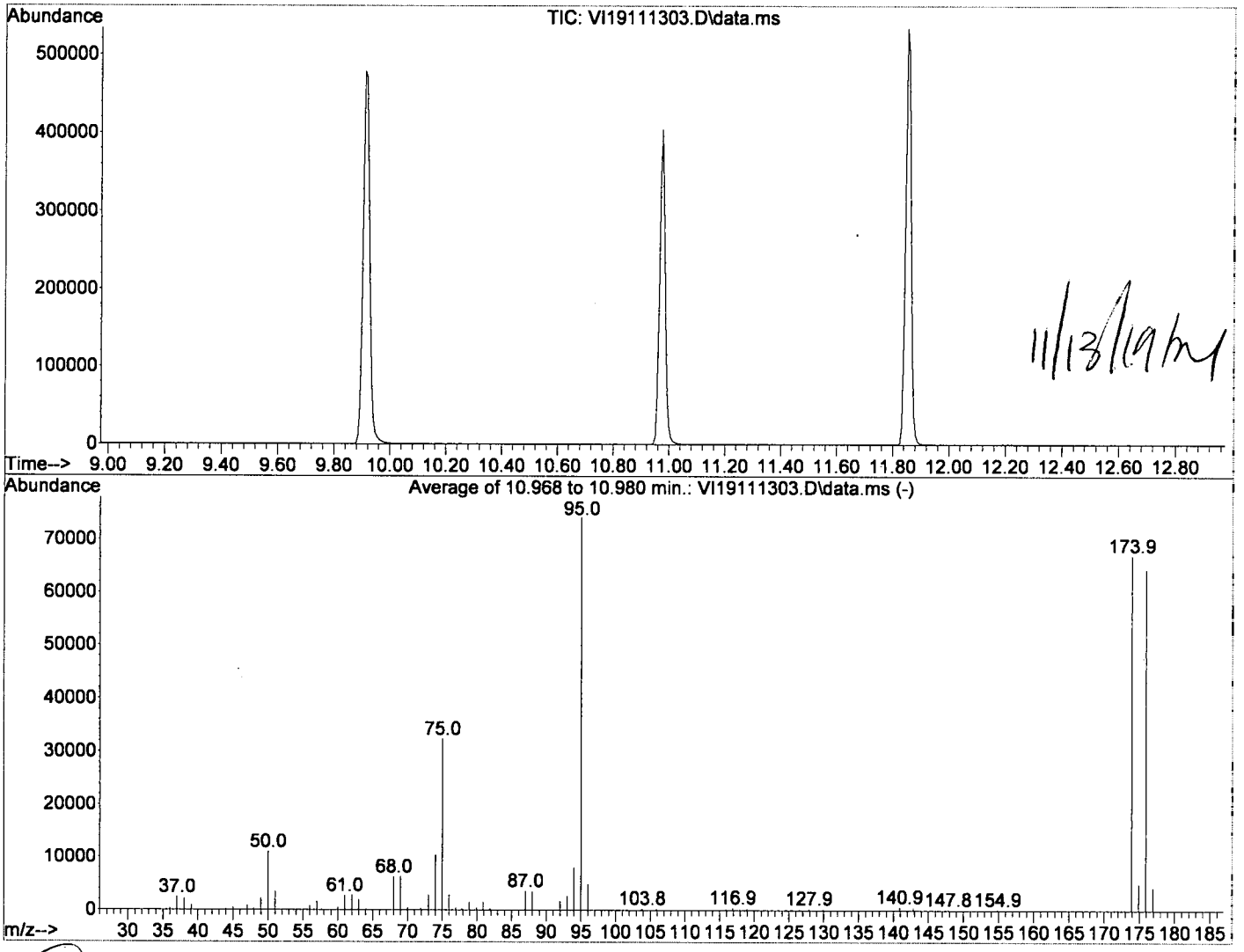
Data Reviewed By: 11/14/19

BFB

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111303.D
Acq On : 13 Nov 2019 9:34 am
Operator : TNL
Sample : 9K13033-TUN1
Misc : A19I039 5mL BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VI191025W.M
Title : EPA 8260: Volatile Organic Compounds
Last Update : Fri Oct 25 08:32:21 2019.



AutoFind: Scans 1543, 1544, 1545; Background Corrected with Scan 1536

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	110.6	74176	PASS
96	95	5	9	6.5	4858	PASS
173	174	0.00	2	0.1	100	PASS
174	95	50	200	90.4	67075	PASS
175	174	5	9	7.4	4985	PASS
176	174	95	105	96.0	64424	PASS
177	176	5	10	6.7	4285	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111303.D
Acq On : 13 Nov 2019 9:34 am
Operator : TNL
Sample : 9K13033-TUN1
Misc : A19I039 5mL BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	103972	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	293735	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	131292	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.712	111	109204	53.45 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	355441	54.11 ug/L	0.00
48) Toluene-d8 (S)	8.297	98	387965	50.32 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	108067	50.94 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.898	50	251	0.11 ug/L #	47
5) Bromomethane	2.360	96	127	0.10 ug/L #	4
15) Acetone	3.948	43	930	1.02 ug/L #	44

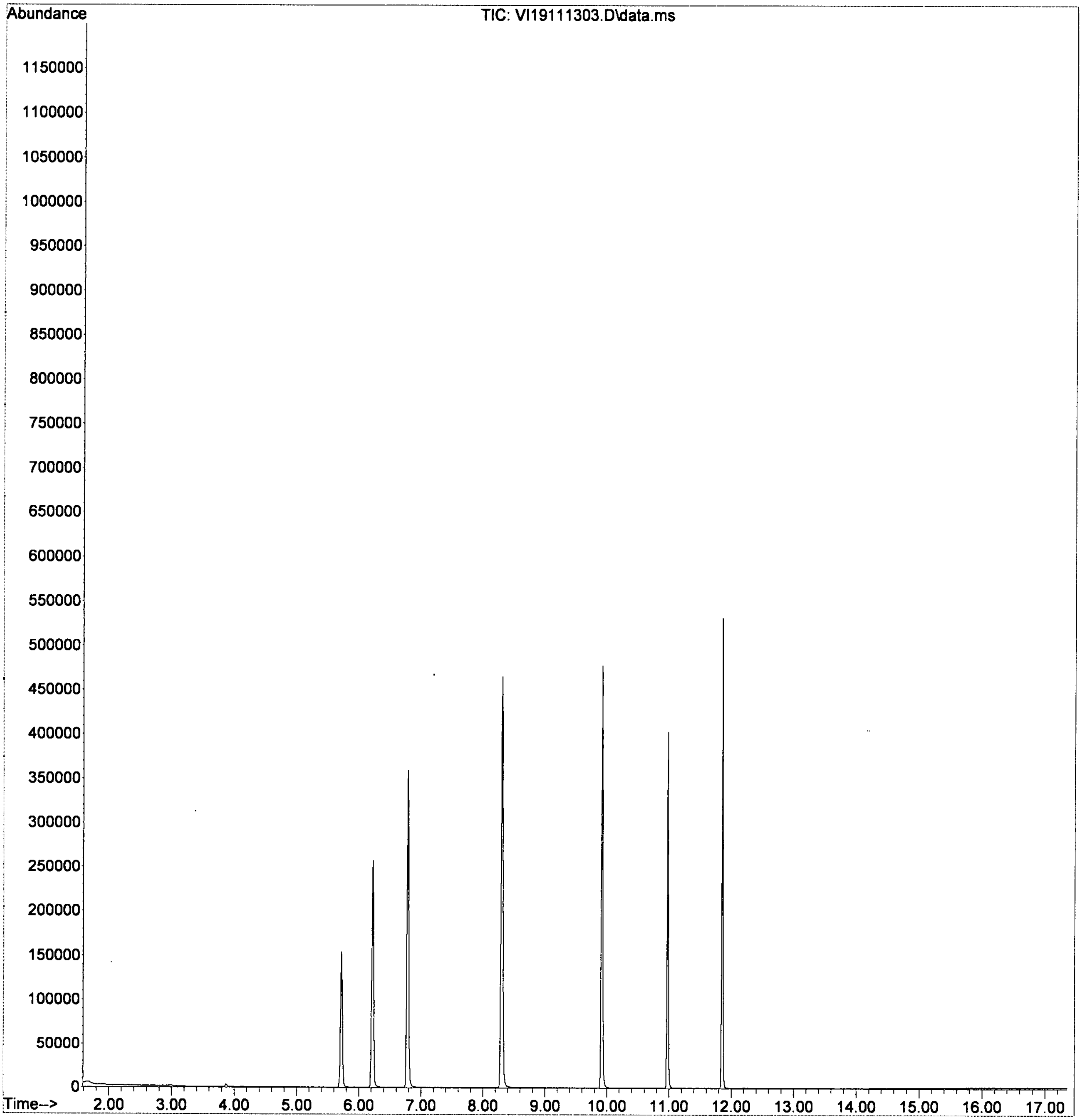
11/13/19 bnf

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111303.D
Acq On : 13 Nov 2019 9:34 am
Operator : TNL
Sample : 9K13033-TUN1
Misc : A19I039 5mL BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111304.D
Acq On : 13 Nov 2019 10:01 am
Operator : TNL
Sample : 9110473-BS1
Misc : 1X 5mL 20/40PPB VOCRO A19K181
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

11/13/19 [initials]

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	95	0.00	
2		Dichlorodifluoromethane	20.000	19.145		4.3	93	0.02	
3	P	Chloromethane	20.000	19.303		3.5	100	0.01	
4	C	Vinyl Chloride	20.000	19.690		1.5	92	0.01	
5		Bromomethane	20.000	21.253		-6.3	106	0.02	
6		Chloroethane	20.000	15.719		21.4#	85	0.02	Q5G
7		Trichlorofluoromethane	20.000	19.761		1.2	90	0.01	
8		Ethanol	1250.000	1149.469		8.0	84	0.00	
9	C	1,1-Dichloroethene	20.000	19.286		3.6	91	0.01	
10		Carbon Disulfide	20.000	20.236		-1.2	96	0.02	
11		Freon 113	20.000	20.635		-3.2	95	0.02	
12		Iodomethane	20.000	11.900	NR	40.5#	60	0.01	
13		Acrolein	20.000	46.067	NR	-130.3#	215	0.01	
14		Methylene Chloride	20.000	21.394		-7.0	100	0.01	
15		Acetone	40.000	37.106		7.2	89	0.01	
16		t-1,2-Dichloroethene	20.000	20.554		-2.8	91	0.01	
17		n-Hexane	20.000	19.508		2.5	89	0.00	
18		Methyl-tert-butyl-ether	20.000	18.694		6.5	87	0.00	
19		tert-Butanol (TBA)	1250.000	1131.675		9.5	76	0.00	
20		Diisopropyl ether (DIPE)	5.000	4.240		15.2	76	0.00	
21	P	1,1-Dichloroethane	20.000	20.027		-0.1	92	0.01	
22		Acrylonitrile	20.000	22.282		-11.4	101	0.00	
23		Ethyl-tert-butyl ether (ET	5.000	4.077		18.5	73	0.00	
24		Vinyl Acetate	20.000	43.661	NR	-118.3#	202	0.00	
25		c-1,2-Dichloroethene	20.000	20.021		-0.1	92	0.01	
26		2,2-Dichloropropane	20.000	19.941		0.3	93	0.01	
27		Bromochloromethane	20.000	24.058	✓	-20.3#	102	0.00	ok 120%
28	C	Chloroform	20.000	20.973		-4.9	93	0.00	
29		Carbon Tetrachloride	20.000	22.021		-10.1	103	0.00	
30		Tetrahydrofuran	20.000	19.286		3.6	89	0.00	
31		1,1,1-Trichloroethane	20.000	19.583		2.1	90	0.00	
32	S	Dibromofluoromethane (S)	50.000	53.089		-6.2	102	0.00	
33		1,1-Dichloropropene	20.000	19.732		1.3	92	0.00	
34		2-Butanone (MEK)	40.000	39.761		0.6	92	0.00	
35		Benzene	20.000	20.729		-3.6	97	0.00	
36		tert-Amyl methyl ether (TA	5.000	4.153		16.9	76	0.00	
37		1,2-Dichloroethane (EDC)	20.000	19.218		3.9	88	0.00	
38		iso-Butyl Alcohol	500.000	503.591		-0.7	90	0.00	
39	S	1,4-Difluorobenzene (S)	50.000	53.108		-6.2	101	0.00	
40		Trichloroethene (TCE)	20.000	21.833		-9.2	97	0.00	
41		Tert-Amyl-Ethyl-Ether (TAEE	5.000	3.882	NR	22.4#	69	0.00	
42		Dibromomethane	20.000	22.344		-11.7	100	0.00	
43	C	1,2-Dichloropropane	20.000	20.757		-3.8	96	0.00	
44		Bromodichloromethane	20.000	22.172		-10.9	101	0.00	
45		Chlorobenzene-d5 (I)	50.000	50.000		0.0	101	0.00	
46		2-Chloroethyl Vinyl Ether	20.000	34.327		-71.6#	164	0.00	
47		c-1,3-Dichloropropene	20.000	20.356		-1.8	96	0.00	
48	S	Toluene-d8 (S)	50.000	49.529		0.9	101	0.00	
49	C	Toluene	20.000	18.930		5.4	94	0.00	
50		Tetrachloroethene (PCE)	20.000	20.571		-2.9	96	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111304.D
Acq On : 13 Nov 2019 10:01 am
Operator : TNL
Sample : 9110473-BS1
Misc : 1X 5mL 20/40PPB VOCRO A19K181
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
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		4-Methyl-2-Pentanone (MIBK)	40.000	38.676	3.3	89	0.00	
52		t-1,3-Dichloropropene	20.000	19.918	0.4	95	0.00	
53		1,1,2-Trichloroethane	20.000	21.372	-6.9	100	0.00	
54		Dibromochloromethane	20.000	26.505	-32.5#	117	0.00	Q56
55		1,3-Dichloropropane	20.000	20.329	-1.6	96	0.00	
56		1,2-Dibromoethane (EDB)	20.000	20.457	-2.3	96	0.00	
57		2-Hexanone	40.000	37.394	6.5	86	0.00	
58	P	Chlorobenzene	20.000	20.282	-1.4	97	0.00	
59	C	Ethylbenzene	20.000	19.109	4.5	93	0.00	
60		1,1,1,2-Tetrachloroethane	20.000	22.775	-13.9	106	0.00	
61		m,p-Xylenes (2)	40.000	38.483	3.8	91	0.00	
62		o-Xylene	20.000	18.875	5.6	88	0.00	
63		Styrene	20.000	19.426	2.9	90	0.00	
64	P	Bromoform	20.000	25.948	-29.7#	133	0.00	Q56
65		Isopropylbenzene	20.000	18.805	6.0	87	0.00	
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	97	0.00	
67	S	4-Bromofluorobenzene (S)	50.000	48.958	2.1	97	0.00	
68		Bromobenzene	20.000	21.099	-5.5	97	0.00	
69		n-Propylbenzene	20.000	19.284	3.6	90	0.00	
70	P	1,1,2,2-Tetrachloroethane	20.000	21.339	-6.7	99	0.00	
71		2-Chlorotoluene	20.000	19.424	2.9	90	0.00	
72		1,3,5-Trimethylbenzene	20.000	19.635	1.8	89	0.00	
73		1,2,3-Trichloropropane	20.000	20.711	-3.6	96	0.00	
74		t-1,4-Dichloro-2-butene	20.000	19.266	3.7	89	0.00	
75		4-Chlorotoluene	20.000	19.601	2.0	91	0.00	
76		tert-Butylbenzene	20.000	18.245	8.8	84	0.00	
77		1,2,4-Trimethylbenzene	20.000	19.935	0.3	89	0.00	
78		sec-Butylbenzene	20.000	19.028	4.9	87	0.00	
79		4-Isopropyltoluene	20.000	19.529	2.4	84	0.00	
80		1,3-Dichlorobenzene	20.000	20.242	-1.2	94	0.00	
81		1,4-Dichlorobenzene	20.000	20.239	-1.2	94	0.00	
82		n-Butylbenzene	20.000	20.000	0.0	85	0.00	
83		1,2-Dichlorobenzene	20.000	20.305	-1.5	94	0.00	
84		1,2-Dibromo-3-Chloropropane	20.000	20.875	-4.4	100	0.00	
85		Hexachlorobutadiene	20.000	18.737	6.3	84	0.00	
86		1,2,4-Trichlorobenzene	20.000	18.982	5.1	83	0.00	
87		Naphthalene	20.000	18.614	6.9	82	0.00	
88		1,2,3-Trichlorobenzene	20.000	19.619	1.9	86	0.00	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111304.D
Acq On : 13 Nov 2019 10:01 am
Operator : TNL
Sample : 9110473-BS1
Misc : 1X 5mL 20/40PPB VOCRO A19K181
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

11/13/19 TNL

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	107283	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	309137	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	147766	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	111911	53.09	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	359953	53.11	ug/L	0.00
48) Toluene-d8 (S)	8.298	98	401881	49.53	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	116889	48.96	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.691	85	33574	19.14	ug/L	98
3) Chloromethane	1.904	50	44890	19.30	ug/L	96
4) Vinyl Chloride	2.007	62	45876	19.69	ug/L	97
5) Bromomethane	2.372	96	29192	21.25	ug/L	99
6) Chloroethane	2.506	64	16832	15.72	ug/L	81
7) Trichlorofluoromethane	2.670	101	52133	19.76	ug/L	97
8) Ethanol	3.236	45	59262	1149.47	ug/L	87
9) 1,1-Dichloroethene	3.242	61	49048	19.29	ug/L	89
10) Carbon Disulfide	3.260	76	94967	20.24	ug/L	98
11) Freon 113	3.297	101	37733	20.63	ug/L	95
12) Iodomethane	3.394	142	6905	11.90	ug/L	92
13) Acrolein	3.625	56	22455	46.07	ug/L	72
14) Methylene Chloride	3.881	84	43527	21.39	ug/L	84
15) Acetone	3.948	43	34885	37.11	ug/L	90
16) t-1,2-Dichloroethene	4.045	61	51161	20.55	ug/L	89
17) n-Hexane	4.124	86	7393	19.51	ug/L	96
18) Methyl-tert-butyl-ether	4.173	73	108159	18.69	ug/L	92
19) tert-Butanol (TBA)	4.295	59	470050	1131.67	ug/L	99
20) Diisopropyl ether (DIPE)	4.568	45	26394	4.24	ug/L	95
21) 1,1-Dichloroethane	4.690	63	69239	20.03	ug/L	98
22) Acrylonitrile	4.751	53	23187	22.28	ug/L	97
23) Ethyl-tert-butyl ether...	4.946	59	24393	4.08	ug/L	96
24) Vinyl Acetate	4.958	43	182310	43.66	ug/L	94
25) c-1,2-Dichloroethene	5.250	61	53431	20.02	ug/L	84
26) 2,2-Dichloropropane	5.359	77	44988	19.94	ug/L	95
27) Bromochloromethane	5.450	130	31505	24.06	ug/L	95
28) Chloroform	5.530	83	70885	20.97	ug/L	98
29) Carbon Tetrachloride	5.663	117	45270	22.02	ug/L	94
30) Tetrahydrofuran	5.706	42	19079	19.29	ug/L	82
31) 1,1,1-Trichloroethane	5.736	97	55870	19.58	ug/L	97
33) 1,1-Dichloropropene	5.864	75	54062	19.73	ug/L	97
34) 2-Butanone (MEK)	5.858	43	59261	39.76	ug/L	94
35) Benzene	6.126	78	169938	20.73	ug/L	95
36) tert-Amyl methyl ether...	6.247	73	23099	4.15	ug/L	93
37) 1,2-Dichloroethane (EDC)	6.345	62	51608	19.22	ug/L	91
38) iso-Butyl Alcohol	6.375	43	75196	503.59	ug/L	96
40) Trichloroethene (TCE)	6.746	130	46119	21.83	ug/L	93
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	15591	3.88	ug/L	86
42) Dibromomethane	7.203	93	29397	22.34	ug/L	97
43) 1,2-Dichloropropane	7.312	63	42444	20.76	ug/L	92
44) Bromodichloromethane	7.385	83	52275	22.17	ug/L	94
46) 2-Chloroethyl Vinyl Ether	8.024	63	54473	34.33	ug/L #	100
47) c-1,3-Dichloropropene	8.091	75	62215	20.36	ug/L	83

0.55

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111304.D
Acq On : 13 Nov 2019 10:01 am
Operator : TNL
Sample : 9110473-BS1
Misc : 1X 5mL 20/40PPB VOCRO A19K181
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

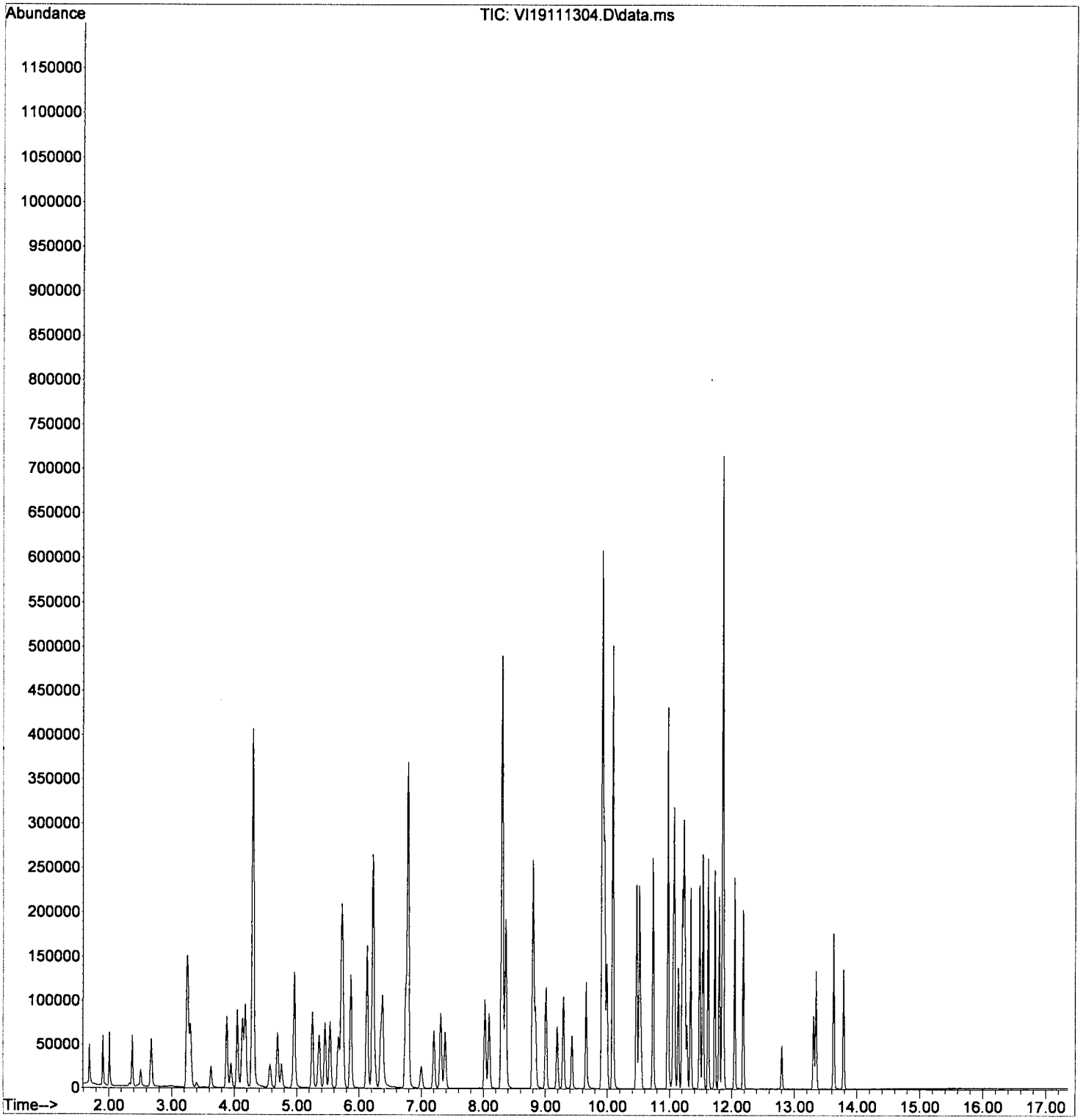
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
49) Toluene	8.358	91	172084	18.93 ug/L	100	
50) Tetrachloroethene (PCE)	8.796	166	43529	20.57 ug/L	92	
51) 4-Methyl-2-Pentanone (...	8.803	43	106737	38.68 ug/L	91	
52) t-1,3-Dichloropropene	8.839	75	53997	19.92 ug/L	98	
53) 1,1,2-Trichloroethane	9.009	97	43069	21.37 ug/L	92	
54) Dibromochloromethane	9.192	129	43181	26.50 ug/L	98	056
55) 1,3-Dichloropropane	9.289	76	70672	20.33 ug/L	86	
56) 1,2-Dibromoethane (EDB)	9.423	107	44886	20.46 ug/L	96	
57) 2-Hexanone	9.654	43	75619	37.39 ug/L	90	
58) Chlorobenzene	9.928	112	117692	20.28 ug/L	99	
59) Ethylbenzene	9.952	91	182176	19.11 ug/L	98	
60) 1,1,1,2-Tetrachloroethane	9.989	131	38541	22.78 ug/L	94	
61) m,p-Xylenes (2)	10.086	91	270161	38.48 ug/L	98	
62) o-Xylene	10.469	91	131369	18.88 ug/L	99	
63) Styrene	10.512	104	108674	19.43 ug/L	99	
64) Bromoform	10.536	173	31683	25.95 ug/L	97	056
65) Isopropylbenzene	10.731	105	159672	18.80 ug/L	98	
68) Bromobenzene	11.060	156	48321	21.10 ug/L	91	
69) n-Propylbenzene	11.072	91	189371	19.28 ug/L	99	
70) 1,1,2,2-Tetrachloroethane	11.139	85	41257	21.34 ug/L	93	
71) 2-Chlorotoluene	11.206	126	41103	19.42 ug/L	94	
72) 1,3,5-Trimethylbenzene	11.230	105	131765	19.64 ug/L	97	
73) 1,2,3-Trichloropropane	11.248	110	19473	20.71 ug/L	92	
74) t-1,4-Dichloro-2-butene	11.279	53	12962	19.27 ug/L	81	
75) 4-Chlorotoluene	11.339	91	118476	19.60 ug/L	98	
76) tert-Butylbenzene	11.479	91	68366	18.24 ug/L	97	
77) 1,2,4-Trimethylbenzene	11.540	105	134581	19.93 ug/L	98	
78) sec-Butylbenzene	11.619	105	157336	19.03 ug/L	99	
79) 4-Isopropyltoluene	11.729	119	127757	19.53 ug/L	97	
80) 1,3-Dichlorobenzene	11.796	146	80763	20.24 ug/L	96	
81) 1,4-Dichlorobenzene	11.863	146	84207	20.24 ug/L	96	
82) n-Butylbenzene	12.045	91	111191	20.00 ug/L	98	
83) 1,2-Dichlorobenzene	12.185	146	78675	20.31 ug/L	98	
84) 1,2-Dibromo-3-Chloropr...	12.799	157	13676	20.87 ug/L	89	
85) Hexachlorobutadiene	13.304	223	10144	18.74 ug/L	94	
86) 1,2,4-Trichlorobenzene	13.347	180	42387	18.98 ug/L	97	
87) Naphthalene	13.627	128	132159	18.61 ug/L	99	
88) 1,2,3-Trichlorobenzene	13.785	180	41595	19.62 ug/L	97	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111304.D
Acq On : 13 Nov 2019 10:01 am
Operator : TNL
Sample : 9110473-BS1
Misc : 1X 5mL 20/40PPB VOCRO A19K181
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111305.D
Acq On : 13 Nov 2019 10:28 am
Operator : TNL
Sample : 9110473-BS2
Misc : 1X 5mL 500PPB A19K086
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:14:14 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	50.000	50.000	0.0	103	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	50.866	-1.7	106	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	49.196	1.6	103	0.00
4	H	NWTPH-Gx (TPH)	500.000	439.377	12.1	92	0.00
5	H	TPHg (C5-C9)	500.000	450.927	9.8	95	0.00
6	H	TPHg (C6-C10)	500.000	450.692	9.9	95	0.00
7	H	CA-LUFT (C5-C12)	500.000	444.574	11.1	94	0.00
8		Benzene (NR)	-1.000	0.000	0.0	106	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	104	0.00
10		Toluene (NR)	-1.000	0.000	0.0	103	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	104	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	104	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	104	0.00

11/13/19 bmj

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111305.D
Acq On : 13 Nov 2019 10:28 am
Operator : TNL
Sample : 9110473-BS2
Misc : 1X 5mL 500PPB A19K086
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:14:14 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	222257	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	367600	50.87	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	118691	49.20	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	412200	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.910	117	312598	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	232580	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	2728217m	439.38	ug/L	
5) TPHg (C5-C9)	9.890	TIC	3921033m	450.93	ug/L	
6) TPHg (C6-C10)	9.890	TIC	3323813m	450.69	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	4577793m	444.57	ug/L	

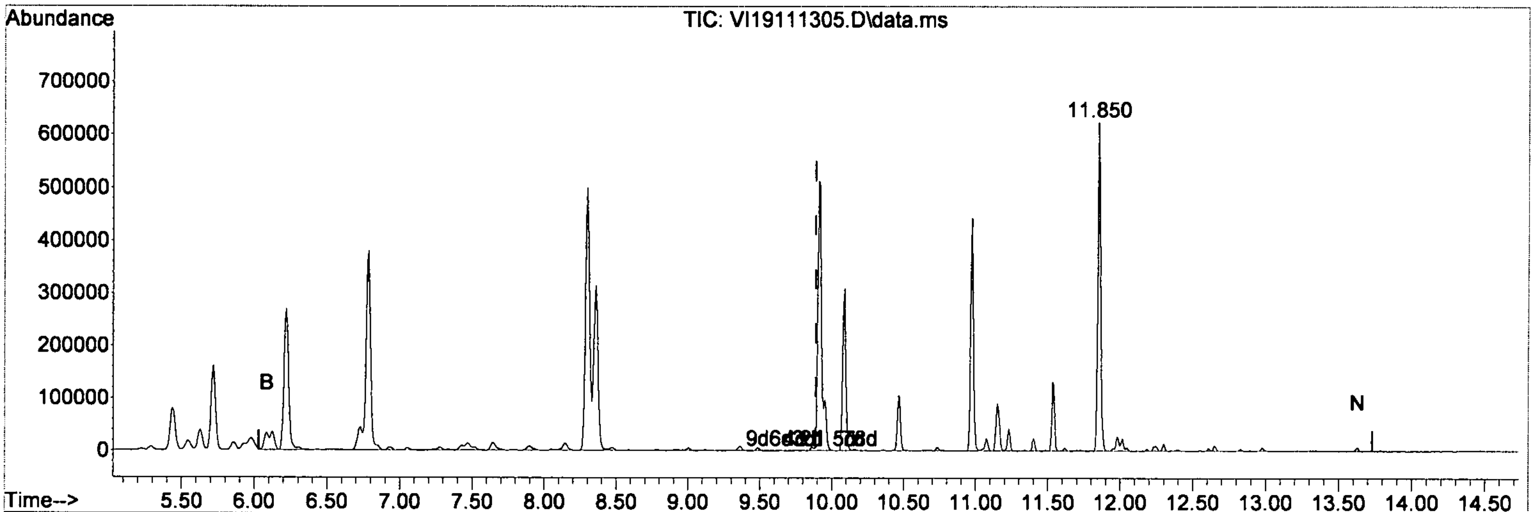
11/13/19 NR

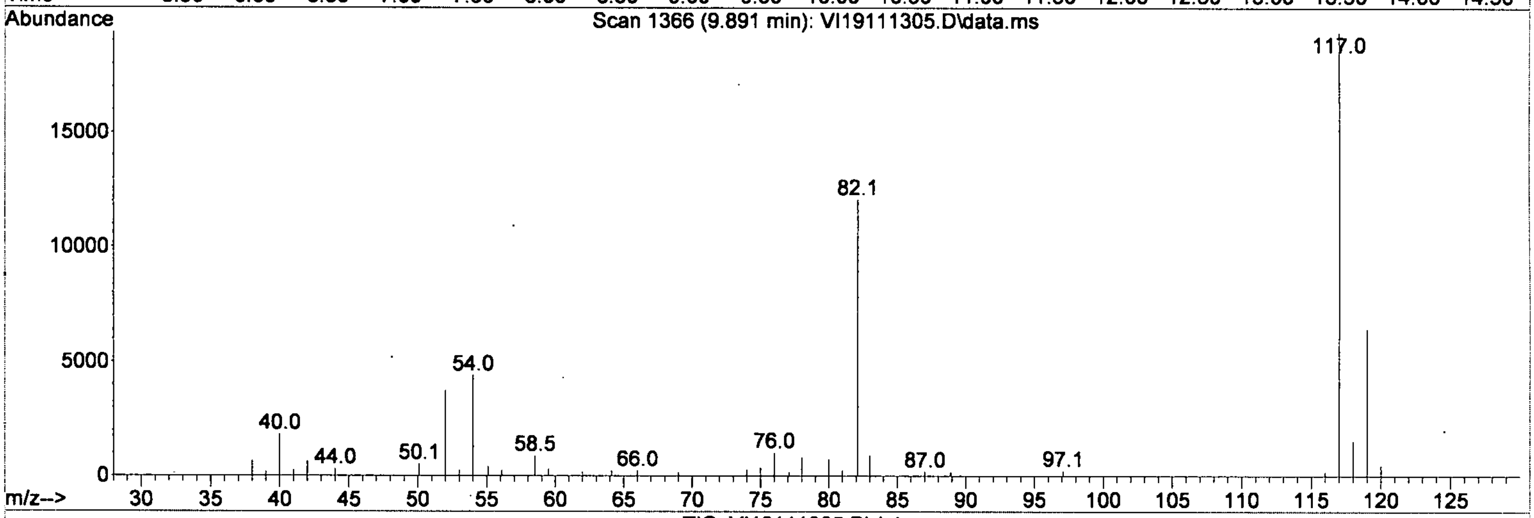
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111305.D
Acq On : 13 Nov 2019 10:28 am
Operator : TNL
Sample : 9110473-BS2
Misc : 1X 5mL 500PPB A19K086
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:14:14 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19111305.D\data.ms

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

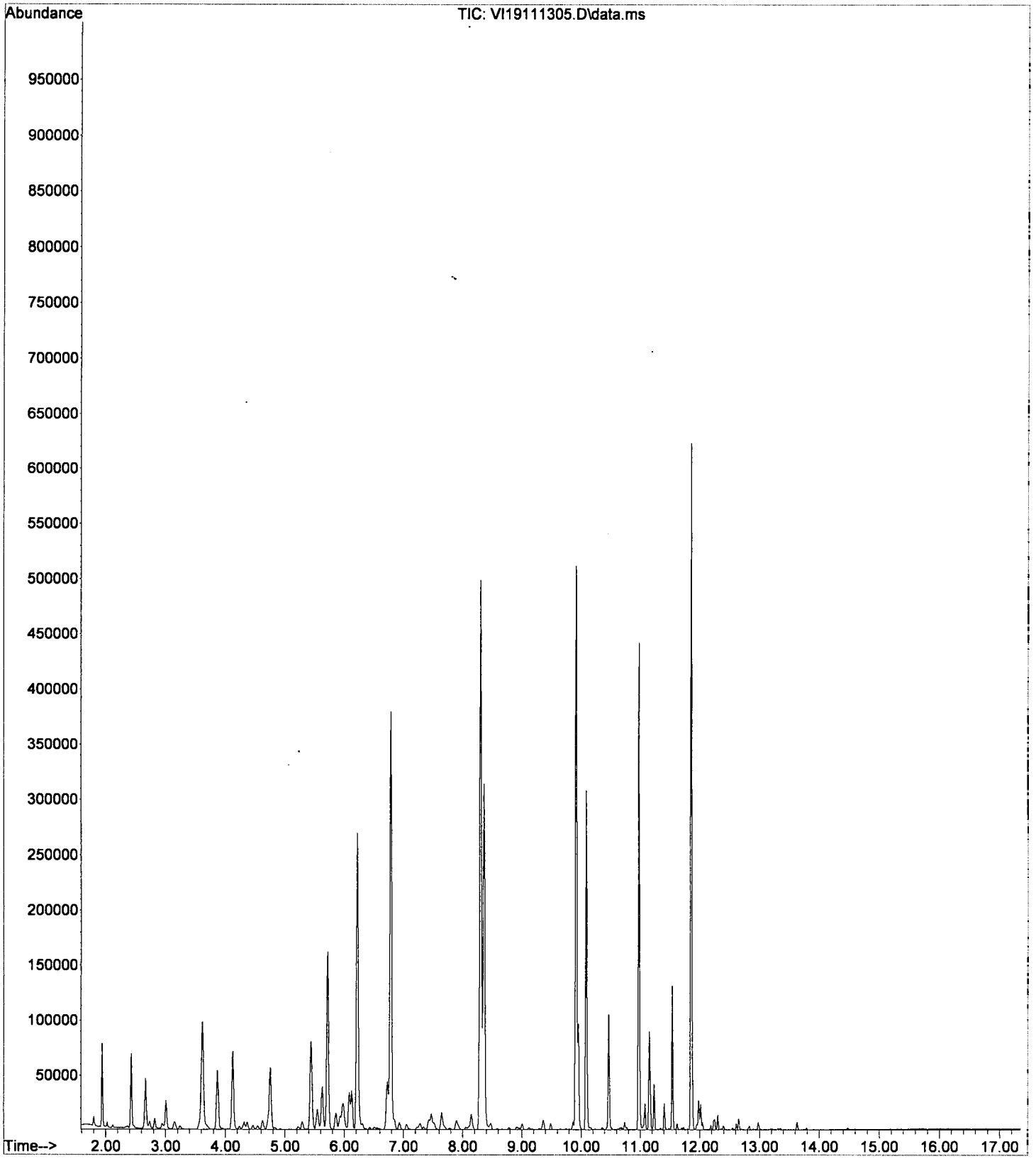
9.890min (0.000) 439.38 ug/L m

response 2728217

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

11/13/19

File :C:\msdchem\1\data\2019-11\9K13033\VI19111305.D
Operator : TNL
Acquired : 13 Nov 2019 10:28 am using AcqMethod VI1611RUN.M
Instrument : VOA-GCMS9
Sample Name: 9110473-BS2
Misc Info : 1X 5mL 500PPB A19K086
Vial Number: 5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111306.D
Acq On : 13 Nov 2019 10:55 am
Operator : TNL
Sample : 9110473-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:14:16 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	212971	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	357043	51.56	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	109356	47.30	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	394301	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.910	117	297900	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	207348	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	-13617m	22.46	ug/L	
5) TPHg (C5-C9)	9.890	TIC	351812m	16.98	ug/L	
6) TPHg (C6-C10)	9.890	TIC	325106m	18.60	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	353185m	20.54	ug/L	

11/13/19 bg

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111306.D
Acq On : 13 Nov 2019 10:55 am
Operator : TNL
Sample : 9110473-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	105869	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.910	117	297900	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	131750	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.712	111	111217	53.46	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	356895	53.36	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	394302	50.43	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	109356	51.37	ug/L	0.00
Target Compounds						Qvalue
3) Chloromethane	1.891	50	227	0.10	ug/L #	47
5) Bromomethane	2.366	96	134	0.10	ug/L #	40
14) Methylene Chloride	3.875	84	1928	0.13	ug/L #	77
15) Acetone	3.948	43	731	0.79	ug/L	88

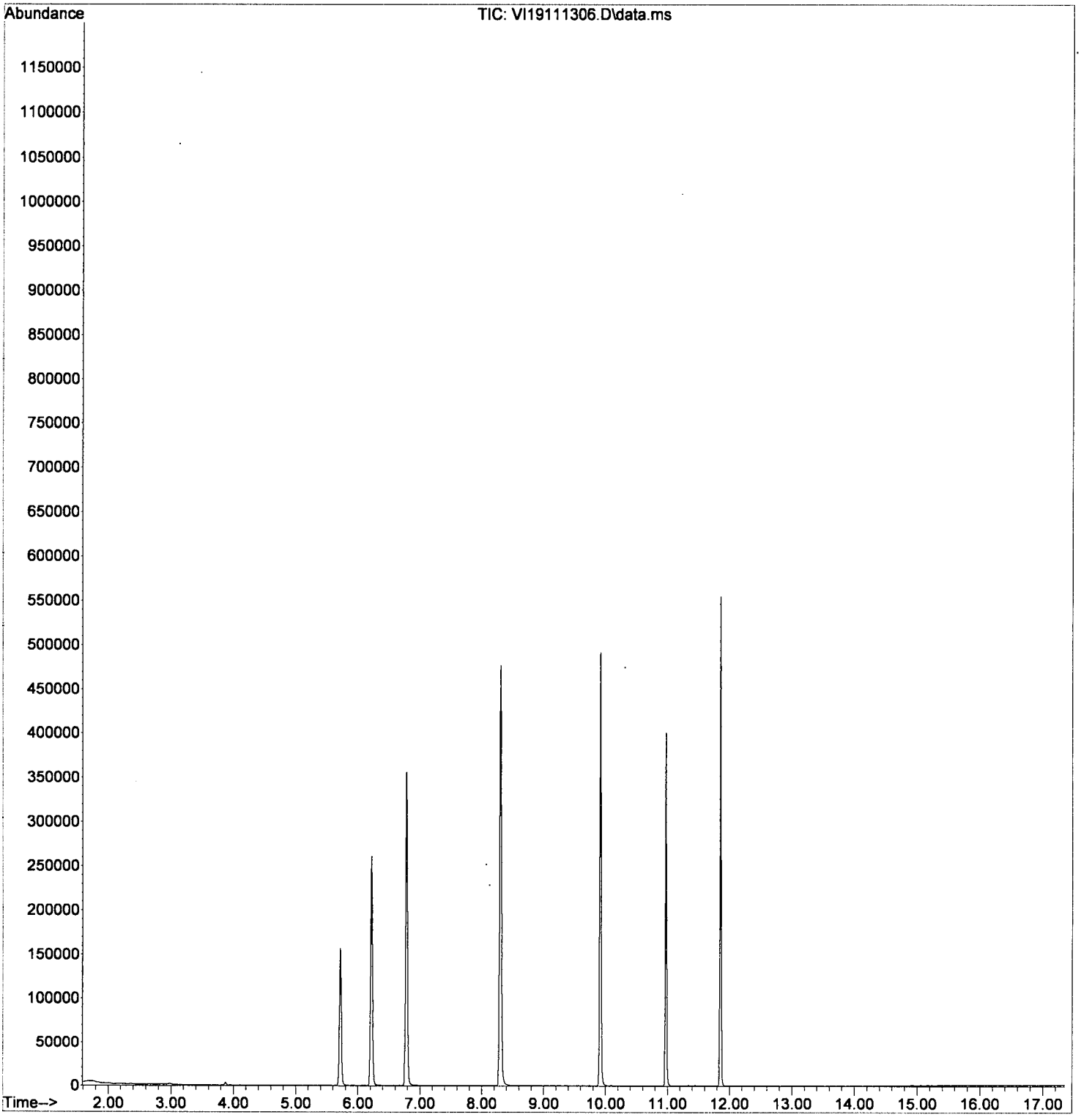
(#) = qualifier out of range (m) = manual integration (+) = signals summed

11/13/19 bd

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111306.D
Acq On : 13 Nov 2019 10:55 am
Operator : TNL
Sample : 9110473-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 13:04:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111314.D
Acq On : 13 Nov 2019 2:30 pm
Operator : TNL
Sample : A9K0332-01
Misc : 1X 5mL BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC TB
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:20 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	110650	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.916	117	314007	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	141567	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	117468	54.03	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.782	114	375013	53.65	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	411269	49.90	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	116441	50.91	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.903	50	274	0.11	ug/L	#	47
5) Bromomethane	2.366	96	226	0.16	ug/L	#	67
6) Chloroethane	2.500	64	119	0.11	ug/L	#	36
14) Methylene Chloride	3.881	84	440	Below Cal		#	69
15) Acetone	3.954	43	3157	3.26	ug/L		84
30) Tetrahydrofuran	5.669	42	346	0.34	ug/L	#	23
34) 2-Butanone (MEK)	5.742	43	129	0.08	ug/L		52

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

11/13/19 KM

Quantitation Report (Not Reviewed)

```
Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111314.D
Acq On    : 13 Nov 2019   2:30 pm
Operator  : TNL
Sample    : A9K0332-01
Misc      : 1X    5mL  BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC    TB
ALS Vial  : 14    Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:20 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title  : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration
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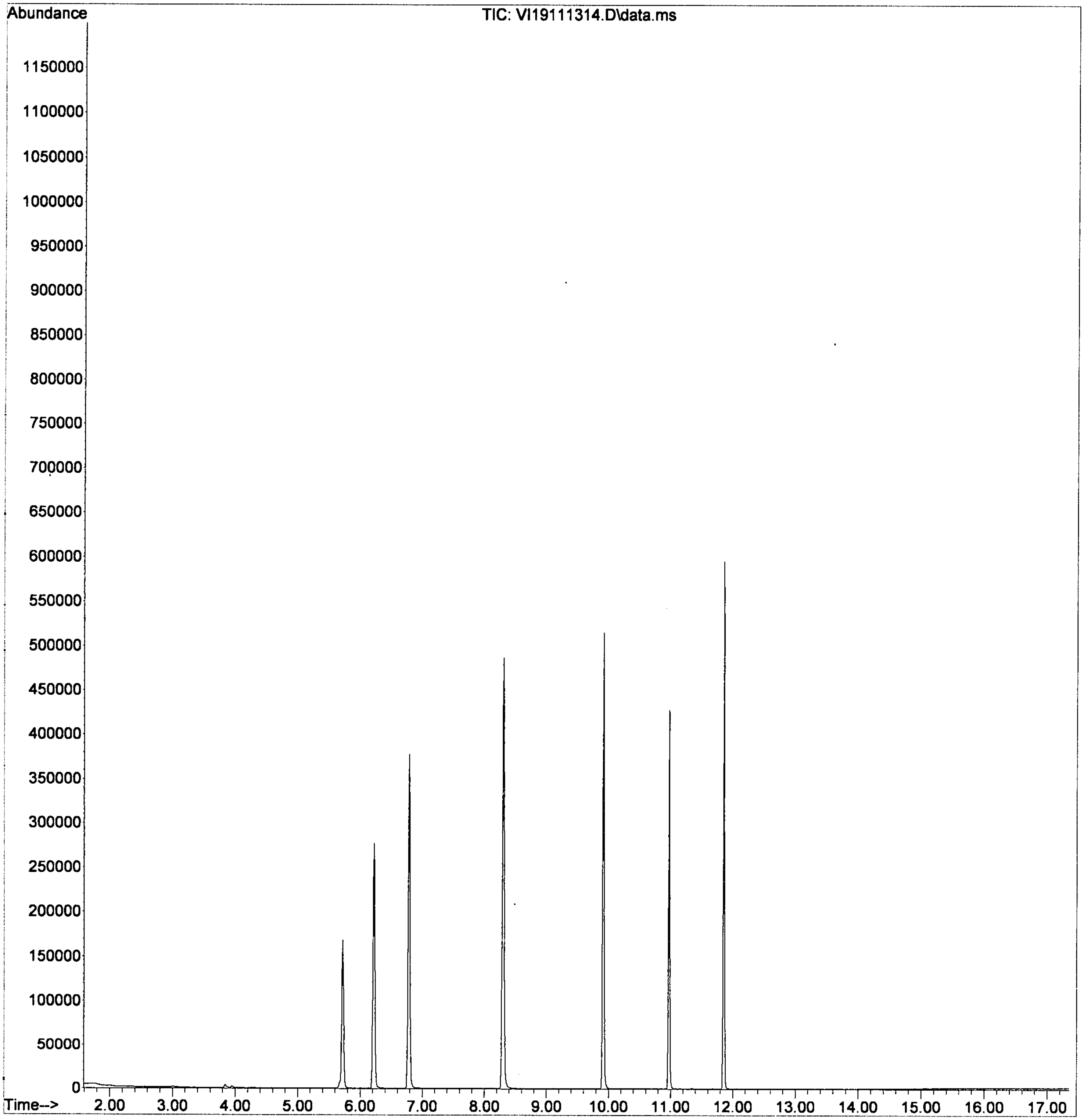


Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111315.D
Acq On : 13 Nov 2019 2:57 pm
Operator : TNL
Sample : A9K0332-02
Misc : 1X 5mL ~~BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC~~ TB
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	105580	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	299080	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	133161	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.718	111	112361	54.16 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	359781	53.94 ug/L	0.00
48) Toluene-d8 (S)	8.298	98	399516	50.89 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	110719	51.46 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.898	50	325	0.14 ug/L #	47
5) Bromomethane	2.372	96	118	0.09 ug/L #	13
14) Methylene Chloride	3.875	84	398	Below Cal #	72
15) Acetone	3.948	43	3271	3.54 ug/L	91
34) 2-Butanone (MEK)	5.864	43	121	0.08 ug/L	52

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

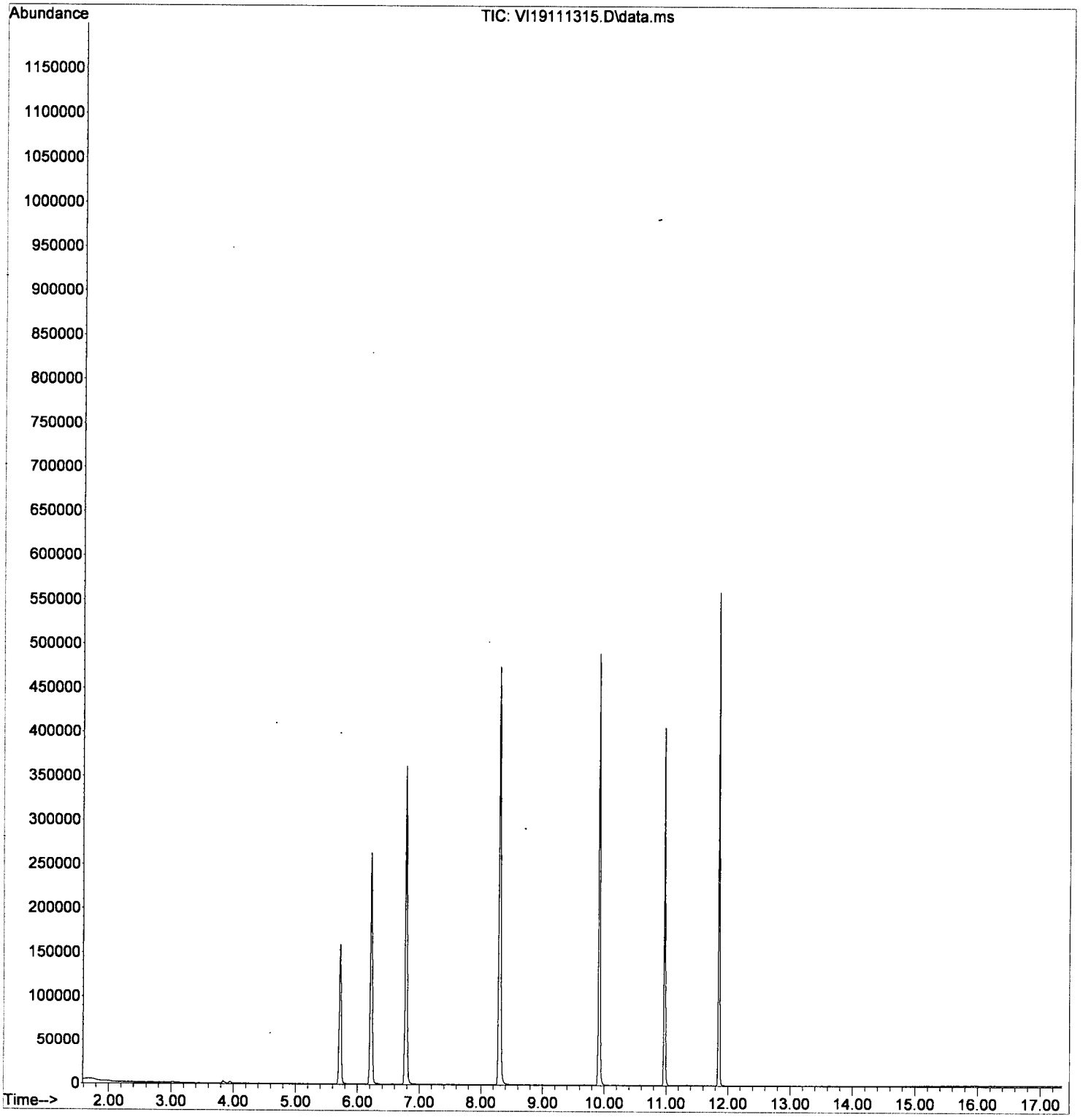
tnl

11/13/19 tnl

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111315.D
Acq On : 13 Nov 2019 2:57 pm
Operator : TNL
Sample : A9K0332-02
Misc : 1X 5mL BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC TB
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111316.D
Acq On : 13 Nov 2019 3:24 pm
Operator : TNL
Sample : A9K0332-03
Misc : 1X 5mL BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC TB
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	103486	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.910	117	292341	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	132149	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.712	111	110922	54.55 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	355410	54.36 ug/L	0.00
48) Toluene-d8 (S)	8.298	98	392447	51.15 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	108453	50.79 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.892	50	293	0.13 ug/L	78
5) Bromomethane	2.366	96	236	0.18 ug/L	67
14) Methylene Chloride	3.869	84	702	Below Cal	87
15) Acetone	3.942	43	5067	5.59 ug/L	88
19) tert-Butanol (TBA)	4.295	59	547	1.37 ug/L	46

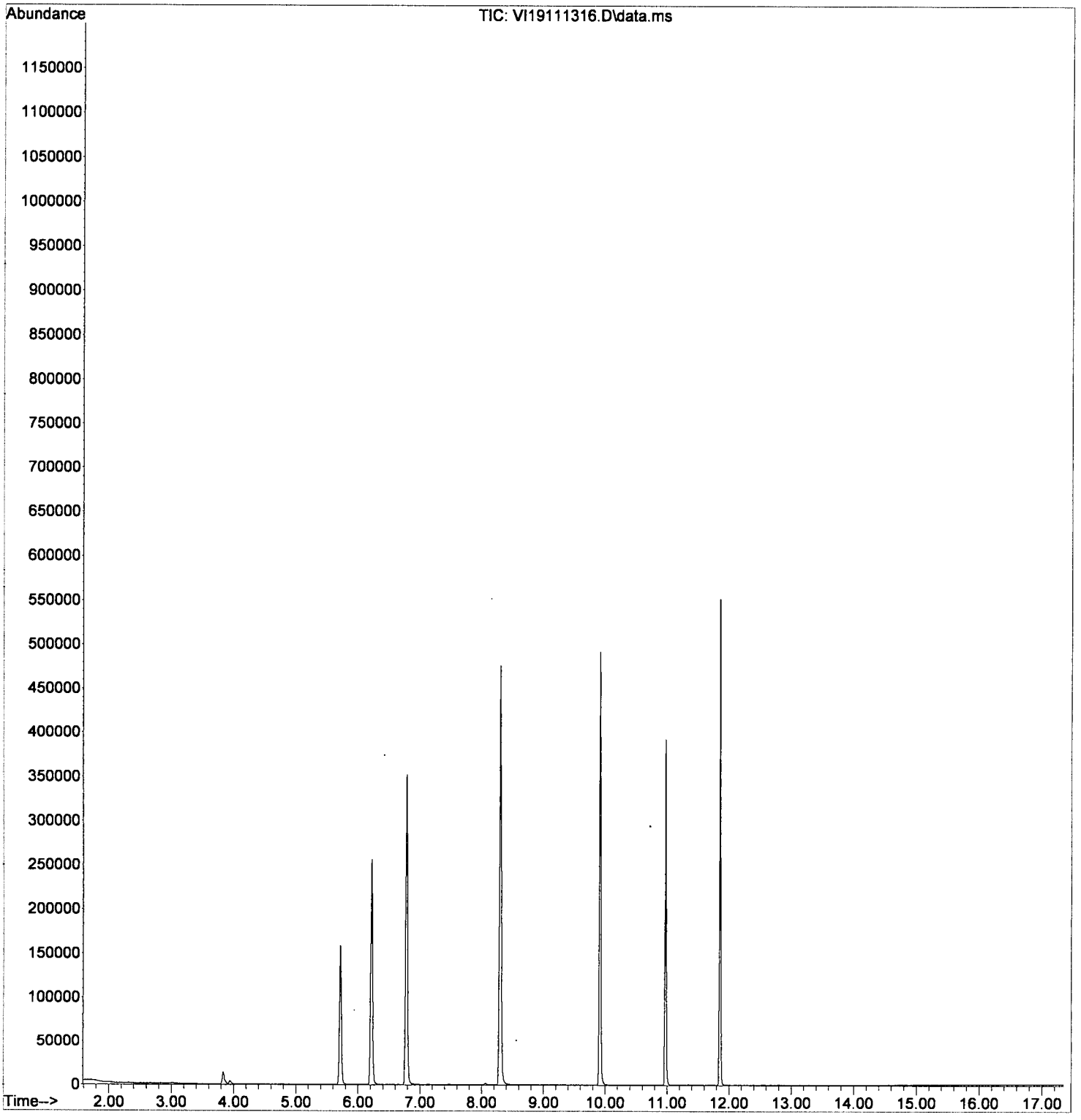
11/13

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K13033\
Data File : VI19111316.D
Acq On : 13 Nov 2019 3:24 pm
Operator : TNL
Sample : A9K0332-03
Misc : 1X 5mL BTEX/HALO6/11DCE/Cis12DCE/TCE/PCE/VC TB
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Nov 13 15:51:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



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

Volatile Organic Compounds by EPA 8260C
Calibration Data

Sequence 9J24043 (Cal ID A9J2503) VOA-GCMS9

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	9J24043	Instrument:	VOA-GCMS9
Date:	10/24/19 14:12	Calibration:	A9J2503

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J24043-IBL1	Water	QC	QC			A19I040	
2	9J24043-TUN1	Water	QC	QC			A19I040	
3	9J24043-ICB1	Water	QC	QC			A19I040	
4	9J24043-CAL1	Water	QC	QC			A19I040	A19J377
5	9J24043-CAL2	Water	QC	QC			A19I040	A19J378
6	9J24043-CAL3	Water	QC	QC			A19I040	A19J379
7	9J24043-CAL4	Water	QC	QC			A19I040	A19J380
8	9J24043-CAL5	Water	QC	QC			A19I040	A19J381
9	9J24043-CAL6	Water	QC	QC			A19I040	A19J382
10	9J24043-CAL7	Water	QC	QC			A19I040	A19J383
11	9J24043-CAL8	Water	QC	QC			A19I040	A19J384
12	9J24043-CAL9	Water	QC	QC			A19I040	A19J385
13	9J24043-IBL2	Water	QC	QC			A19I040	
14	9J24043-CALA	Water	QC	QC			A19I040	A19J386
15	9J24043-IBL3	Water	QC	QC			A19I040	
16	9J24043-CALB	Water	QC	QC			A19I040	A19J387
17	9J24043-IBL4	Water	QC	QC			A19I040	
18	9J24043-IBL5	Water	QC	QC			A19I040	
19	9J24043-ICV1	Water	QC	QC			A19I040	A19J131
20	9J24043-ICV2	Water	QC	QC			A19I040	A19E195
21	9J24043-IBL6	Water	QC	QC			A19I040	
22	9J24043-TUN2	Water	QC	QC			A19I040	
23	9J24043-IBL7	Water	QC	QC			A19I040	
24	9J24043-ICB2	Water	QC	QC			A19I040	
25	9J24043-CALC	Water	QC	QC			A19I040	A19J388
26	9J24043-CALD	Water	QC	QC			A19I040	A19J389
27	9J24043-CALE	Water	QC	QC			A19I040	A19J390
28	9J24043-CALF	Water	QC	QC			A19I040	A19J391
29	9J24043-CALH	Water	QC	QC			A19I040	A19J393
30	9J24043-CALI	Water	QC	QC			A19I040	A19J394
31	9J24043-CALJ	Water	QC	QC			A19I040	A19J395
32	9J24043-IBL8	Water	QC	QC			A19I040	
33	9J24043-IBL9	Water	QC	QC			A19I040	
34	9J24043-IBLA	Water	QC	QC			A19I040	
35	9J24043-IBLB	Water	QC	QC			A19I040	
36	9J24043-CALG	Water	QC	QC			A19I040	A19J392
37	9J24043-ICV3	Water	QC	QC			A19I040	A19G350

Data Entered By: 10/25/19

Data Reviewed By: 10/28/19

Comments:

Calibration Status Report VOA-GCMS9

Method Path : C:\msdchem\1\methods\
Method File : VI191025W.M
Title : EPA 8260: Volatile Organic Compounds
Last Update : Fri Oct 25 08:32:21 2019
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	0.1	-1	50	C:\msdchem\1\data\2019-10\9J24043\VI19102417.D
2	0.2	0	50	C:\msdchem\1\data\2019-10\9J24043\VI19102418.D
3	0.5	0	50	C:\msdchem\1\data\2019-10\9J24043\VI19102419.D
4	1	1	50	C:\msdchem\1\data\2019-10\9J24043\VI19102420.D
5	2	2	50	C:\msdchem\1\data\2019-10\9J24043\VI19102421.D
6	5	5	50	C:\msdchem\1\data\2019-10\9J24043\VI19102422.D
7	10	10	50	C:\msdchem\1\data\2019-10\9J24043\VI19102423.D
8	20	20	50	C:\msdchem\1\data\2019-10\9J24043\VI19102424.D
9	50	50	50	C:\msdchem\1\data\2019-10\9J24043\VI19102425.D
10	100	100	50	C:\msdchem\1\data\2019-10\9J24043\VI19102427.D
11	200	200	50	C:\msdchem\1\data\2019-10\9J24043\VI19102429.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	Oct 25 08:32 2019	Oct 25 08:17 2019	24 Oct 2019 3:55 pm
2	0.2	Oct 25 08:32 2019	Oct 25 08:19 2019	24 Oct 2019 4:21 pm
3	0.5	Oct 25 08:32 2019	Oct 25 08:21 2019	24 Oct 2019 4:48 pm
4	1	Oct 25 08:32 2019	Oct 25 08:23 2019	24 Oct 2019 5:15 pm
5	2	Oct 25 08:32 2019	Oct 25 08:24 2019	24 Oct 2019 5:42 pm
6	5	Oct 25 08:32 2019	Oct 25 08:25 2019	24 Oct 2019 6:09 pm
7	10	Oct 25 08:32 2019	Oct 25 08:10 2019	24 Oct 2019 6:36 pm
8	20	Oct 25 08:32 2019	Oct 25 08:10 2019	24 Oct 2019 7:03 pm
9	50	Oct 25 08:32 2019	Oct 25 08:10 2019	24 Oct 2019 7:30 pm
10	100	Oct 25 08:32 2019	Oct 25 08:10 2019	24 Oct 2019 8:24 pm
11	200	Oct 25 08:32 2019	Oct 25 08:30 2019	24 Oct 2019 9:17 pm

VI191025W.M Fri Oct 25 09:01:36 2019

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J24043

Analysis Included

8260C Full List
8260C Additional Cpds
8260C Iodomethane Add On
8260C Oxygenates

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9J24043-TUN1	MS Tune	Water		A19I040	10/24/2019 3:01:00PM
9J24043-ICB1	Initial Cal Blank	Water		A19I040	10/24/2019 3:28:00PM
9J24043-CAL1	Cal Standard	Water	A19J377	"	10/24/2019 3:55:00PM
9J24043-CAL2	Cal Standard	Water	A19J378	"	10/24/2019 4:21:00PM
9J24043-CAL3	Cal Standard	Water	A19J379	"	10/24/2019 4:48:00PM
9J24043-CAL4	Cal Standard	Water	A19J380	"	10/24/2019 5:15:00PM
9J24043-CAL5	Cal Standard	Water	A19J381	"	10/24/2019 5:42:00PM
9J24043-CAL6	Cal Standard	Water	A19J382	"	10/24/2019 6:09:00PM
9J24043-CAL7	Cal Standard	Water	A19J383	"	10/24/2019 6:36:00PM
9J24043-CAL8	Cal Standard	Water	A19J384	"	10/24/2019 7:03:00PM
9J24043-CAL9	Cal Standard	Water	A19J385	"	10/24/2019 7:30:00PM
9J24043-CALA	Cal Standard	Water	A19J386	"	10/24/2019 8:24:00PM
9J24043-CALB	Cal Standard	Water	A19J387	"	10/24/2019 9:17:00PM
9J24043-ICV1	Initial Cal Check	Water	A19J131	"	10/24/2019 10:38:00PM
9J24043-ICV2	Initial Cal Check	Water	A19E195	"	10/24/2019 11:05:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: A9J2503 Instrument: VOA-GCMS9

8260C Full List Sequence: 9J24043 Matrix: Water

9J24043-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J24043-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J24043

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: **A9J2503** Instrument: **VOA-GCMS9**

8260C Full List Sequence: **9J24043** Matrix: **Water**

9J24043-ICV1	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9J24043-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.

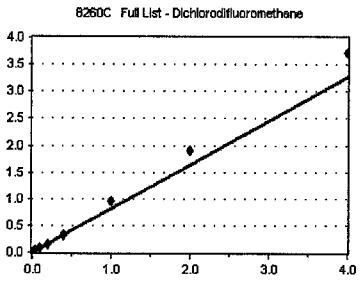
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Dichlorodifluoromethane

Curve Fit: **AVERAGE RF**

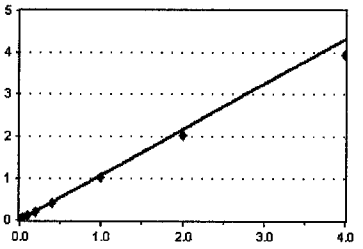


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	562	0.627	1.67
9J24043-CAL4	1	1583	0.682	1.68
9J24043-CAL5	2	3731	0.842	1.69
9J24043-CAL6	5	9010	0.812	1.68
9J24043-CAL7	10	18118	0.770	1.68
9J24043-CAL8	20	35982	0.800	1.67
9J24043-CAL9	50	109425	0.946	1.68
9J24043-CALA	100	212153	0.947	1.68
9J24043-CALB	200	431143	0.929	1.69

AVE RF **0.817** RF RSD **13.92** AVE RT **1.68**

Chloromethane

Curve Fit: **AVERAGE RF**

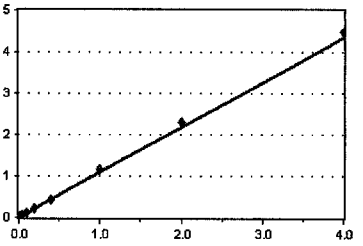


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~479~~	~~2.063~~	~~1.90~~
9J24043-CAL2	0.2	669	1.457	1.90
9J24043-CAL3	0.4	1136	1.268	1.89
9J24043-CAL4	1	2407	1.037	1.89
9J24043-CAL5	2	4743	1.070	1.90
9J24043-CAL6	5	11370	1.024	1.89
9J24043-CAL7	10	22449	0.954	1.90
9J24043-CAL8	20	45062	1.002	1.89
9J24043-CAL9	50	118956	1.029	1.89
9J24043-CALA	100	226754	1.012	1.90
9J24043-CALB	200	456703	0.984	1.90

AVE RF **1.084** RF RSD **14.45** AVE RT **1.90**

Vinyl chloride

Curve Fit: **AVERAGE RF**

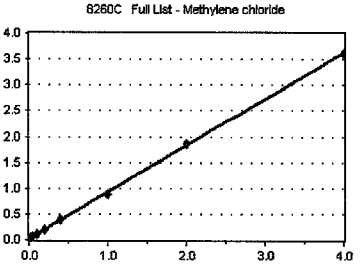


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	406	0.884	2.01
9J24043-CAL3	0.4	967	1.079	2.00
9J24043-CAL4	1	2351	1.013	2.00
9J24043-CAL5	2	5030	1.135	2.01
9J24043-CAL6	5	12653	1.140	2.00
9J24043-CAL7	10	25149	1.069	2.00
9J24043-CAL8	20	49916	1.110	2.00
9J24043-CAL9	50	133008	1.150	2.00
9J24043-CALA	100	258510	1.154	2.00
9J24043-CALB	200	521368	1.123	2.00

AVE RF **1.086** RF RSD **7.67** AVE RT **2.00**

Methylene chloride

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



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	2024	8.716	0.00
9J24043-CAL2	0.2	2201	4.794	0.00
9J24043-CAL3	0.4	2646	2.954	0.00
9J24043-CAL4	1	3939	1.697	0.00
9J24043-CAL5	2	6151	1.388	0.00
9J24043-CAL6	5	12549	1.130	3.87
9J24043-CAL7	10	22701	0.965	3.87
9J24043-CAL8	20	43598	0.970	3.87
9J24043-CAL9	50	102541	0.887	3.87
9J24043-CALA	100	209114	0.934	3.88
9J24043-CALB	200	419637	0.904	3.88

AVE RF **2.304** RF RSD **106.11** AVE RT **2.11**

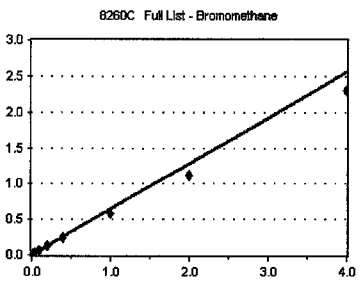
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Bromomethane

Curve Fit: **AVERAGE RF**

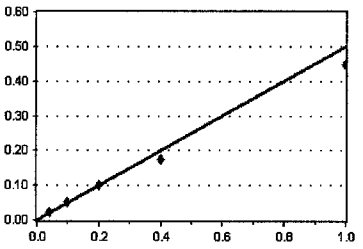


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~839~~	~~0.937~~	~~2.36~~
9J24043-CAL4	1	1763	0.760	2.36
9J24043-CAL5	2	3140	0.709	2.37
9J24043-CAL6	5	7782	0.701	2.36
9J24043-CAL7	10	14678	0.624	2.36
9J24043-CAL8	20	27599	0.614	2.35
9J24043-CAL9	50	66917	0.579	2.36
9J24043-CALA	100	125242	0.559	2.37
9J24043-CALB	200	267468	0.576	2.37

AVE RF **0.640** RF RSD **11.51** AVE RT **2.36**

Chloroethane

Curve Fit: **AVERAGE RF**

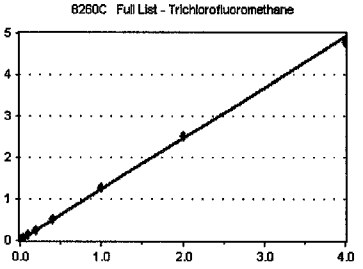


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL5	2	2540	0.573	2.52
9J24043-CAL6	5	5899	0.531	2.51
9J24043-CAL7	10	11813	0.502	2.50
9J24043-CAL8	20	19851	0.442	2.49
9J24043-CAL9	50	51695	0.447	2.49
~~9J24043-CALA~~	~~100~~	~~53786~~	~~0.240~~	~~2.51~~
~~9J24043-CALB~~	~~200~~	~~53331~~	~~0.115~~	~~2.49~~

AVE RF **0.499** RF RSD **11.23** AVE RT **2.50**

Trichlorofluoromethane

Curve Fit: **AVERAGE RF**

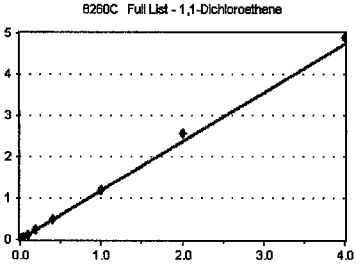


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	958	1.069	2.66
9J24043-CAL4	1	2784	1.200	2.66
9J24043-CAL5	2	5667	1.279	2.68
9J24043-CAL6	5	14236	1.282	2.66
9J24043-CAL7	10	29038	1.235	2.66
9J24043-CAL8	20	58162	1.294	2.66
9J24043-CAL9	50	145579	1.259	2.66
9J24043-CALA	100	279991	1.250	2.66
9J24043-CALB	200	556445	1.199	2.66

AVE RF **1.230** RF RSD **5.62** AVE RT **2.66**

1,1-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1038	1.159	3.23
9J24043-CAL4	1	2476	1.067	3.23
9J24043-CAL5	2	5263	1.188	3.24
9J24043-CAL6	5	13321	1.200	3.23
9J24043-CAL7	10	27243	1.158	3.23
9J24043-CAL8	20	54074	1.203	3.23
9J24043-CAL9	50	137847	1.192	3.23
9J24043-CALA	100	286478	1.279	3.24
9J24043-CALB	200	567371	1.222	3.23

AVE RF **1.185** RF RSD **4.83** AVE RT **3.23**

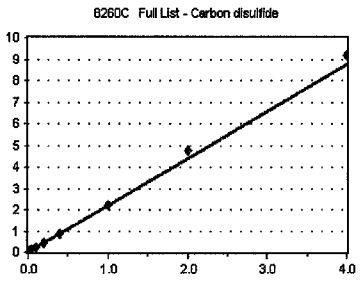
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Carbon disulfide

Curve Fit: **AVERAGE RF**

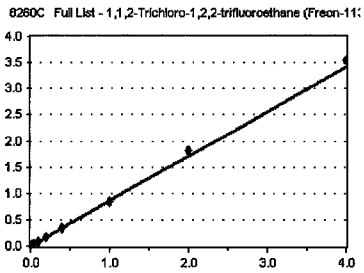


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	4573	1.970	3.25
9J24043-CAL5	2	9757	2.202	3.26
9J24043-CAL6	5	24060	2.167	3.25
9J24043-CAL7	10	49011	2.084	3.25
9J24043-CAL8	20	98898	2.200	3.24
9J24043-CAL9	50	254448	2.200	3.25
9J24043-CALA	100	531736	2.374	3.25
9J24043-CALB	200	1067583	2.300	3.25

AVE RF **2.187** RF RSD **5.64** AVE RT **3.25**

1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Fit: **AVERAGE RF**

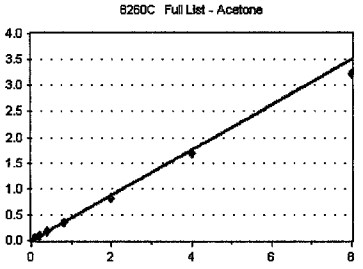


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	1717	0.740	3.29
9J24043-CAL5	2	3803	0.858	3.30
9J24043-CAL6	5	9544	0.860	3.29
9J24043-CAL7	10	19612	0.834	3.28
9J24043-CAL8	20	39711	0.883	3.28
9J24043-CAL9	50	97812	0.846	3.29
9J24043-CALA	100	204168	0.912	3.29
9J24043-CALB	200	411156	0.886	3.29

AVE RF **0.852** RF RSD **6.07** AVE RT **3.29**

Acetone

Curve Fit: **AVERAGE RF**

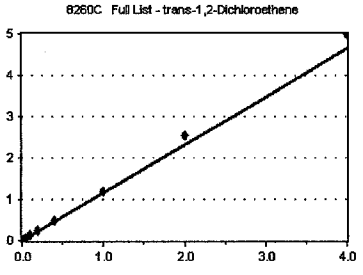


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.4~~	~~1168~~	~~1.272~~	~~3.95~~
~~9J24043-CAL3~~	~~0.8~~	~~1616~~	~~0.902~~	~~3.95~~
~~9J24043-CAL4~~	~~2~~	~~2940~~	~~0.633~~	~~3.95~~
9J24043-CAL5	4	4523	0.510	3.95
9J24043-CAL6	10	10355	0.466	3.94
9J24043-CAL7	20	19796	0.421	3.94
9J24043-CAL8	40	39380	0.438	3.94
9J24043-CAL9	100	93945	0.406	3.94
9J24043-CALA	200	188786	0.421	3.94
9J24043-CALB	400	375022	0.404	3.94

AVE RF **0.438** RF RSD **8.73** AVE RT **3.94**

trans-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	360	0.784	4.05
9J24043-CAL3	0.4	963	1.075	4.04
9J24043-CAL4	1	2657	1.145	4.04
9J24043-CAL5	2	5503	1.242	4.05
9J24043-CAL6	5	13685	1.233	4.04
9J24043-CAL7	10	27372	1.164	4.04
9J24043-CAL8	20	56066	1.247	4.03
9J24043-CAL9	50	137318	1.188	4.04
9J24043-CALA	100	285846	1.276	4.04
9J24043-CALB	200	579277	1.248	4.04

AVE RF **1.160** RF RSD **12.54** AVE RT **4.04**

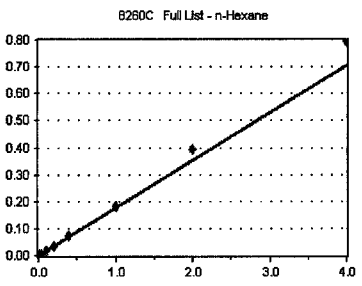
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

n-Hexane

Curve Fit: **AVERAGE RF**

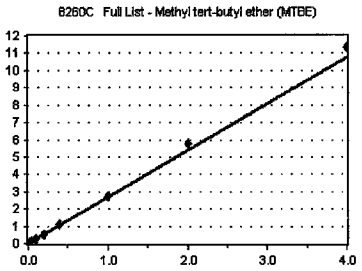


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	357	0.154	4.12
9J24043-CAL5	2	709	0.160	4.13
9J24043-CAL6	5	1836	0.165	4.12
9J24043-CAL7	10	4034	0.172	4.12
9J24043-CAL8	20	8308	0.185	4.12
9J24043-CAL9	50	21163	0.183	4.12
9J24043-CALA	100	43920	0.196	4.12
9J24043-CALB	200	92077	0.198	4.12

AVE RF **0.177** RF RSD **9.35** AVE RT **4.12**

Methyl tert-butyl ether (MTBE)

Curve Fit: **AVERAGE RF**

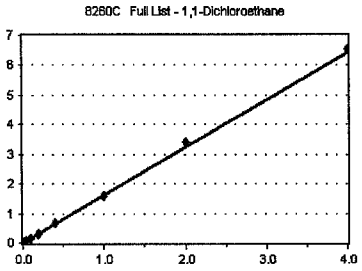


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	2309	2.577	4.17
9J24043-CAL4	1	5789	2.494	4.17
9J24043-CAL5	2	11957	2.698	4.17
9J24043-CAL6	5	29908	2.694	4.17
9J24043-CAL7	10	61557	2.617	4.17
9J24043-CAL8	20	123669	2.750	4.17
9J24043-CAL9	50	313020	2.707	4.17
9J24043-CALA	100	646936	2.888	4.17
9J24043-CALB	200	1318751	2.841	4.17

AVE RF **2.696** RF RSD **4.58** AVE RT **4.17**

1,1-Dichloroethane

Curve Fit: **AVERAGE RF**

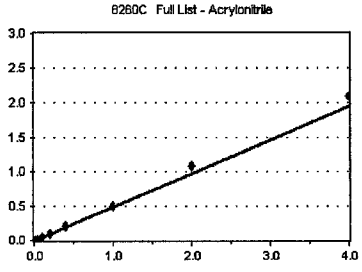


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1323	1.477	4.68
9J24043-CAL4	1	3672	1.582	4.68
9J24043-CAL5	2	7227	1.631	4.69
9J24043-CAL6	5	18307	1.649	4.68
9J24043-CAL7	10	36999	1.573	4.68
9J24043-CAL8	20	75120	1.671	4.68
9J24043-CAL9	50	182910	1.582	4.68
9J24043-CALA	100	379907	1.696	4.68
9J24043-CALB	200	761535	1.641	4.68

AVE RF **1.611** RF RSD **4.09** AVE RT **4.68**

Acrylonitrile

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	876	0.377	4.75
9J24043-CAL5	2	1949	0.440	4.76
9J24043-CAL6	5	5426	0.489	4.75
9J24043-CAL7	10	11383	0.484	4.74
9J24043-CAL8	20	22973	0.511	4.75
9J24043-CAL9	50	58667	0.507	4.75
9J24043-CALA	100	122564	0.547	4.75
9J24043-CALB	200	243406	0.524	4.75

AVE RF **0.485** RF RSD **11.08** AVE RT **4.75**

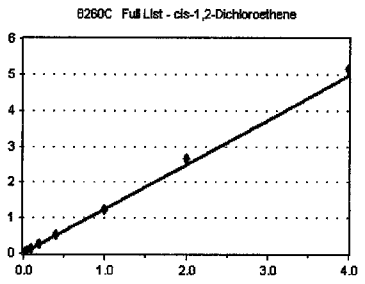
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

cis-1,2-Dichloroethene

Curve Fit: **AVERAGE RF**

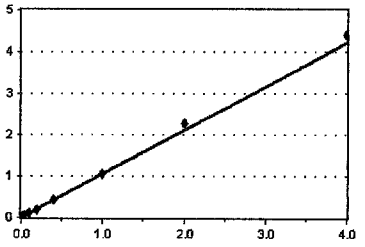


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1008	1.125	5.24
9J24043-CAL4	1	2744	1.182	5.24
9J24043-CAL5	2	5568	1.256	5.25
9J24043-CAL6	5	13959	1.257	5.24
9J24043-CAL7	10	28723	1.221	5.24
9J24043-CAL8	20	58359	1.298	5.24
9J24043-CAL9	50	143124	1.238	5.24
9J24043-CALA	100	297452	1.328	5.24
9J24043-CALB	200	597836	1.288	5.24

AVE RF **1.244** RF RSD **4.98** AVE RT **5.24**

2,2-Dichloropropane

Curve Fit: **AVERAGE RF**

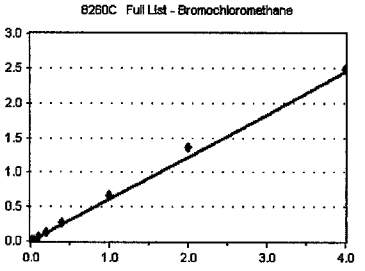


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	853	0.952	5.35
9J24043-CAL4	1	2316	0.998	5.35
9J24043-CAL5	2	4776	1.078	5.35
9J24043-CAL6	5	11793	1.062	5.35
9J24043-CAL7	10	23663	1.006	5.35
9J24043-CAL8	20	48254	1.073	5.35
9J24043-CAL9	50	122658	1.061	5.35
9J24043-CALA	100	252830	1.129	5.35
9J24043-CALB	200	512393	1.104	5.35

AVE RF **1.051** RF RSD **5.31** AVE RT **5.35**

Bromochloromethane

Curve Fit: **AVERAGE RF**

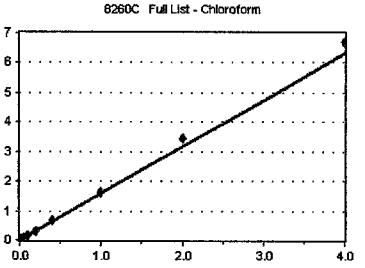


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	391	0.436	5.44
9J24043-CAL4	1	1188	0.512	5.45
9J24043-CAL5	2	2679	0.605	5.46
9J24043-CAL6	5	7172	0.646	5.44
9J24043-CAL7	10	14961	0.636	5.45
9J24043-CAL8	20	30935	0.688	5.44
9J24043-CAL9	50	77572	0.671	5.44
9J24043-CALA	100	151653	0.677	5.45
9J24043-CALB	200	288672	0.622	5.45

AVE RF **0.610** RF RSD **13.73** AVE RT **5.45**

Chloroform

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	587	1.278	5.53
9J24043-CAL3	0.4	1292	1.442	5.53
9J24043-CAL4	1	3341	1.440	5.53
9J24043-CAL5	2	7277	1.642	5.54
9J24043-CAL6	5	18186	1.638	5.53
9J24043-CAL7	10	37799	1.607	5.53
9J24043-CAL8	20	76239	1.696	5.52
9J24043-CAL9	50	186984	1.617	5.52
9J24043-CALA	100	385051	1.719	5.53
9J24043-CALB	200	776466	1.673	5.53

AVE RF **1.575** RF RSD **8.98** AVE RT **5.53**

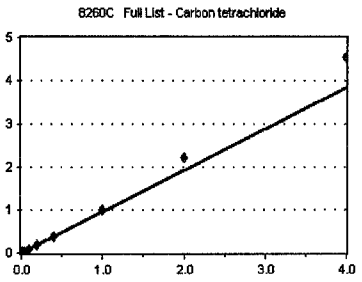
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Carbon tetrachloride

Curve Fit: **AVERAGE RF**

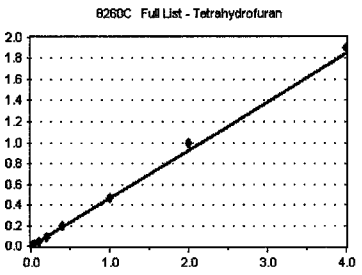


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~618~~	~~0.690~~	~~5.65~~
9J24043-CAL4	1	1791	0.772	5.66
9J24043-CAL5	2	4001	0.903	5.66
9J24043-CAL6	5	9957	0.897	5.66
9J24043-CAL7	10	20840	0.886	5.66
9J24043-CAL8	20	43938	0.977	5.66
9J24043-CAL9	50	114614	0.991	5.66
9J24043-CALA	100	247648	1.106	5.66
9J24043-CALB	200	525973	1.133	5.66

AVE RF **0.958** RF RSD **12.52** AVE RT **5.66**

Tetrahydrofuran

Curve Fit: **AVERAGE RF**

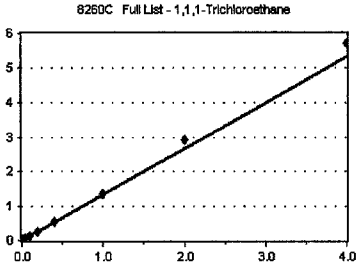


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	945	0.407	5.71
9J24043-CAL5	2	2045	0.461	5.71
9J24043-CAL6	5	5112	0.460	5.71
9J24043-CAL7	10	10375	0.441	5.70
9J24043-CAL8	20	21330	0.474	5.70
9J24043-CAL9	50	54072	0.468	5.69
9J24043-CALA	100	111881	0.500	5.70
9J24043-CALB	200	221252	0.477	5.69

AVE RF **0.461** RF RSD **5.94** AVE RT **5.70**

1,1,1-Trichloroethane

Curve Fit: **AVERAGE RF**

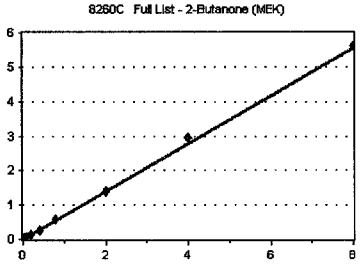


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1012	1.130	5.73
9J24043-CAL4	1	2903	1.251	5.73
9J24043-CAL5	2	5937	1.340	5.74
9J24043-CAL6	5	14957	1.347	5.73
9J24043-CAL7	10	30210	1.284	5.74
9J24043-CAL8	20	62000	1.379	5.73
9J24043-CAL9	50	156566	1.354	5.73
9J24043-CALA	100	325398	1.453	5.74
9J24043-CALB	200	663507	1.430	5.74

AVE RF **1.330** RF RSD **7.37** AVE RT **5.73**

2-Butanone (MEK)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.8~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	2	2900	0.625	5.86
9J24043-CAL5	4	6243	0.704	5.87
9J24043-CAL6	10	15638	0.704	5.86
9J24043-CAL7	20	31158	0.662	5.86
9J24043-CAL8	40	64474	0.717	5.85
9J24043-CAL9	100	162223	0.701	5.85
9J24043-CALA	200	331914	0.741	5.85
9J24043-CALB	400	651518	0.702	5.85

AVE RF **0.695** RF RSD **5.12** AVE RT **5.86**

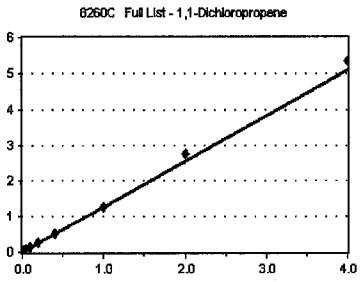
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,1-Dichloropropene

Curve Fit: **AVERAGE RF**

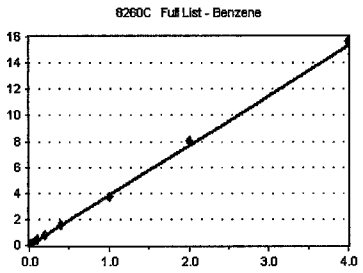


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1049	1.171	5.87
9J24043-CAL4	1	2749	1.184	5.86
9J24043-CAL5	2	5724	1.292	5.87
9J24043-CAL6	5	14423	1.299	5.86
9J24043-CAL7	10	29295	1.245	5.86
9J24043-CAL8	20	59019	1.313	5.86
9J24043-CAL9	50	146998	1.271	5.86
9J24043-CALA	100	308104	1.376	5.86
9J24043-CALB	200	622283	1.341	5.86

AVE RF **1.277** RF RSD **5.30** AVE RT **5.86**

Benzene

Curve Fit: **AVERAGE RF**

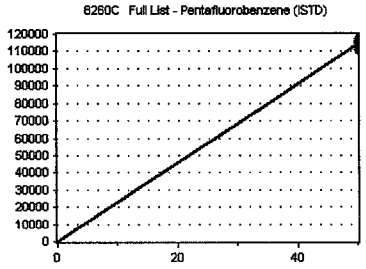


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	917	3.949	6.13
9J24043-CAL2	0.2	1584	3.450	6.13
9J24043-CAL3	0.4	3381	3.774	6.12
9J24043-CAL4	1	8314	3.582	6.13
9J24043-CAL5	2	17935	4.047	6.13
9J24043-CAL6	5	43404	3.910	6.12
9J24043-CAL7	10	87359	3.714	6.12
9J24043-CAL8	20	175817	3.910	6.12
9J24043-CAL9	50	434612	3.758	6.12
9J24043-CALA	100	900809	4.022	6.12
9J24043-CALB	200	1815119	3.911	6.12

AVE RF **3.821** RF RSD **4.86** AVE RT **6.12**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

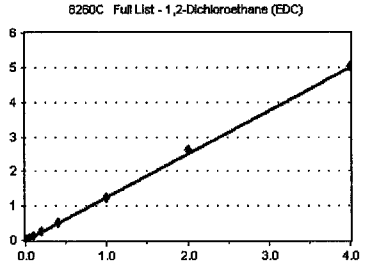


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	6.22
9J24043-CAL8	50	112406	2248.120	6.21
9J24043-CAL9	50	115635	2312.700	6.21
9J24043-CALA	50	111989	2239.780	6.22
9J24043-CALB	50	116034	2320.680	6.22

AVE RF **2280.709** RF RSD **2.13** AVE RT **6.21**

1,2-Dichloroethane (EDC)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1073	1.198	6.33
9J24043-CAL4	1	2623	1.130	6.34
9J24043-CAL5	2	5726	1.292	6.35
9J24043-CAL6	5	14359	1.293	6.34
9J24043-CAL7	10	28935	1.230	6.34
9J24043-CAL8	20	58731	1.306	6.34
9J24043-CAL9	50	143950	1.245	6.34
9J24043-CALA	100	294149	1.313	6.34
9J24043-CALB	200	583025	1.256	6.34

AVE RF **1.252** RF RSD **4.76** AVE RT **6.34**

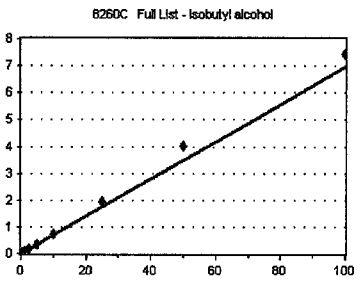
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Isobutyl alcohol

Curve Fit: **AVERAGE RF**

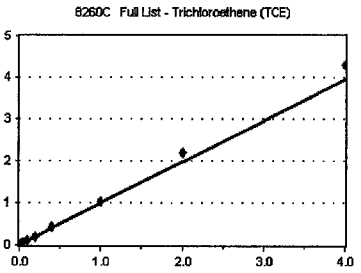


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~2.5~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~5~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	10	1172	5.233	6.39
9J24043-CAL4	25	3120	5.377	6.38
9J24043-CAL5	50	7968	7.192	6.38
9J24043-CAL6	125	20710	7.462	6.38
9J24043-CAL7	250	39286	6.681	6.38
9J24043-CAL8	500	83527	7.431	6.37
9J24043-CAL9	1250	224878	0.078	6.37
9J24043-CALA	2500	450055	8.037	6.38
9J24043-CALB	5000	863259	7.440	6.38

AVE RF **6.959** RF RSD **14.51** AVE RT **6.38**

Trichloroethene (TCE)

Curve Fit: **AVERAGE RF**

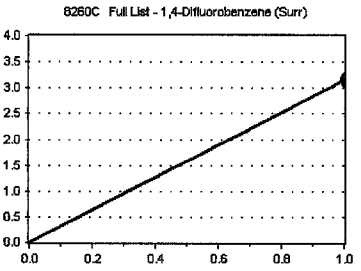


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	372	0.810	6.75
9J24043-CAL3	0.4	718	0.801	6.75
9J24043-CAL4	1	2166	0.933	6.74
9J24043-CAL5	2	4576	1.033	6.75
9J24043-CAL6	5	11340	1.022	6.74
9J24043-CAL7	10	23449	0.997	6.74
9J24043-CAL8	20	47359	1.053	6.74
9J24043-CAL9	50	118626	1.026	6.74
9J24043-CALA	100	245311	1.095	6.75
9J24043-CALB	200	498651	1.074	6.74

AVE RF **0.984** RF RSD **10.55** AVE RT **6.74**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

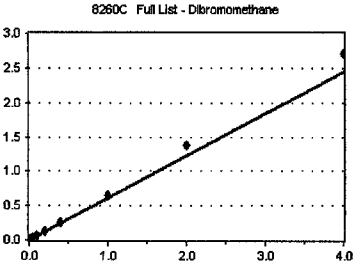


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	364447	3.139	6.78
9J24043-CAL2	50	359462	3.132	6.78
9J24043-CAL3	50	352302	3.146	6.78
9J24043-CAL4	50	366642	3.160	6.78
9J24043-CAL5	50	347212	3.134	6.78
9J24043-CAL6	50	353918	3.188	6.78
9J24043-CAL7	50	367409	3.124	6.78
9J24043-CAL8	50	354922	3.158	6.78
9J24043-CAL9	50	370144	3.201	6.78
9J24043-CALA	50	356857	3.187	6.78
9J24043-CALB	50	369003	3.180	6.78

AVE RF **3.159** RF RSD **0.84** AVE RT **6.78**

Dibromomethane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	378	0.422	7.20
9J24043-CAL4	1	1285	0.554	7.20
9J24043-CAL5	2	2755	0.622	7.20
9J24043-CAL6	5	7023	0.633	7.20
9J24043-CAL7	10	14594	0.620	7.20
9J24043-CAL8	20	29514	0.656	7.20
9J24043-CAL9	50	74270	0.642	7.20
9J24043-CALA	100	155032	0.692	7.20
9J24043-CALB	200	314382	0.677	7.20

AVE RF **0.613** RF RSD **13.36** AVE RT **7.20**

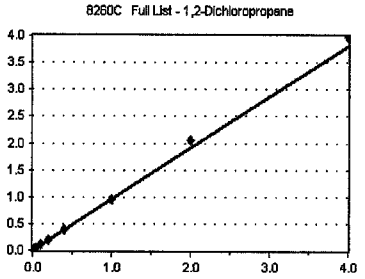
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,2-Dichloropropane

Curve Fit: **AVERAGE RF**

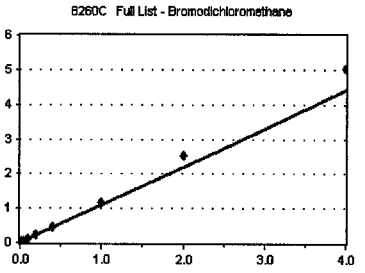


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	797	0.890	7.31
9J24043-CAL4	1	1944	0.838	7.31
9J24043-CAL5	2	4373	0.987	7.31
9J24043-CAL6	5	10897	0.982	7.31
9J24043-CAL7	10	21915	0.932	7.31
9J24043-CAL8	20	44422	0.988	7.31
9J24043-CAL9	50	109124	0.944	7.31
9J24043-CALA	100	229327	1.024	7.31
9J24043-CALB	200	461364	0.994	7.31

AVE RF **0.953** RF RSD **6.18** AVE RT **7.31**

Bromodichloromethane

Curve Fit: **AVERAGE RF**

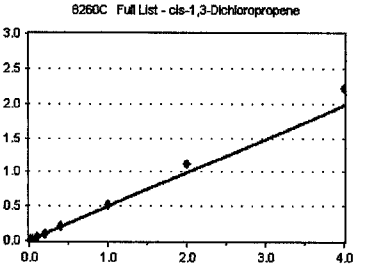


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	800	0.893	7.38
9J24043-CAL4	1	2259	0.973	7.38
9J24043-CAL5	2	4681	1.056	7.39
9J24043-CAL6	5	12021	1.083	7.38
9J24043-CAL7	10	25055	1.065	7.38
9J24043-CAL8	20	51693	1.150	7.38
9J24043-CAL9	50	133532	1.155	7.38
9J24043-CALA	100	282119	1.260	7.38
9J24043-CALB	200	582259	1.255	7.38

AVE RF **1.099** RF RSD **11.01** AVE RT **7.38**

cis-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**

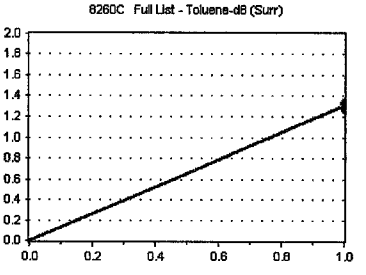


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1014	0.431	8.09
9J24043-CAL4	1	2667	0.429	8.09
9J24043-CAL5	2	5578	0.468	8.09
9J24043-CAL6	5	14229	0.474	8.09
9J24043-CAL7	10	30482	0.487	8.09
9J24043-CAL8	20	64475	0.525	8.09
9J24043-CAL9	50	166893	0.520	8.09
9J24043-CALA	100	356393	0.559	8.09
9J24043-CALB	200	736312	0.556	8.09

AVE RF **0.494** RF RSD **9.88** AVE RT **8.09**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	406288	1.321	8.30
9J24043-CAL2	50	403793	1.333	8.30
9J24043-CAL3	50	396027	1.345	8.30
9J24043-CAL4	50	410518	1.321	8.30
9J24043-CAL5	50	395017	1.327	8.30
9J24043-CAL6	50	397005	1.322	8.30
9J24043-CAL7	50	415174	1.327	8.30
9J24043-CAL8	50	399810	1.302	8.30
9J24043-CAL9	50	415062	1.292	8.30
9J24043-CALA	50	405945	1.274	8.30
9J24043-CALB	50	420947	1.272	8.30

AVE RF **1.312** RF RSD **1.83** AVE RT **8.30**

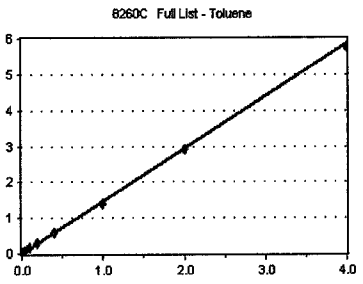
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Toluene

Curve Fit: **AVERAGE RF**

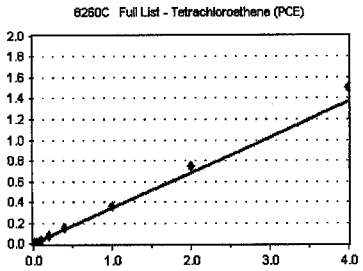


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	978	1.590	8.36
9J24043-CAL2	0.2	1744	1.439	8.35
9J24043-CAL3	0.4	3505	1.488	8.36
9J24043-CAL4	1	9040	1.454	8.35
9J24043-CAL5	2	17851	1.499	8.36
9J24043-CAL6	5	44272	1.474	8.36
9J24043-CAL7	10	90400	1.445	8.36
9J24043-CAL8	20	183309	1.492	8.36
9J24043-CAL9	50	446611	1.391	8.36
9J24043-CALA	100	931584	1.462	8.36
9J24043-CALB	200	1905088	1.439	8.36

AVE RF **1.470** RF RSD **3.41** AVE RT **8.36**

Tetrachloroethene (PCE)

Curve Fit: **AVERAGE RF**

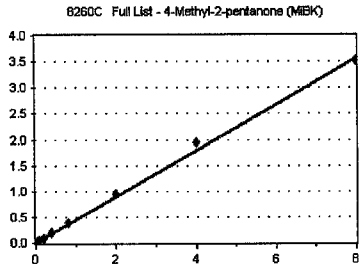


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	267	0.220	8.81
9J24043-CAL3	0.4	787	0.334	8.80
9J24043-CAL4	1	1994	0.321	8.80
9J24043-CAL5	2	4333	0.364	8.80
9J24043-CAL6	5	10847	0.361	8.80
9J24043-CAL7	10	22099	0.353	8.80
9J24043-CAL8	20	45467	0.370	8.80
9J24043-CAL9	50	113079	0.352	8.80
9J24043-CALA	100	236880	0.372	8.80
9J24043-CALB	200	496433	0.375	8.80

AVE RF **0.342** RF RSD **13.48** AVE RT **8.80**

4-Methyl-2-pentanone (MiBK)

Curve Fit: **AVERAGE RF**

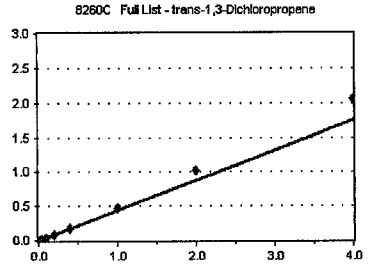


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.4	890	0.367	8.80
9J24043-CAL3	0.8	1912	0.406	8.81
9J24043-CAL4	2	5042	0.406	8.80
9J24043-CAL5	4	11029	0.463	8.81
9J24043-CAL6	10	28183	0.469	8.80
9J24043-CAL7	20	58009	0.464	8.80
9J24043-CAL8	40	120524	0.491	8.80
9J24043-CAL9	100	304356	0.474	8.80
9J24043-CALA	200	616767	0.484	8.80
9J24043-CALB	400	1166981	0.441	8.80

AVE RF **0.446** RF RSD **9.09** AVE RT **8.80**

trans-1,3-Dichloropropene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~610~~	~~0.259~~	~~8.84~~
9J24043-CAL4	1	2122	0.341	8.84
9J24043-CAL5	2	4500	0.378	8.84
9J24043-CAL6	5	12130	0.404	8.84
9J24043-CAL7	10	26302	0.420	8.84
9J24043-CAL8	20	57085	0.465	8.83
9J24043-CAL9	50	151987	0.473	8.83
9J24043-CALA	100	327146	0.513	8.84
9J24043-CALB	200	678927	0.513	8.84

AVE RF **0.438** RF RSD **14.34** AVE RT **8.84**

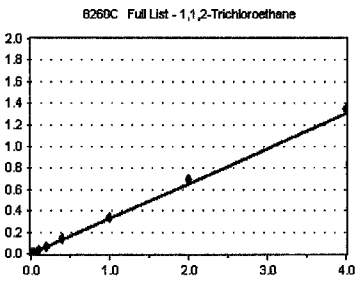
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,1,2-Trichloroethane

Curve Fit: **AVERAGE RF**

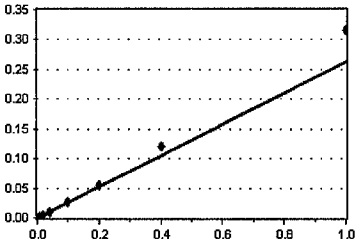


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	288	0.238	9.01
9J24043-CAL3	0.4	717	0.304	9.00
9J24043-CAL4	1	1944	0.313	9.00
9J24043-CAL5	2	4134	0.347	9.00
9J24043-CAL6	5	10336	0.344	9.00
9J24043-CAL7	10	21402	0.342	9.01
9J24043-CAL8	20	43171	0.351	9.00
9J24043-CAL9	50	107594	0.335	9.00
9J24043-CALA	100	221018	0.347	9.01
9J24043-CALB	200	447395	0.338	9.01

AVE RF **0.326** RF RSD **10.62** AVE RT **9.01**

Dibromochloromethane

Curve Fit: **AVERAGE RF**

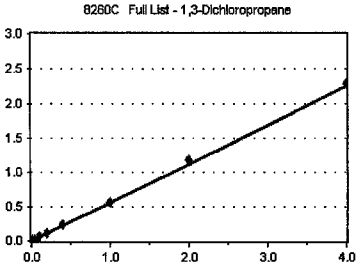


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	505	0.214	9.19
9J24043-CAL4	1	1349	0.217	9.19
9J24043-CAL5	2	3038	0.255	9.19
9J24043-CAL6	5	8016	0.267	9.19
9J24043-CAL7	10	17208	0.275	9.19
9J24043-CAL8	20	36932	0.301	9.19
9J24043-CAL9	50	101291	0.315	9.19
~~9J24043-CALA~~	~~100~~	~~222919~~	~~0.360~~	~~9.19~~
~~9J24043-CALB~~	~~200~~	~~473598~~	~~0.358~~	~~9.19~~

AVE RF **0.264** RF RSD **14.58** AVE RT **9.19**

1,3-Dichloropropane

Curve Fit: **AVERAGE RF**

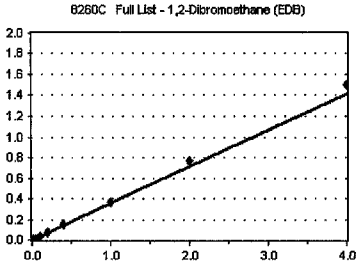


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	568	0.469	9.29
9J24043-CAL3	0.4	1253	0.532	9.29
9J24043-CAL4	1	3361	0.541	9.29
9J24043-CAL5	2	6889	0.578	9.29
9J24043-CAL6	5	17551	0.584	9.29
9J24043-CAL7	10	36354	0.581	9.29
9J24043-CAL8	20	73700	0.600	9.29
9J24043-CAL9	50	183541	0.571	9.29
9J24043-CALA	100	379039	0.595	9.29
9J24043-CALB	200	755862	0.571	9.29

AVE RF **0.562** RF RSD **6.98** AVE RT **9.29**

1,2-Dibromoethane (EDB)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~279~~	~~0.230~~	~~9.42~~
9J24043-CAL3	0.4	615	0.261	9.42
9J24043-CAL4	1	1928	0.310	9.42
9J24043-CAL5	2	4499	0.378	9.43
9J24043-CAL6	5	11270	0.375	9.42
9J24043-CAL7	10	22884	0.366	9.42
9J24043-CAL8	20	46797	0.381	9.42
9J24043-CAL9	50	117418	0.366	9.42
9J24043-CALA	100	243688	0.382	9.42
9J24043-CALB	200	496207	0.375	9.42

AVE RF **0.355** RF RSD **11.70** AVE RT **9.42**

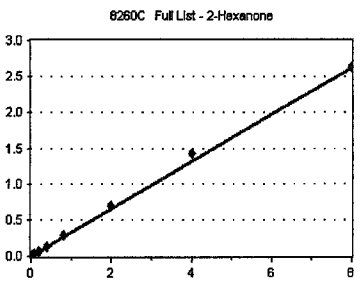
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

2-Hexanone

Curve Fit: **AVERAGE RF**

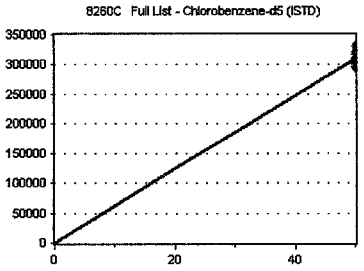


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.8	1346	0.286	9.66
9J24043-CAL4	2	3526	0.284	9.66
9J24043-CAL5	4	7610	0.319	9.66
9J24043-CAL6	10	19724	0.328	9.65
9J24043-CAL7	20	41881	0.335	9.65
9J24043-CAL8	40	87528	0.356	9.65
9J24043-CAL9	100	224495	0.350	9.65
9J24043-CALA	200	456833	0.358	9.65
9J24043-CALB	400	866990	0.327	9.65

AVE RF **0.327** RF RSD **8.41** AVE RT **9.66**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

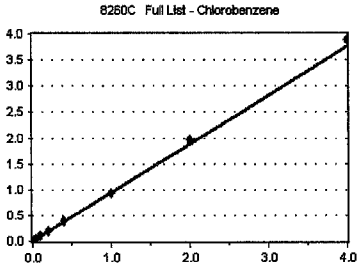


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	307577	6151.540	9.91
9J24043-CAL2	50	302974	6059.480	9.92
9J24043-CAL3	50	294372	5887.440	9.91
9J24043-CAL4	50	310797	6215.940	9.91
9J24043-CAL5	50	297754	5955.080	9.92
9J24043-CAL6	50	300317	6006.340	9.91
9J24043-CAL7	50	312833	6256.660	9.91
9J24043-CAL8	50	307093	6141.860	9.91
9J24043-CAL9	50	321159	6423.180	9.91
9J24043-CALA	50	318635	6372.700	9.91
9J24043-CALB	50	330915	6618.300	9.92

AVE RF **6189.865** RF RSD **3.53** AVE RT **9.91**

Chlorobenzene

Curve Fit: **AVERAGE RF**

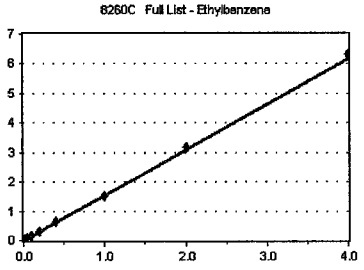


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	480	0.780	9.93
9J24043-CAL2	0.2	1045	0.862	9.93
9J24043-CAL3	0.4	2226	0.945	9.93
9J24043-CAL4	1	5770	0.928	9.93
9J24043-CAL5	2	11701	0.982	9.93
9J24043-CAL6	5	29555	0.984	9.93
9J24043-CAL7	10	60359	0.965	9.93
9J24043-CAL8	20	120984	0.985	9.93
9J24043-CAL9	50	301806	0.940	9.93
9J24043-CALA	100	624905	0.981	9.93
9J24043-CALB	200	1285529	0.971	9.93

AVE RF **0.939** RF RSD **6.80** AVE RT **9.93**

Ethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	942	1.531	9.95
9J24043-CAL2	0.2	1835	1.514	9.95
9J24043-CAL3	0.4	3584	1.522	9.95
9J24043-CAL4	1	8761	1.409	9.95
9J24043-CAL5	2	19157	1.608	9.95
9J24043-CAL6	5	46860	1.560	9.95
9J24043-CAL7	10	96018	1.535	9.95
9J24043-CAL8	20	195460	1.591	9.95
9J24043-CAL9	50	486890	1.516	9.95
9J24043-CALA	100	1015747	1.594	9.95
9J24043-CALB	200	2091382	1.580	9.95

AVE RF **1.542** RF RSD **3.61** AVE RT **9.95**

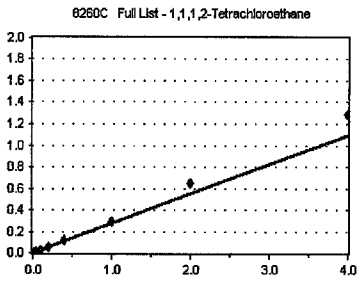
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,1,1,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

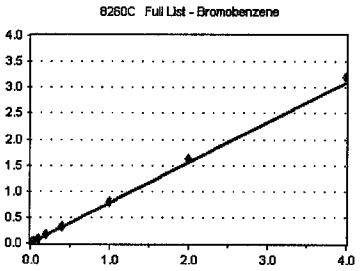


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~129~~	~~0.106~~	~~0.00~~
9J24043-CAL3	0.4	470	0.200	9.99
9J24043-CAL4	1	1476	0.237	9.99
9J24043-CAL5	2	2985	0.251	9.99
9J24043-CAL6	5	7981	0.266	9.99
9J24043-CAL7	10	16995	0.272	9.99
9J24043-CAL8	20	36336	0.296	9.99
9J24043-CAL9	50	95075	0.296	9.99
9J24043-CALA	100	206263	0.324	9.99
9J24043-CALB	200	427244	0.323	9.99

AVE RF **0.274** RF RSD **14.90** AVE RT **9.99**

Bromobenzene

Curve Fit: **AVERAGE RF**

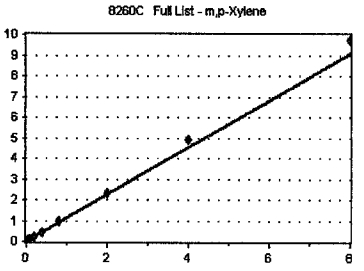


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	124	0.444	0.00
9J24043-CAL2	0.2	432	0.800	11.06
9J24043-CAL3	0.4	875	0.813	11.06
9J24043-CAL4	1	2220	0.771	11.06
9J24043-CAL5	2	4634	0.830	11.06
9J24043-CAL6	5	11623	0.819	11.06
9J24043-CAL7	10	24222	0.812	11.06
9J24043-CAL8	20	50013	0.825	11.06
9J24043-CAL9	50	126180	0.798	11.06
9J24043-CALA	100	265287	0.813	11.06
9J24043-CALB	200	542011	0.800	11.06

AVE RF **0.775** RF RSD **14.32** AVE RT **10.05**

m,p-Xylene

Curve Fit: **AVERAGE RF**

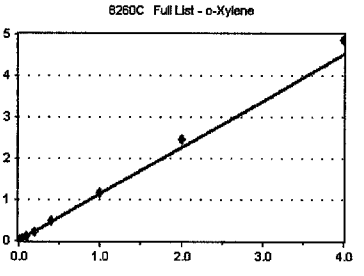


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.2	1368	1.112	10.09
9J24043-CAL2	0.4	2470	1.019	10.09
9J24043-CAL3	0.8	5197	1.103	10.09
9J24043-CAL4	2	12789	1.029	10.09
9J24043-CAL5	4	27092	1.137	10.09
9J24043-CAL6	10	68847	1.146	10.09
9J24043-CAL7	20	142004	1.135	10.09
9J24043-CAL8	40	297066	1.209	10.09
9J24043-CAL9	100	738497	1.150	10.09
9J24043-CALA	200	1568164	1.230	10.09
9J24043-CALB	400	3227914	1.219	10.09

AVE RF **1.135** RF RSD **6.12** AVE RT **10.09**

o-Xylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	585	0.951	10.47
9J24043-CAL2	0.2	1221	1.008	10.47
9J24043-CAL3	0.4	2605	1.106	10.47
9J24043-CAL4	1	6630	1.067	10.46
9J24043-CAL5	2	13605	1.142	10.47
9J24043-CAL6	5	34456	1.147	10.46
9J24043-CAL7	10	71417	1.141	10.46
9J24043-CAL8	20	149422	1.216	10.46
9J24043-CAL9	50	371768	1.158	10.46
9J24043-CALA	100	785588	1.233	10.46
9J24043-CALB	200	1606355	1.214	10.46

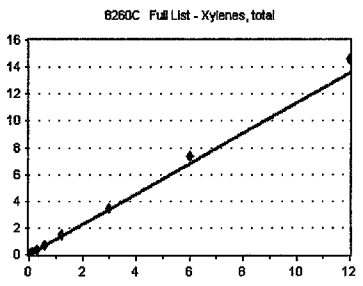
AVE RF **1.126** RF RSD **7.83** AVE RT **10.47**

Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Xylenes, total

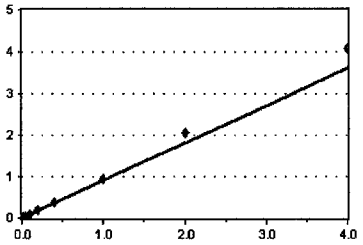


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.3	1953	1.058	10.47
9J24043-CAL2	0.6	3691	1.015	10.47
9J24043-CAL3	1.2	7802	1.104	10.47
9J24043-CAL4	3	19419	1.041	10.46
9J24043-CAL5	6	40697	1.139	10.47
9J24043-CAL6	15	103303	1.147	10.46
9J24043-CAL7	30	213421	1.137	10.46
9J24043-CAL8	60	446488	1.212	10.46
9J24043-CAL9	150	1110265	1.152	10.46
9J24043-CALA	300	2353752	1.231	10.46
9J24043-CALB	600	4834269	1.217	10.46

AVE RF **1.132** RF RSD **6.38** AVE RT **10.47**

Styrene

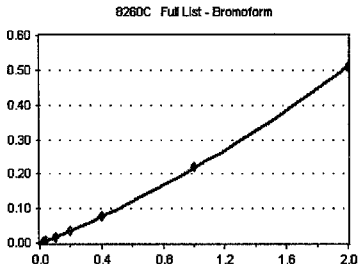


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~754~~	~~0.622~~	~~10.52~~
9J24043-CAL3	0.4	1656	0.703	10.52
9J24043-CAL4	1	4878	0.785	10.52
9J24043-CAL5	2	10363	0.870	10.52
9J24043-CAL6	5	26739	0.890	10.51
9J24043-CAL7	10	57022	0.911	10.51
9J24043-CAL8	20	120205	0.979	10.51
9J24043-CAL9	50	307044	0.956	10.51
9J24043-CALA	100	653902	1.026	10.51
9J24043-CALB	200	1353743	1.023	10.51

AVE RF **0.905** RF RSD **11.93** AVE RT **10.51**

Bromoform

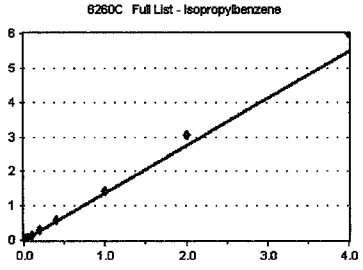


Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	795	0.128	10.54
9J24043-CAL5	2	1771	0.149	10.54
9J24043-CAL6	5	4690	0.156	10.54
9J24043-CAL7	10	10701	0.171	10.54
9J24043-CAL8	20	23844	0.194	10.54
9J24043-CAL9	50	71080	0.221	10.54
9J24043-CALA	100	162527	0.255	10.54
~~9J24043-CALB~~	~~200~~	~~351162~~	~~0.265~~	~~10.54~~

AVE RF **0.182** RF RSD **24.41** AVE RT **10.54**

Isopropylbenzene



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	1347	1.111	10.74
9J24043-CAL3	0.4	3067	1.302	10.73
9J24043-CAL4	1	7662	1.233	10.73
9J24043-CAL5	2	16325	1.371	10.73
9J24043-CAL6	5	41801	1.392	10.73
9J24043-CAL7	10	86673	1.385	10.73
9J24043-CAL8	20	182751	1.488	10.73
9J24043-CAL9	50	458349	1.427	10.73
9J24043-CALA	100	973691	1.528	10.73
9J24043-CALB	200	1980670	1.496	10.73

AVE RF **1.373** RF RSD **9.37** AVE RT **10.73**

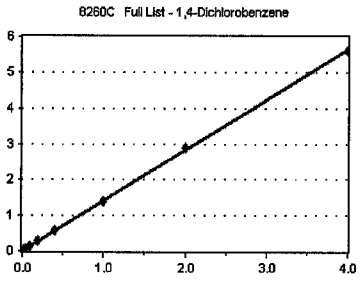
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

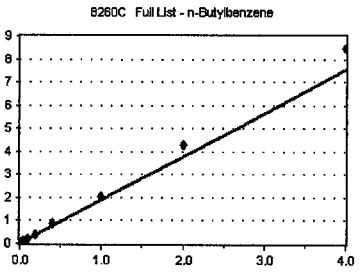


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	311	1.113	0.00
9J24043-CAL2	0.2	725	1.342	11.86
9J24043-CAL3	0.4	1564	1.454	11.86
9J24043-CAL4	1	4177	1.451	11.86
9J24043-CAL5	2	8550	1.531	11.86
9J24043-CAL6	5	20421	1.440	11.86
9J24043-CAL7	10	42771	1.433	11.86
9J24043-CAL8	20	89594	1.478	11.86
9J24043-CAL9	50	222386	1.406	11.86
9J24043-CALA	100	468883	1.436	11.86
9J24043-CALB	200	949679	1.402	11.86

AVE RF **1.408** RF RSD **7.70** AVE RT **10.78**

n-Butylbenzene

Curve Fit: **AVERAGE RF**

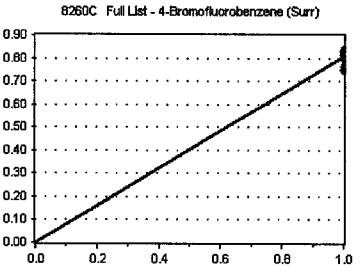


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	379	1.357	0.00
9J24043-CAL2	0.2	805	1.491	12.05
9J24043-CAL3	0.4	1867	1.735	12.05
9J24043-CAL4	1	4997	1.735	12.05
9J24043-CAL5	2	10626	1.903	12.05
9J24043-CAL6	5	28526	2.011	12.05
9J24043-CAL7	10	59515	1.994	12.05
9J24043-CAL8	20	130970	2.160	12.05
9J24043-CAL9	50	325681	2.060	12.05
9J24043-CALA	100	694929	2.129	12.05
9J24043-CALB	200	1435776	2.119	12.05

AVE RF **1.881** RF RSD **14.34** AVE RT **10.95**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

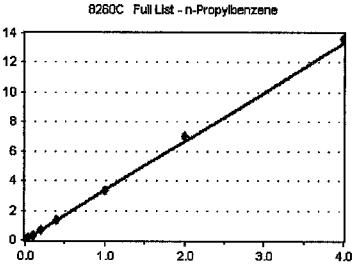


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116090	0.831	10.97
9J24043-CAL2	50	113180	0.838	10.97
9J24043-CAL3	50	112304	0.835	10.97
9J24043-CAL4	50	118563	0.823	10.97
9J24043-CAL5	50	115163	0.825	10.97
9J24043-CAL6	50	115652	0.815	10.97
9J24043-CAL7	50	121121	0.812	10.97
9J24043-CAL8	50	120976	0.798	10.97
9J24043-CAL9	50	125801	0.796	10.97
9J24043-CALA	50	124392	0.762	10.97
9J24043-CALB	50	127221	0.751	10.97

AVE RF **0.808** RF RSD **3.58** AVE RT **10.97**

n-Propylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	873	3.125	11.08
9J24043-CAL2	0.2	1649	3.053	11.08
9J24043-CAL3	0.4	3544	3.294	11.08
9J24043-CAL4	1	9160	3.181	11.08
9J24043-CAL5	2	19292	3.455	11.08
9J24043-CAL6	5	48000	3.384	11.07
9J24043-CAL7	10	99009	3.318	11.07
9J24043-CAL8	20	210703	3.475	11.07
9J24043-CAL9	50	530991	3.358	11.07
9J24043-CALA	100	1142995	3.501	11.07
9J24043-CALB	200	2308779	3.408	11.07

AVE RF **3.323** RF RSD **4.44** AVE RT **11.07**

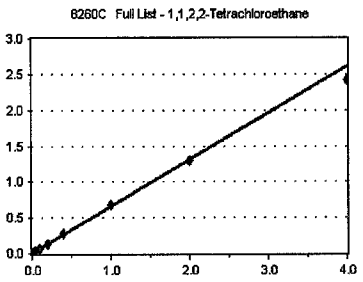
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,1,2,2-Tetrachloroethane

Curve Fit: **AVERAGE RF**

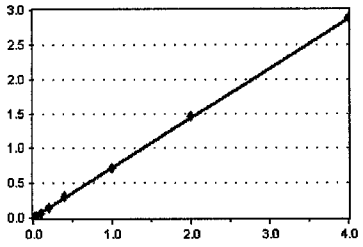


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	305	0.565	11.14
9J24043-CAL3	0.4	671	0.624	11.14
9J24043-CAL4	1	1876	0.651	11.14
9J24043-CAL5	2	4008	0.718	11.14
9J24043-CAL6	5	9843	0.694	11.14
9J24043-CAL7	10	20098	0.673	11.14
9J24043-CAL8	20	41819	0.690	11.14
9J24043-CAL9	50	106506	0.674	11.14
9J24043-CALA	100	212550	0.651	11.14
9J24043-CALB	200	408430	0.603	11.14

AVE RF **0.654** RF RSD **7.07** AVE RT **11.14**

2-Chlorotoluene

Curve Fit: **AVERAGE RF**

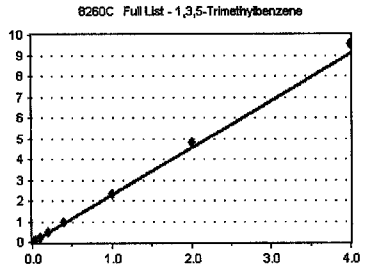


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	719	0.668	11.21
9J24043-CAL4	1	1910	0.663	11.21
9J24043-CAL5	2	4172	0.747	11.21
9J24043-CAL6	5	10150	0.716	11.21
9J24043-CAL7	10	21625	0.725	11.21
9J24043-CAL8	20	45664	0.753	11.21
9J24043-CAL9	50	113724	0.719	11.21
9J24043-CALA	100	238214	0.730	11.21
9J24043-CALB	200	490093	0.723	11.21

AVE RF **0.716** RF RSD **4.34** AVE RT **11.21**

1,3,5-Trimethylbenzene

Curve Fit: **AVERAGE RF**

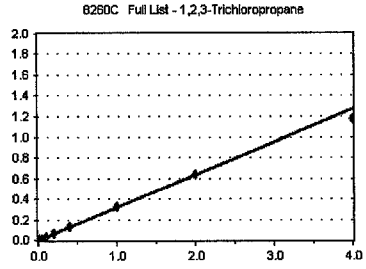


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	556	1.990	11.23
9J24043-CAL2	0.2	1127	2.087	11.23
9J24043-CAL3	0.4	2289	2.127	11.23
9J24043-CAL4	1	6197	2.152	11.23
9J24043-CAL5	2	13089	2.344	11.23
9J24043-CAL6	5	33314	2.349	11.23
9J24043-CAL7	10	69892	2.342	11.23
9J24043-CAL8	20	148694	2.452	11.23
9J24043-CAL9	50	370702	2.344	11.23
9J24043-CALA	100	783721	2.400	11.23
9J24043-CALB	200	1618836	2.390	11.23

AVE RF **2.271** RF RSD **6.72** AVE RT **11.23**

1,2,3-Trichloropropane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	271	0.252	11.25
9J24043-CAL4	1	887	0.308	11.25
9J24043-CAL5	2	1935	0.347	11.25
9J24043-CAL6	5	4862	0.343	11.25
9J24043-CAL7	10	10162	0.341	11.25
9J24043-CAL8	20	20199	0.333	11.25
9J24043-CAL9	50	51746	0.327	11.25
9J24043-CALA	100	103994	0.319	11.25
9J24043-CALB	200	199656	0.295	11.25

AVE RF **0.318** RF RSD **9.47** AVE RT **11.25**

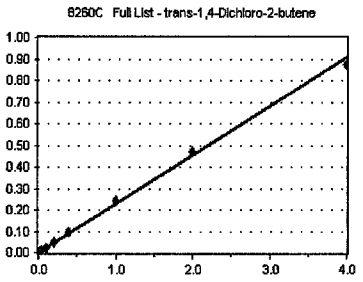
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

trans-1,4-Dichloro-2-butene

Curve Fit: **AVERAGE RF**

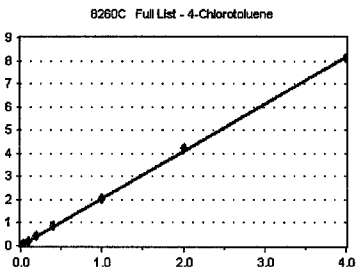


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	531	0.184	11.29
9J24043-CAL5	2	1313	0.235	11.28
9J24043-CAL6	5	3293	0.232	11.28
9J24043-CAL7	10	6985	0.234	11.28
9J24043-CAL8	20	14515	0.239	11.28
9J24043-CAL9	50	38431	0.243	11.28
9J24043-CALA	100	76466	0.234	11.28
9J24043-CALB	200	148266	0.219	11.28

AVE RF **0.228** RF RSD **8.27** AVE RT **11.28**

4-Chlorotoluene

Curve Fit: **AVERAGE RF**

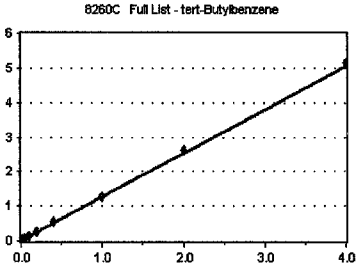


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	1020	1.889	11.34
9J24043-CAL3	0.4	2178	2.024	11.34
9J24043-CAL4	1	5461	1.896	11.34
9J24043-CAL5	2	11718	2.099	11.34
9J24043-CAL6	5	30239	2.132	11.34
9J24043-CAL7	10	61742	2.069	11.34
9J24043-CAL8	20	129933	2.143	11.34
9J24043-CAL9	50	325043	2.056	11.33
9J24043-CALA	100	688819	2.110	11.34
9J24043-CALB	200	1379272	2.036	11.34

AVE RF **2.045** RF RSD **4.37** AVE RT **11.34**

tert-Butylbenzene

Curve Fit: **AVERAGE RF**

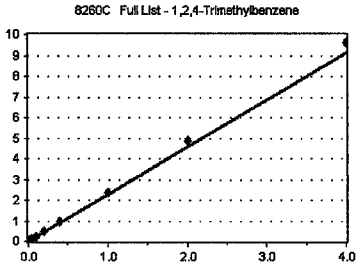


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	602	1.115	11.49
9J24043-CAL3	0.4	1248	1.160	11.49
9J24043-CAL4	1	3551	1.233	11.49
9J24043-CAL5	2	7395	1.324	11.49
9J24043-CAL6	5	18808	1.326	11.48
9J24043-CAL7	10	38411	1.287	11.48
9J24043-CAL8	20	81742	1.348	11.48
9J24043-CAL9	50	202040	1.278	11.48
9J24043-CALA	100	431117	1.320	11.48
9J24043-CALB	200	872573	1.288	11.48

AVE RF **1.268** RF RSD **6.05** AVE RT **11.48**

1,2,4-Trimethylbenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	536	1.919	11.54
9J24043-CAL2	0.2	1066	1.974	11.54
9J24043-CAL3	0.4	2387	2.218	11.54
9J24043-CAL4	1	6319	2.194	11.53
9J24043-CAL5	2	12974	2.324	11.53
9J24043-CAL6	5	34216	2.412	11.54
9J24043-CAL7	10	70882	2.375	11.53
9J24043-CAL8	20	151018	2.491	11.53
9J24043-CAL9	50	374779	2.370	11.53
9J24043-CALA	100	798406	2.445	11.53
9J24043-CALB	200	1629601	2.405	11.53

AVE RF **2.284** RF RSD **8.30** AVE RT **11.54**

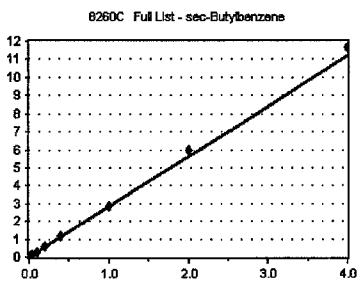
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

sec-Butylbenzene

Curve Fit: **AVERAGE RF**

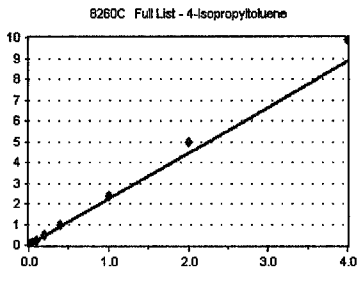


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	1301	2.409	11.62
9J24043-CAL3	0.4	2990	2.779	11.62
9J24043-CAL4	1	7450	2.587	11.62
9J24043-CAL5	2	15756	2.822	11.62
9J24043-CAL6	5	40240	2.837	11.62
9J24043-CAL7	10	83977	2.814	11.62
9J24043-CAL8	20	180894	2.983	11.62
9J24043-CAL9	50	451933	2.858	11.62
9J24043-CALA	100	969880	2.971	11.62
9J24043-CALB	200	1977513	2.919	11.62

AVE RF **2.798** RF RSD **6.31** AVE RT **11.62**

4-Isopropyltoluene

Curve Fit: **AVERAGE RF**

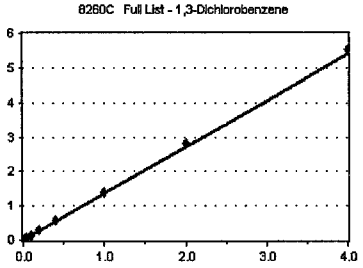


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	481	1.722	11.73
9J24043-CAL2	0.2	919	1.702	11.72
9J24043-CAL3	0.4	2236	2.078	11.73
9J24043-CAL4	1	6086	2.114	11.73
9J24043-CAL5	2	12523	2.243	11.73
9J24043-CAL6	5	33176	2.339	11.73
9J24043-CAL7	10	68628	2.300	11.73
9J24043-CAL8	20	151382	2.497	11.73
9J24043-CAL9	50	378247	2.392	11.73
9J24043-CALA	100	812481	2.489	11.73
9J24043-CALB	200	1677679	2.476	11.73

AVE RF **2.214** RF RSD **12.88** AVE RT **11.73**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

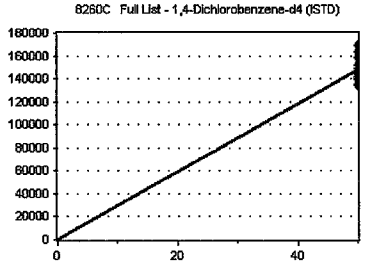


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	629	1.165	11.80
9J24043-CAL3	0.4	1412	1.312	11.80
9J24043-CAL4	1	3650	1.268	11.80
9J24043-CAL5	2	7718	1.382	11.80
9J24043-CAL6	5	19712	1.390	11.80
9J24043-CAL7	10	41299	1.384	11.80
9J24043-CAL8	20	86247	1.422	11.80
9J24043-CAL9	50	218694	1.383	11.80
9J24043-CALA	100	461068	1.412	11.80
9J24043-CALB	200	936572	1.382	11.80

AVE RF **1.350** RF RSD **5.93** AVE RT **11.80**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	139681	2793.620	11.85
9J24043-CAL2	50	135021	2700.420	11.85
9J24043-CAL3	50	134501	2690.020	11.85
9J24043-CAL4	50	143979	2879.580	11.85
9J24043-CAL5	50	139582	2791.640	11.85
9J24043-CAL6	50	141843	2836.860	11.85
9J24043-CAL7	50	149215	2984.300	11.85
9J24043-CAL8	50	151591	3031.820	11.85
9J24043-CAL9	50	158122	3162.440	11.85
9J24043-CALA	50	163243	3264.860	11.85
9J24043-CALB	50	169365	3387.300	11.85

AVE RF **2956.624** RF RSD **7.86** AVE RT **11.85**

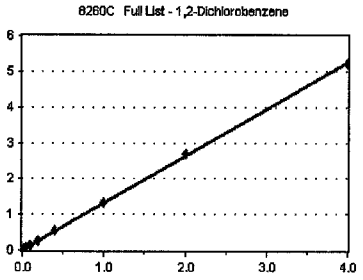
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

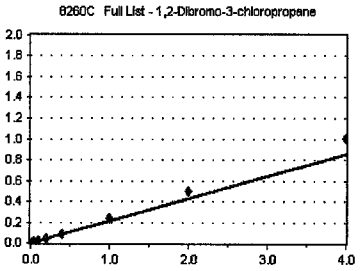


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	624	1.155	12.19
9J24043-CAL3	0.4	1284	1.193	12.19
9J24043-CAL4	1	3650	1.268	12.19
9J24043-CAL5	2	7854	1.407	12.19
9J24043-CAL6	5	19460	1.372	12.19
9J24043-CAL7	10	40125	1.345	12.18
9J24043-CAL8	20	83871	1.383	12.19
9J24043-CAL9	50	211431	1.337	12.18
9J24043-CALA	100	439251	1.345	12.19
9J24043-CALB	200	884385	1.305	12.19

AVE RF **1.311** RF RSD **6.28** AVE RT **12.18**

1,2-Dibromo-3-chloropropane

Curve Fit: **AVERAGE RF**

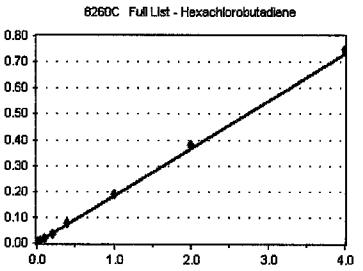


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	1	447	0.155	12.80
9J24043-CAL5	2	1006	0.180	12.80
9J24043-CAL6	5	2728	0.192	12.80
9J24043-CAL7	10	6234	0.209	12.80
9J24043-CAL8	20	13740	0.227	12.80
9J24043-CAL9	50	38435	0.243	12.80
9J24043-CALA	100	81625	0.250	12.80
9J24043-CALB	200	169849	0.251	12.80

AVE RF **0.213** RF RSD **16.56** 12.84 AVE RT **12.80**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

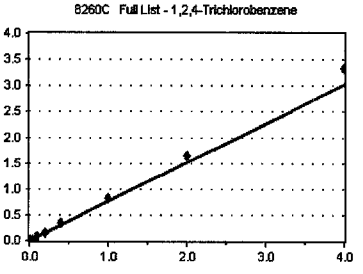


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	443	0.154	13.31
9J24043-CAL5	2	963	0.172	13.30
9J24043-CAL6	5	2715	0.191	13.30
9J24043-CAL7	10	5468	0.183	13.30
9J24043-CAL8	20	12054	0.199	13.30
9J24043-CAL9	50	29829	0.189	13.30
9J24043-CALA	100	62008	0.190	13.30
9J24043-CALB	200	126838	0.187	13.30

AVE RF **0.183** RF RSD **7.66** AVE RT **13.30**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~244~~	~~0.452~~	~~13.35~~
9J24043-CAL3	0.4	615	0.572	13.35
9J24043-CAL4	1	1833	0.637	13.35
9J24043-CAL5	2	4043	0.724	13.34
9J24043-CAL6	5	11114	0.784	13.35
9J24043-CAL7	10	23133	0.775	13.35
9J24043-CAL8	20	50962	0.840	13.35
9J24043-CAL9	50	128379	0.812	13.34
9J24043-CALA	100	268764	0.823	13.35
9J24043-CALB	200	564943	0.834	13.35

AVE RF **0.756** RF RSD **12.49** AVE RT **13.35**

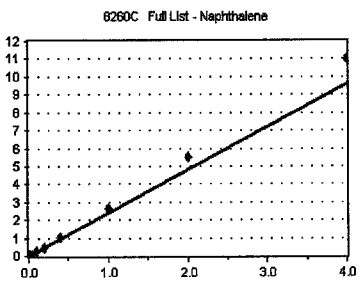
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Full List** Instrument Cal ID: **VI191025W.M VI191025G.M**

Naphthalene

Curve Fit: **AVERAGE RF**

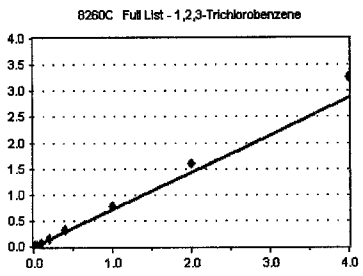


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~924~~	~~1.711~~	~~13.63~~
9J24043-CAL3	0.4	2009	1.867	13.63
9J24043-CAL4	1	5345	1.856	13.63
9J24043-CAL5	2	12724	2.279	13.63
9J24043-CAL6	5	32892	2.319	13.63
9J24043-CAL7	10	72324	2.423	13.63
9J24043-CAL8	20	161860	2.669	13.63
9J24043-CAL9	50	425207	2.689	13.63
9J24043-CALA	100	899370	2.755	13.63
9J24043-CALB	200	1872418	2.764	13.63

AVE RF **2.402** RF RSD **14.83** AVE RT **13.63**

1,2,3-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	261	0.483	13.79
9J24043-CAL3	0.4	687	0.638	13.78
9J24043-CAL4	1	1879	0.653	13.79
9J24043-CAL5	2	4073	0.729	13.79
9J24043-CAL6	5	10402	0.733	13.79
9J24043-CAL7	10	22293	0.747	13.79
9J24043-CAL8	20	48345	0.797	13.79
9J24043-CAL9	50	123175	0.779	13.79
9J24043-CALA	100	260549	0.798	13.79
9J24043-CALB	200	552458	0.815	13.79

AVE RF **0.717** RF RSD **14.16** AVE RT **13.79**

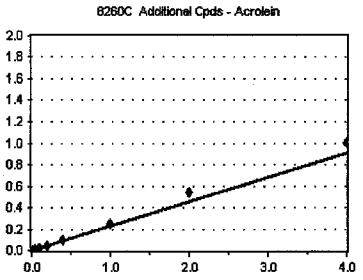
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Additional Cpds** Instrument Cal ID: **VI191025W.M VI191025G.M**

Acrolein

Curve Fit: **AVERAGE RF**

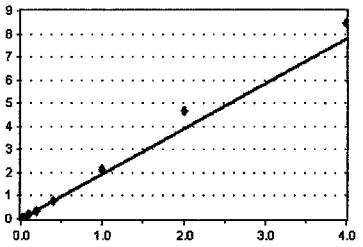


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	420	0.181	3.63
9J24043-CAL5	2	927	0.209	3.63
9J24043-CAL6	5	2465	0.222	3.62
9J24043-CAL7	10	4855	0.206	3.62
9J24043-CAL8	20	10458	0.233	3.61
9J24043-CAL9	50	28604	0.247	3.61
9J24043-CALA	100	60054	0.268	3.63
9J24043-CALB	200	116360	0.251	3.62

AVE RF **0.227** RF RSD **12.43** AVE RT **3.62**

Vinyl acetate

Curve Fit: **AVERAGE RF**

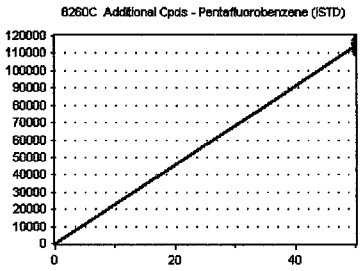


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	3620	1.560	4.96
9J24043-CAL5	2	7854	1.772	4.96
9J24043-CAL6	5	20467	1.844	4.96
9J24043-CAL7	10	42656	1.813	4.96
9J24043-CAL8	20	90141	2.005	4.95
9J24043-CAL9	50	246127	2.128	4.95
9J24043-CALA	100	522592	2.333	4.96
9J24043-CALB	200	980632	2.113	4.96

AVE RF **1.946** RF RSD **12.62** AVE RT **4.96**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

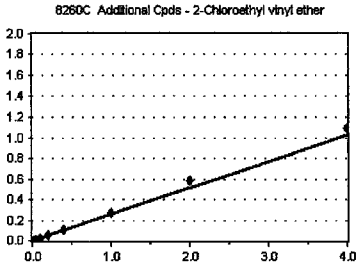


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	6.22
9J24043-CAL8	50	112406	2248.120	6.21
9J24043-CAL9	50	115635	2312.700	6.21
9J24043-CALA	50	111989	2239.780	6.22
9J24043-CALB	50	116034	2320.680	6.22

AVE RF **2280.709** RF RSD **2.13** AVE RT **6.21**

2-Chloroethyl vinyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~369~~	~~0.152~~	~~8.04~~
9J24043-CAL4	1	1378	0.222	8.03
9J24043-CAL5	2	2589	0.217	8.03
9J24043-CAL6	5	7592	0.253	8.02
9J24043-CAL7	10	15685	0.251	8.02
9J24043-CAL8	20	33274	0.271	8.02
9J24043-CAL9	50	88331	0.275	8.02
9J24043-CALA	100	185987	0.292	8.02
9J24043-CALB	200	361318	0.273	8.02

AVE RF **0.257** RF RSD **10.27** AVE RT **8.02**

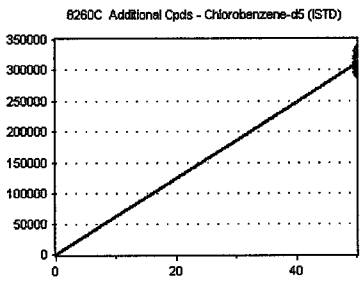
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Additional Cpds** Instrument Cal ID: **VI191025W.M VI191025G.M**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	307577	6151.540	9.91
9J24043-CAL2	50	302974	6059.480	9.92
9J24043-CAL3	50	294372	5887.440	9.91
9J24043-CAL4	50	310797	6215.940	9.91
9J24043-CAL5	50	297754	5955.080	9.92
9J24043-CAL6	50	300317	6006.340	9.91
9J24043-CAL7	50	312833	6256.660	9.91
9J24043-CAL8	50	307093	6141.860	9.91
9J24043-CAL9	50	321159	6423.180	9.91
9J24043-CALA	50	318635	6372.700	9.91
9J24043-CALB	50	330915	6618.300	9.92

AVE RF **6189.865** RF RSD **3.53** AVE RT **9.91**

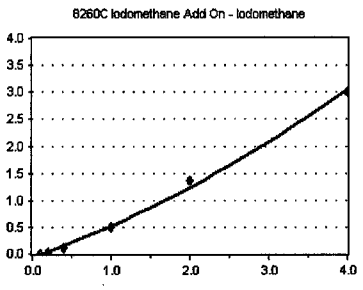
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Iodomethane Add On** Instrument Cal ID: **VI191025W.M VI191025G.M**

Iodomethane

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

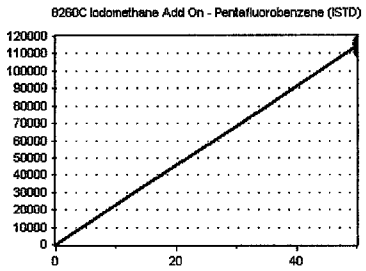


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL5~~	~~2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL6	5	916	8.252	3.38
9J24043-CAL7	10	3125	0.133	3.39
9J24043-CAL8	20	11472	0.255	3.38
9J24043-CAL9	50	57651	0.499	3.38
9J24043-CALA	100	153366	0.685	3.39
9J24043-CALB	200	348091	0.750	3.39

AVE RF **0.401** RF RSD **71.16** AVE RT **3.39**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	6.22
9J24043-CAL8	50	112406	2248.120	6.21
9J24043-CAL9	50	115635	2312.700	6.21
9J24043-CALA	50	111989	2239.780	6.22
9J24043-CALB	50	116034	2320.680	6.22

AVE RF **2280.709** RF RSD **2.13** AVE RT **6.21**

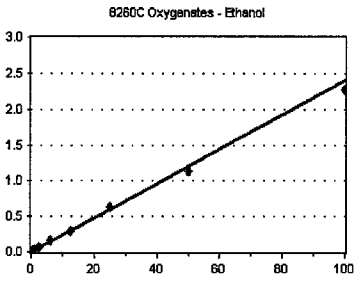
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VI191025W.M VI191025G.M**

Ethanol

Curve Fit: **AVERAGE RF**

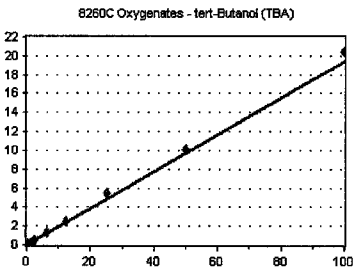


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	25	1315	2.349	3.23
9J24043-CAL4	62.5	3446	2.376	3.24
9J24043-CAL5	125	7229	2.610	3.24
9J24043-CAL6	312	17243	2.489	3.23
9J24043-CAL7	625	34617	2.355	3.24
9J24043-CAL8	1250	70360	2.504	3.23
9J24043-CAL9	2500	131053	2.267	3.23
9J24043-CALA	5000	254643	2.274	3.24

AVE RF **2.403** RF RSD **5.02** AVE RT **3.23**

tert-Butanol (TBA)

Curve Fit: **AVERAGE RF**

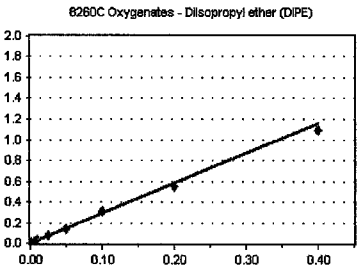


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	6.25	2472	0.170	4.30
9J24043-CAL2	12.5	4690	0.163	4.30
9J24043-CAL3	25	10086	0.180	4.29
9J24043-CAL4	62.5	25977	0.179	4.30
9J24043-CAL5	125	58093	0.210	4.30
9J24043-CAL6	312	143817	0.208	4.29
9J24043-CAL7	625	292252	0.199	4.29
9J24043-CAL8	1250	614954	0.219	4.29
9J24043-CAL9	2500	1172838	0.203	4.29
9J24043-CALA	5000	2295578	0.205	4.29

AVE RF **0.194** RF RSD **9.71** AVE RT **4.29**

Diisopropyl ether (DIPE)

Curve Fit: **AVERAGE RF**

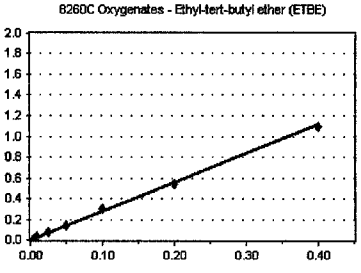


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.1	638	2.849	4.56
9J24043-CAL4	0.25	1604	2.764	4.56
9J24043-CAL5	0.5	3305	2.983	4.57
9J24043-CAL6	1.25	8576	3.090	4.57
9J24043-CAL7	2.5	17135	2.914	4.57
9J24043-CAL8	5	34871	3.102	4.56
9J24043-CAL9	10	63994	2.767	4.56
9J24043-CALA	20	122827	2.742	4.57

AVE RF **2.901** RF RSD **5.01** AVE RT **4.57**

Ethyl-tert-butyl ether (ETBE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	0.25	1449	2.497	4.94
9J24043-CAL5	0.5	3145	2.839	4.94
9J24043-CAL6	1.25	8071	2.908	4.94
9J24043-CAL7	2.5	16756	2.849	4.94
9J24043-CAL8	5	33471	2.978	4.94
9J24043-CAL9	10	63126	2.730	4.94
9J24043-CALA	20	121788	2.719	4.94

AVE RF **2.789** RF RSD **5.66** AVE RT **4.94**

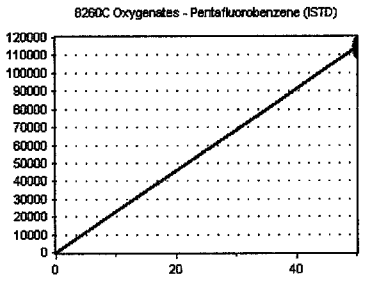
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VI191025W.M VI191025G.M**

Pentafluorobenzene (ISTD)

Curve Fit: **AVERAGE RF**

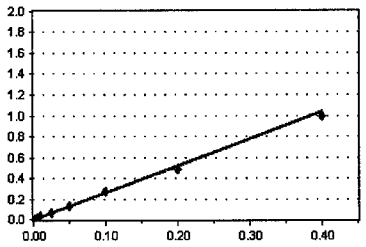


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	6.22
9J24043-CAL8	50	112406	2248.120	6.21
9J24043-CAL9	50	115635	2312.700	6.21
9J24043-CALA	50	111989	2239.780	6.22
9J24043-CALB	50	116034	2320.680	6.22

AVE RF **2280.709** RF RSD **2.13** AVE RT **6.21**

tert-Amyl methyl ether (TAME)

Curve Fit: **AVERAGE RF**

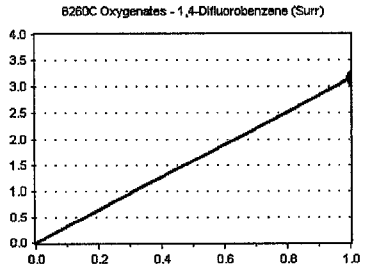


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.1	580	2.590	6.25
9J24043-CAL4	0.25	1462	2.520	6.25
9J24043-CAL5	0.5	2996	2.704	6.25
9J24043-CAL6	1.25	7445	2.683	6.25
9J24043-CAL7	2.5	15349	2.610	6.25
9J24043-CAL8	5	30296	2.695	6.25
9J24043-CAL9	10	56793	2.456	6.24
9J24043-CALA	20	111127	2.481	6.25

AVE RF **2.592** RF RSD **3.80** AVE RT **6.25**

1,4-Difluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

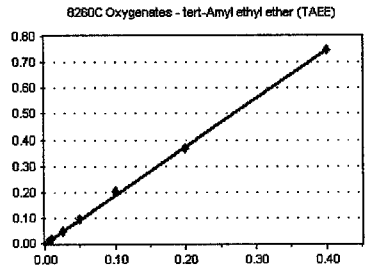


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	364447	3.139	6.78
9J24043-CAL2	50	359462	3.132	6.78
9J24043-CAL3	50	352302	3.146	6.78
9J24043-CAL4	50	366642	3.160	6.78
9J24043-CAL5	50	347212	3.134	6.78
9J24043-CAL6	50	353918	3.188	6.78
9J24043-CAL7	50	367409	3.124	6.78
9J24043-CAL8	50	354922	3.158	6.78
9J24043-CAL9	50	370144	3.201	6.78
9J24043-CALA	50	356857	3.187	6.78
9J24043-CALB	50	369003	3.180	6.78

AVE RF **3.159** RF RSD **0.84** AVE RT **6.78**

tert-Amyl ethyl ether (TAEE)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	0.25	950	1.637	7.00
9J24043-CAL5	0.5	2147	1.938	7.00
9J24043-CAL6	1.25	5331	1.921	7.00
9J24043-CAL7	2.5	11032	1.876	7.00
9J24043-CAL8	5	22696	2.019	7.00
9J24043-CAL9	10	42660	1.845	7.00
9J24043-CALA	20	83591	1.866	7.00

AVE RF **1.872** RF RSD **6.33** AVE RT **7.00**

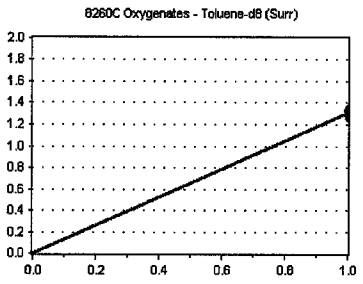
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8260C Oxygenates** Instrument Cal ID: **VI191025W.M VI191025G.M**

Toluene-d8 (Surr)

Curve Fit: **AVERAGE RF**

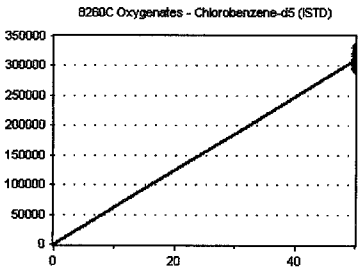


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	406288	1.321	8.30
9J24043-CAL2	50	403793	1.333	8.30
9J24043-CAL3	50	396027	1.345	8.30
9J24043-CAL4	50	410518	1.321	8.30
9J24043-CAL5	50	395017	1.327	8.30
9J24043-CAL6	50	397005	1.322	8.30
9J24043-CAL7	50	415174	1.327	8.30
9J24043-CAL8	50	399810	1.302	8.30
9J24043-CAL9	50	415062	1.292	8.30
9J24043-CALA	50	405945	1.274	8.30
9J24043-CALB	50	420947	1.272	8.30

AVE RF **1.312** RF RSD **1.83** AVE RT **8.30**

Chlorobenzene-d5 (ISTD)

Curve Fit: **AVERAGE RF**

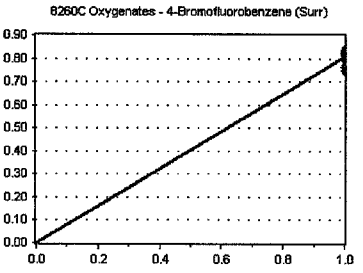


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	307577	6151.540	9.91
9J24043-CAL2	50	302974	6059.480	9.92
9J24043-CAL3	50	294372	5887.440	9.91
9J24043-CAL4	50	310797	6215.940	9.91
9J24043-CAL5	50	297754	5955.080	9.92
9J24043-CAL6	50	300317	6006.340	9.91
9J24043-CAL7	50	312833	6256.660	9.91
9J24043-CAL8	50	307093	6141.860	9.91
9J24043-CAL9	50	321159	6423.180	9.91
9J24043-CALA	50	318635	6372.700	9.91
9J24043-CALB	50	330915	6618.300	9.92

AVE RF **6189.865** RF RSD **3.53** AVE RT **9.91**

4-Bromofluorobenzene (Surr)

Curve Fit: **AVERAGE RF**

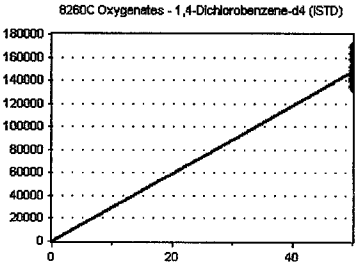


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116090	0.831	10.97
9J24043-CAL2	50	113180	0.838	10.97
9J24043-CAL3	50	112304	0.835	10.97
9J24043-CAL4	50	118563	0.823	10.97
9J24043-CAL5	50	115163	0.825	10.97
9J24043-CAL6	50	115652	0.815	10.97
9J24043-CAL7	50	121121	0.812	10.97
9J24043-CAL8	50	120976	0.798	10.97
9J24043-CAL9	50	125801	0.796	10.97
9J24043-CALA	50	124392	0.762	10.97
9J24043-CALB	50	127221	0.751	10.97

AVE RF **0.808** RF RSD **3.58** AVE RT **10.97**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	139681	2793.620	11.85
9J24043-CAL2	50	135021	2700.420	11.85
9J24043-CAL3	50	134501	2690.020	11.85
9J24043-CAL4	50	143979	2879.580	11.85
9J24043-CAL5	50	139582	2791.640	11.85
9J24043-CAL6	50	141843	2836.860	11.85
9J24043-CAL7	50	149215	2984.300	11.85
9J24043-CAL8	50	151591	3031.820	11.85
9J24043-CAL9	50	158122	3162.440	11.85
9J24043-CALA	50	163243	3264.860	11.85
9J24043-CALB	50	169365	3387.300	11.85

AVE RF **2956.624** RF RSD **7.86** AVE RT **11.85**

Response Factor Report VOA-GCMS9

Method Path : C:\msdchem\1\methods\
Method File : VI191025W.M
Title : EPA 8260: Volatile Organic Compounds
Last Update : Fri Oct 25 08:32:21 2019
Response Via : Initial Calibration

Calibration Files
0.1 =VI19102417.D 0.2 =VI19102418.D 0.5 =VI19102419.D 1 =VI19102420.D 2 =VI19102421.D 5 =VI19102422.D
10 =VI19102423.D 20 =VI19102424.D 50 =VI19102425.D 100 =VI19102427.D 200 =VI19102429.D

		Compound	0.1	0.2	0.5	1	2	5	10	20	50	100	200	Avg	%RSD
1)	I	Pentafluorobenzene...	----------				ISTD								
2)		Dichlorodifluo...			0.627	0.682	0.842	0.812	0.770	0.800	0.946	0.947	0.929	0.817	13.92
3)	P	Chloromethane		1.457	1.268	1.037	1.070	1.024	0.954	1.002	1.029	1.012	0.984	1.084	14.45
4)	C	Vinyl Chloride		0.884	1.079	1.013	1.135	1.140	1.069	1.110	1.150	1.154	1.123	1.086	7.67
5)		Bromomethane				0.760	0.709	0.701	0.624	0.614	0.579	0.559	0.576	0.640	11.51
6)		Chloroethane					0.573	0.531	0.502	0.442	0.447			0.499	11.23
7)		Trichlorofluor...			1.069	1.200	1.279	1.282	1.235	1.294	1.259	1.250	1.199	1.230	5.62
8)		Ethanol			0.023	0.024	0.026	0.025	0.024	0.025	0.023	0.023		0.024	5.02
9)	C	1,1-Dichloroet...			1.159	1.067	1.188	1.200	1.158	1.203	1.192	1.279	1.222	1.185	4.83
10)		Carbon Disulfide				1.970	2.202	2.167	2.084	2.200	2.200	2.374	2.300	2.187	5.64
11)		Freon 113				0.740	0.858	0.860	0.834	0.883	0.846	0.912	0.886	0.852	6.07
12)		Iodomethane						0.083	0.133	0.255	0.499	0.685	0.750	0.401	71.16
13)		Acrolein				0.181	0.209	0.222	0.206	0.233	0.247	0.268	0.251	0.227	12.43
14)		Methylene Chlo...	8.716	4.794	2.954	1.697	1.388	1.130	0.965	0.970	0.887	0.934	0.904	2.304	106.11
15)		Acetone					0.510	0.466	0.421	0.438	0.406	0.421	0.404	0.438	8.73
16)		t-1,2-Dichloro...		0.784	1.075	1.145	1.242	1.233	1.164	1.247	1.188	1.276	1.248	1.160	12.54
17)		n-Hexane				0.154	0.160	0.165	0.172	0.185	0.183	0.196	0.198	0.177	9.35
18)		Methyl-tert-bu...			2.577	2.494	2.698	2.694	2.617	2.750	2.707	2.888	2.841	2.696	4.58
19)		tert-Butanol ...	0.170	0.163	0.180	0.179	0.210	0.208	0.199	0.219	0.203	0.205		0.194	9.71
20)		Diisopropyl et...			2.849	2.764	2.983	3.090	2.914	3.102	2.767	2.742		2.901	5.01
21)	P	1,1-Dichloroet...			1.477	1.582	1.631	1.649	1.573	1.671	1.582	1.696	1.641	1.611	4.09
22)		Acrylonitrile				0.377	0.440	0.489	0.484	0.511	0.507	0.547	0.524	0.485	11.08
23)		Ethyl-tert-but...				2.497	2.839	2.908	2.849	2.978	2.730	2.719		2.789	5.66
24)		Vinyl Acetate				1.560	1.772	1.844	1.813	2.005	2.128	2.333	2.113	1.946	12.62
25)		c-1,2-Dichloro...			1.125	1.182	1.256	1.257	1.221	1.298	1.238	1.328	1.288	1.244	4.98
26)		2,2-Dichloropr...			0.952	0.998	1.078	1.062	1.006	1.073	1.061	1.129	1.104	1.051	5.31
27)		Bromochloromet...			0.436	0.512	0.605	0.646	0.636	0.688	0.671	0.677	0.622	0.610	13.73
28)	C	Chloroform		1.278	1.442	1.440	1.642	1.638	1.607	1.696	1.617	1.719	1.673	1.575	8.98
29)		Carbon Tetrach...				0.772	0.903	0.897	0.886	0.977	0.991	1.106	1.133	0.958	12.52
30)		Tetrahydrofuran				0.407	0.461	0.460	0.441	0.474	0.468	0.500	0.477	0.461	5.94
31)		1,1,1-Trichlor...			1.130	1.251	1.340	1.347	1.284	1.379	1.354	1.453	1.430	1.330	7.37
32)	S	Dibromofluorom...	0.960	0.964	0.965	0.962	0.982	0.984	0.967	0.975	1.010	1.016	1.023	0.982	2.38
33)		1,1-Dichloropr...			1.171	1.184	1.292	1.299	1.245	1.313	1.271	1.376	1.341	1.277	5.30
34)		2-Butanone (MEK)				0.625	0.704	0.704	0.662	0.717	0.701	0.741	0.702	0.695	5.12
35)		Benzene	3.949	3.450	3.774	3.582	4.047	3.910	3.714	3.910	3.758	4.022	3.911	3.821	4.86
36)		tert-Amyl meth...			2.590	2.520	2.704	2.683	2.610	2.695	2.456	2.481		2.592	3.80
37)		1,2-Dichloroet...			1.198	1.130	1.292	1.293	1.230	1.306	1.245	1.313	1.256	1.252	4.76
38)		iso-Butyl Alcohol			0.052	0.054	0.072	0.075	0.067	0.074	0.078	0.080	0.074	0.070	14.51
39)	S	1,4-Difluorobe...	3.139	3.132	3.146	3.160	3.134	3.188	3.124	3.158	3.201	3.187	3.180	3.159	0.84
40)		Trichloroethen...		0.810	0.801	0.933	1.033	1.022	0.997	1.053	1.026	1.095	1.074	0.984	10.55
41)		Tert-Amyl-Ethy...				1.637	1.938	1.921	1.876	2.019	1.845	1.866		1.872	6.33

Method Path : C:\msdchem\1\methods\
Method File : VI191025W.M
Title : EPA 8260: Volatile Organic Compounds

42)		Dibromomethane			0.422	0.554	0.622	0.633	0.620	0.656	0.642	0.692	0.677	0.613	13.36
43)	C	1,2-Dichloropr...			0.890	0.838	0.987	0.982	0.932	0.988	0.944	1.024	0.994	0.953	6.18
44)		Bromodichlorom...			0.893	0.973	1.056	1.083	1.065	1.150	1.155	1.260	1.255	1.099	11.01
45)		Chlorobenzene-d5 (I)	----------ISTD----------												
46)		2-Chloroethyl ...				0.222	0.217	0.253	0.251	0.271	0.275	0.292	0.273	0.257	10.27
47)		c-1,3-Dichloro...			0.431	0.429	0.468	0.474	0.487	0.525	0.520	0.559	0.556	0.494	9.88
48)	S	Toluene-d8 (S)	1.321	1.333	1.345	1.321	1.327	1.322	1.327	1.302	1.292	1.274	1.272	1.312	1.83
49)	C	Toluene	1.590	1.439	1.488	1.454	1.499	1.474	1.445	1.492	1.391	1.462	1.439	1.470	3.41
50)		Tetrachloroeth...		0.220	0.334	0.321	0.364	0.361	0.353	0.370	0.352	0.372	0.375	0.342	13.48
51)		4-Methyl-2-Pen...		0.367	0.406	0.406	0.463	0.469	0.464	0.491	0.474	0.484	0.441	0.446	9.09
52)		t-1,3-Dichloro...				0.341	0.378	0.404	0.420	0.465	0.473	0.513	0.513	0.438	14.34
53)		1,1,2-Trichlor...		0.238	0.304	0.313	0.347	0.344	0.342	0.351	0.335	0.347	0.338	0.326	10.62
54)		Dibromochlorom...			0.214	0.217	0.255	0.267	0.275	0.301	0.315			0.264	14.58
55)		1,3-Dichloropr...		0.469	0.532	0.541	0.578	0.584	0.581	0.600	0.571	0.595	0.571	0.562	6.98
56)		1,2-Dibromoeth...			0.261	0.310	0.378	0.375	0.366	0.381	0.366	0.382	0.375	0.355	11.70
57)		2-Hexanone			0.286	0.284	0.319	0.328	0.335	0.356	0.350	0.358	0.327	0.327	8.41
58)	P	Chlorobenzene	0.780	0.862	0.945	0.928	0.982	0.984	0.965	0.985	0.940	0.981	0.971	0.939	6.80
59)	C	Ethylbenzene	1.531	1.514	1.522	1.409	1.608	1.560	1.535	1.591	1.516	1.594	1.580	1.542	3.61
60)		1,1,1,2-Tetrac...			0.200	0.237	0.251	0.266	0.272	0.296	0.296	0.324	0.323	0.274	14.90
61)		m,p-Xylenes (2)	1.112	1.019	1.103	1.029	1.137	1.146	1.135	1.209	1.150	1.230	1.219	1.135	6.12
62)		o-Xylene	0.951	1.008	1.106	1.067	1.142	1.147	1.141	1.216	1.158	1.233	1.214	1.126	7.83
63)		Styrene			0.703	0.785	0.870	0.890	0.911	0.979	0.956	1.026	1.023	0.905	11.93
64)	P	Bromoform				0.128	0.149	0.156	0.171	0.194	0.221	0.255		0.182	24.41
65)		Isopropylbenzene		1.111	1.302	1.233	1.371	1.392	1.385	1.488	1.427	1.528	1.496	1.373	9.37
66)	I	1,4-Dichlorobenzen...	----------ISTD----------												
67)	S	4-Bromofluorob...	0.831	0.838	0.835	0.823	0.825	0.815	0.812	0.798	0.796	0.762	0.751	0.808	3.58
68)		Bromobenzene	0.444	0.800	0.813	0.771	0.830	0.819	0.812	0.825	0.798	0.813	0.800	0.775	14.32
69)		n-Propylbenzene	3.125	3.053	3.294	3.181	3.455	3.384	3.318	3.475	3.358	3.501	3.408	3.323	4.44
70)	P	1,1,2,2-Tetrac...		0.565	0.624	0.651	0.718	0.694	0.673	0.690	0.674	0.651	0.603	0.654	7.07
71)		2-Chlorotoluene			0.668	0.663	0.747	0.716	0.725	0.753	0.719	0.730	0.723	0.716	4.34
72)		1,3,5-Trimethy...	1.990	2.087	2.127	2.152	2.344	2.349	2.342	2.452	2.344	2.400	2.390	2.271	6.72
73)		1,2,3-Trichlor...			0.252	0.308	0.347	0.343	0.341	0.333	0.327	0.319	0.295	0.318	9.47
74)		t-1,4-Dichloro...				0.184	0.235	0.232	0.234	0.239	0.243	0.234	0.219	0.228	8.27
75)		4-Chlorotoluene		1.889	2.024	1.896	2.099	2.132	2.069	2.143	2.056	2.110	2.036	2.045	4.37
76)		tert-Butylbenzene		1.115	1.160	1.233	1.324	1.326	1.287	1.348	1.278	1.320	1.288	1.268	6.05
77)		1,2,4-Trimethy...	1.919	1.974	2.218	2.194	2.324	2.412	2.375	2.491	2.370	2.445	2.405	2.284	8.30
78)		sec-Butylbenzene		2.409	2.779	2.587	2.822	2.837	2.814	2.983	2.858	2.971	2.919	2.798	6.32
79)		4-Isopropyltol...	1.722	1.702	2.078	2.114	2.243	2.339	2.300	2.497	2.392	2.489	2.476	2.214	12.88
80)		1,3-Dichlorobe...		1.165	1.312	1.268	1.382	1.390	1.384	1.422	1.383	1.412	1.382	1.350	5.93
81)		1,4-Dichlorobe...	1.113	1.342	1.454	1.451	1.531	1.440	1.433	1.478	1.406	1.436	1.402	1.408	7.70
82)		n-Butylbenzene	1.357	1.491	1.735	1.735	1.903	2.011	1.994	2.160	2.060	2.129	2.119	1.881	14.34
83)		1,2-Dichlorobe...		1.155	1.193	1.268	1.407	1.372	1.345	1.383	1.337	1.345	1.305	1.311	6.28
84)		1,2-Dibromo-3-...					0.180	0.192	0.209	0.227	0.243	0.250	0.251	0.222	12.86
85)		Hexachlorobuta...				0.154	0.172	0.191	0.183	0.199	0.189	0.190	0.187	0.183	7.66
86)		1,2,4-Trichlor...			0.572	0.637	0.724	0.784	0.775	0.840	0.812	0.823	0.834	0.756	12.49
87)		Naphthalene			1.867	1.856	2.279	2.319	2.423	2.669	2.689	2.755	2.764	2.402	14.83
88)		1,2,3-Trichlor...		0.483	0.638	0.653	0.729	0.733	0.747	0.797	0.779	0.798	0.815	0.717	14.16

(#) = Out of Range

Compound List Report VOA-GCMS9

Method Path : C:\msdchem\1\methods\
Method File : VI191025W.M
Title : EPA 8260: Volatile Organic Compounds
Last Update : Fri Oct 25 08:32:21 2019
Response Via : Initial Calibration

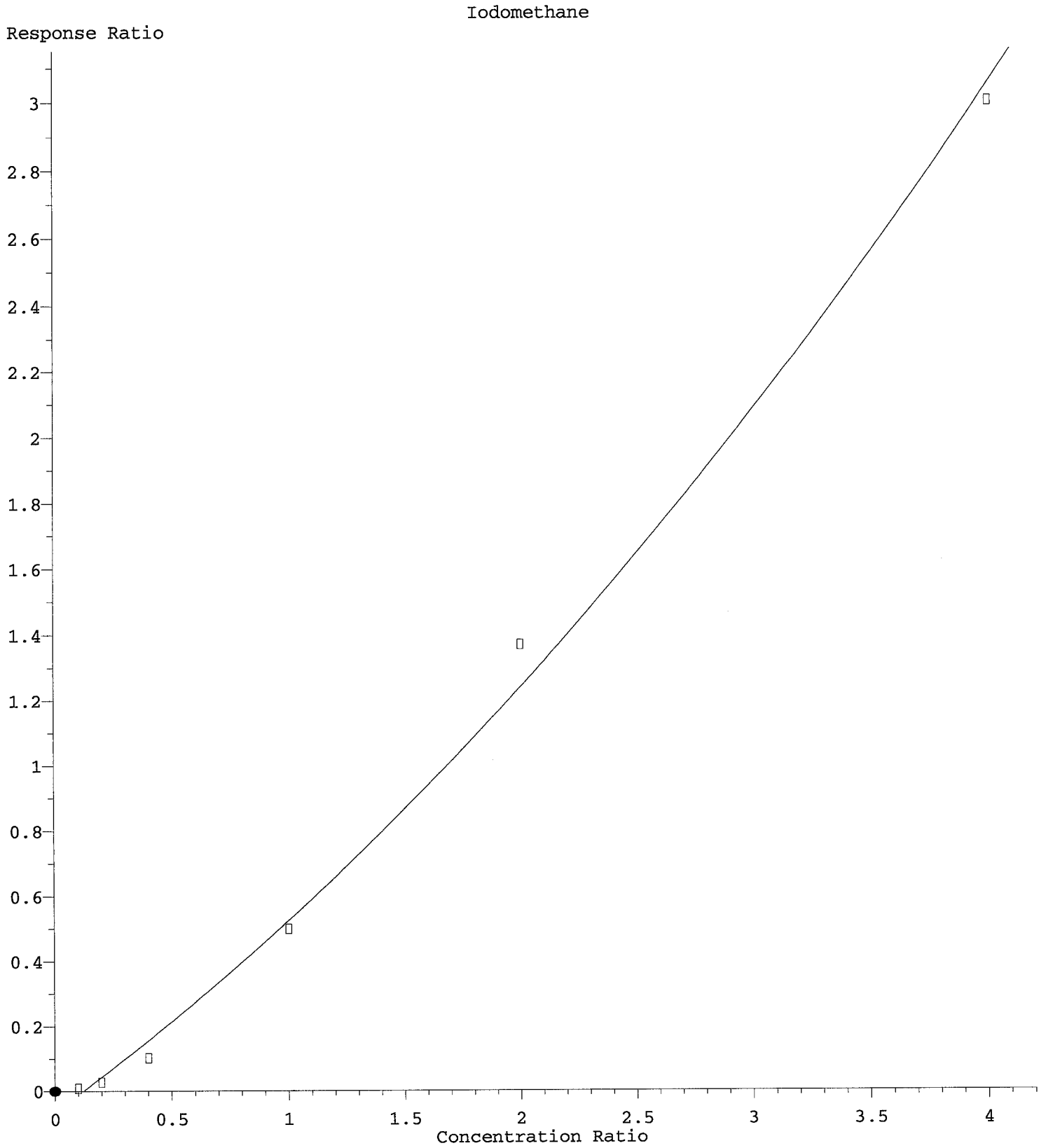
Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (I)	99	6.211	1.000	A	2	A	R
2		Dichlorodifluoromethane	85	1.673	0.269	A	2	A	R
3	P	Chloromethane	50	1.891	0.304	A	2	A	R
4	C	Vinyl Chloride	62	1.995	0.321	A	2	A	R
5		Bromomethane	96	2.353	0.379	A	2	A	R
6		Chloroethane	64	2.487	0.400	A	2	A	R
7		Trichlorofluoromethane	101	2.658	0.428	A	2	A	R
8		Ethanol	45	3.230	0.520	A	1	A	R
9	C	1,1-Dichloroethene	61	3.230	0.520	A	2	A	R
10		Carbon Disulfide	76	3.242	0.522	A	2	A	R
11		Freon 113	101	3.279	0.528	A	2	A	R
12		Iodomethane	142	3.382	0.545	QV	2	A	R
13		Acrolein	56	3.613	0.582	A	2	A	R
14		Methylene Chloride	84	3.868	0.623	QV	2	A	R
15		Acetone	43	3.935	0.634	A	1	A	R
16		t-1,2-Dichloroethene	61	4.033	0.649	A	2	A	R
17		n-Hexane	86	4.118	0.663	A	3	A	R
18		Methyl-tert-butyl-ether	73	4.167	0.671	A	3	A	R
19		tert-Butanol (TBA)	59	4.288	0.690	A	1	A	R
20		Diisopropyl ether (DIPE)	45	4.562	0.735	A	2	A	R
21	P	1,1-Dichloroethane	63	4.678	0.753	A	2	A	R
22		Acrylonitrile	53	4.745	0.764	A	2	A	R
23		Ethyl-tert-butyl ether (ETBE)	59	4.939	0.795	A	2	A	R
24		Vinyl Acetate	43	4.951	0.797	A	2	A	R
25		c-1,2-Dichloroethene	61	5.238	0.843	A	2	A	R
26		2,2-Dichloropropane	77	5.347	0.861	A	2	A	R
27		Bromochloromethane	130	5.444	0.877	A	2	A	R
28	C	Chloroform	83	5.523	0.889	A	2	A	R
29		Carbon Tetrachloride	117	5.657	0.911	A	2	A	R
30		Tetrahydrofuran	42	5.700	0.918	A	2	A	R
31		1,1,1-Trichloroethane	97	5.730	0.923	A	2	A	R
32	S	Dibromofluoromethane (S)	111	5.712	0.920	A	2	A	R
33		1,1-Dichloropropene	75	5.858	0.943	A	2	A	R
34		2-Butanone (MEK)	43	5.852	0.942	A	2	A	R
35		Benzene	78	6.120	0.985	A	2	A	R
36		tert-Amyl methyl ether (TAME)	73	6.247	1.006	A	2	A	R
37		1,2-Dichloroethane (EDC)	62	6.339	1.021	A	2	A	R
38		iso-Butyl Alcohol	43	6.369	1.025	A	2	A	R
39	S	1,4-Difluorobenzene (S)	114	6.777	1.091	A	2	A	R
40		Trichloroethene (TCE)	130	6.740	1.085	A	2	A	R
41		Tert-Amyl-Ethyl-Ether (TAEE)	59	6.996	1.126	A	2	A	R
42		Dibromomethane	93	7.196	1.159	A	2	A	R
43	C	1,2-Dichloropropane	63	7.306	1.176	A	2	A	R
44		Bromodichloromethane	83	7.379	1.188	A	2	A	R
45	I	Chlorobenzene-d5 (I)	117	9.910	1.000	A	2	A	R
46		2-Chloroethyl Vinyl Ether	63	8.017	0.809	A	2	A	R
47		c-1,3-Dichloropropene	75	8.091	0.816	A	2	A	R
48	S	Toluene-d8 (S)	98	8.298	0.837	A	2	A	R
49	C	Toluene	91	8.358	0.843	A	2	A	R
50		Tetrachloroethene (PCE)	166	8.796	0.888	A	2	A	R
51		4-Methyl-2-Pentanone (MIBK)	43	8.796	0.888	A	2	A	R
52		t-1,3-Dichloropropene	75	8.832	0.891	A	2	A	R
53		1,1,2-Trichloroethane	97	9.003	0.909	A	2	A	R
54		Dibromochloromethane	129	9.185	0.927	A	2	A	R
55		1,3-Dichloropropane	76	9.289	0.937	A	2	A	R

56		1,2-Dibromoethane (EDB)	107	9.423	0.951	A	2	A	R
57		2-Hexanone	43	9.654	0.974	A	2	A	R
58	P	Chlorobenzene	112	9.928	1.002	A	2	A	R
59	C	Ethylbenzene	91	9.952	1.004	A	2	A	R
60		1,1,1,2-Tetrachloroethane	131	9.988	1.008	A	2	A	R
61		m,p-Xylenes (2)	91	10.086	1.018	A	2	A	R
62		o-Xylene	91	10.463	1.056	A	2	A	R
63		Styrene	104	10.512	1.061	A	2	A	R
64	P	Bromoform	173	10.536	1.063	Q	2	A	R
65		Isopropylbenzene	105	10.731	1.083	A	2	A	R
66	I	1,4-Dichlorobenzene-d4 (I)	152	11.850	1.000	A	2	A	R
67	S	4-Bromofluorobenzene (S)	174	10.974	0.926	A	2	A	R
68		Bromobenzene	156	11.060	0.933	A	2	A	R
69		n-Propylbenzene	91	11.072	0.934	A	2	A	R
70	P	1,1,2,2-Tetrachloroethane	85	11.139	0.940	A	2	A	R
71		2-Chlorotoluene	126	11.206	0.946	A	2	A	R
72		1,3,5-Trimethylbenzene	105	11.229	0.948	A	2	A	R
73		1,2,3-Trichloropropane	110	11.248	0.949	A	2	A	R
74		t-1,4-Dichloro-2-butene	53	11.279	0.952	A	3	A	R
75		4-Chlorotoluene	91	11.339	0.957	A	2	A	R
76		tert-Butylbenzene	91	11.479	0.969	A	2	A	R
77		1,2,4-Trimethylbenzene	105	11.534	0.973	A	2	A	R
78		sec-Butylbenzene	105	11.619	0.980	A	2	A	R
79		4-Isopropyltoluene	119	11.728	0.990	A	2	A	R
80		1,3-Dichlorobenzene	146	11.796	0.995	A	2	A	R
81		1,4-Dichlorobenzene	146	11.863	1.001	A	2	A	R
82		n-Butylbenzene	91	12.045	1.016	A	2	A	R
83		1,2-Dichlorobenzene	146	12.185	1.028	A	2	A	R
84		1,2-Dibromo-3-Chloropropane	157	12.799	1.080	A	2	A	R
85		Hexachlorobutadiene	223	13.304	1.123	A	3	A	R
86		1,2,4-Trichlorobenzene	180	13.346	1.126	A	2	A	R
87		Naphthalene	128	13.626	1.150	A	2	A	R
88		1,2,3-Trichlorobenzene	180	13.784	1.163	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

VI191025W.M Fri Oct 25 09:01:32 2019

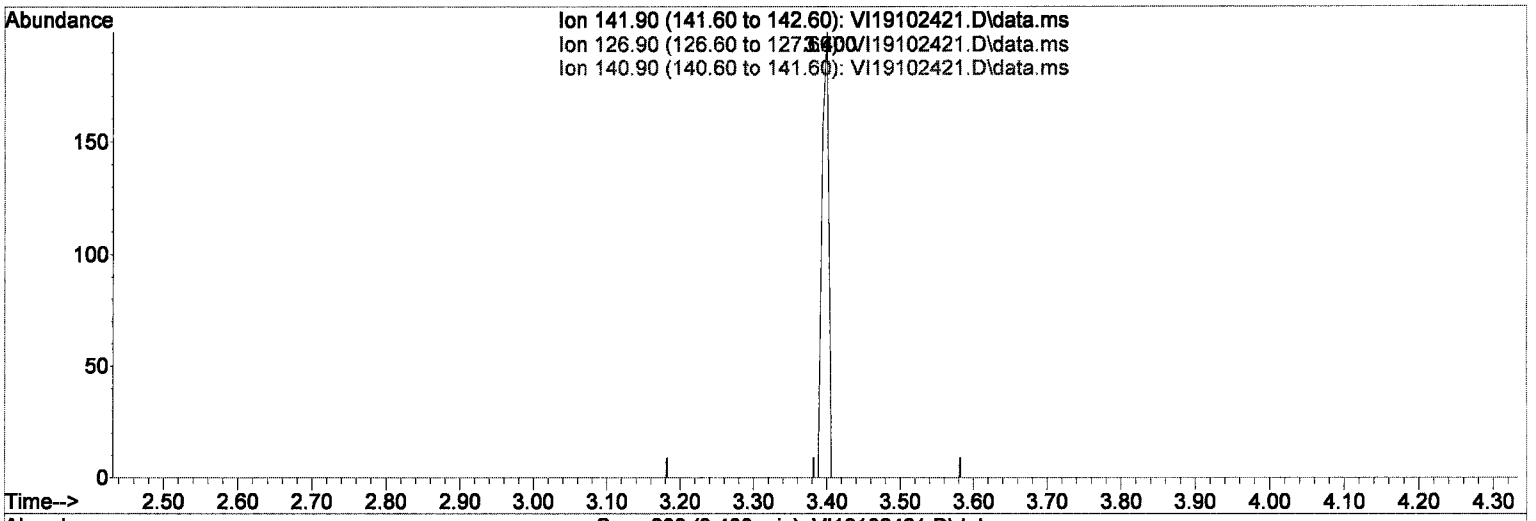


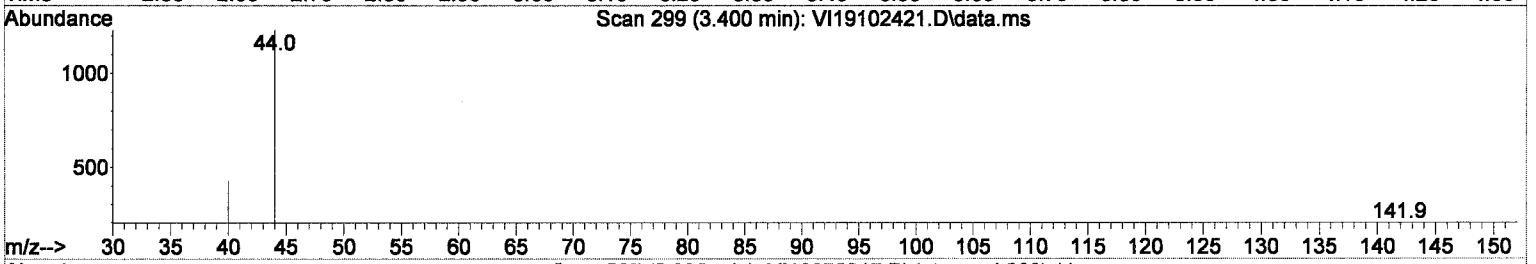
R = 6.36e-002 A*A + 5.25e-001 A - 6.41e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025W.M
Calibration Table Last Updated: Fri Oct 25 08:33:22 2019

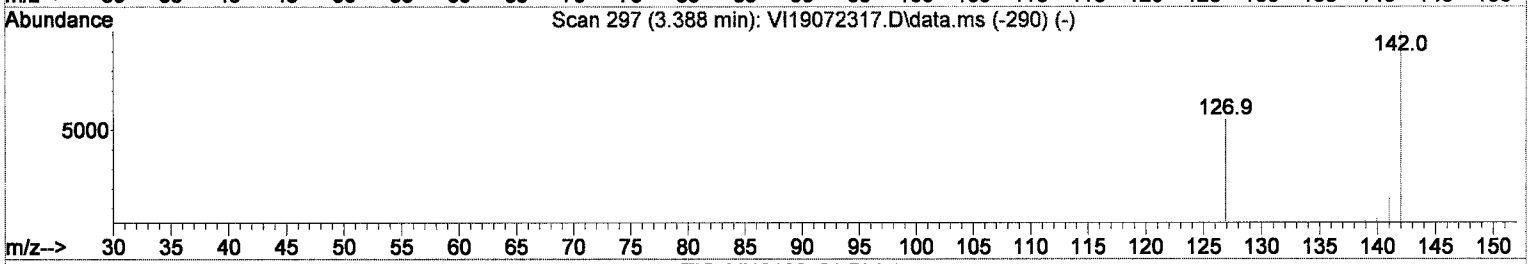
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:42:43 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration







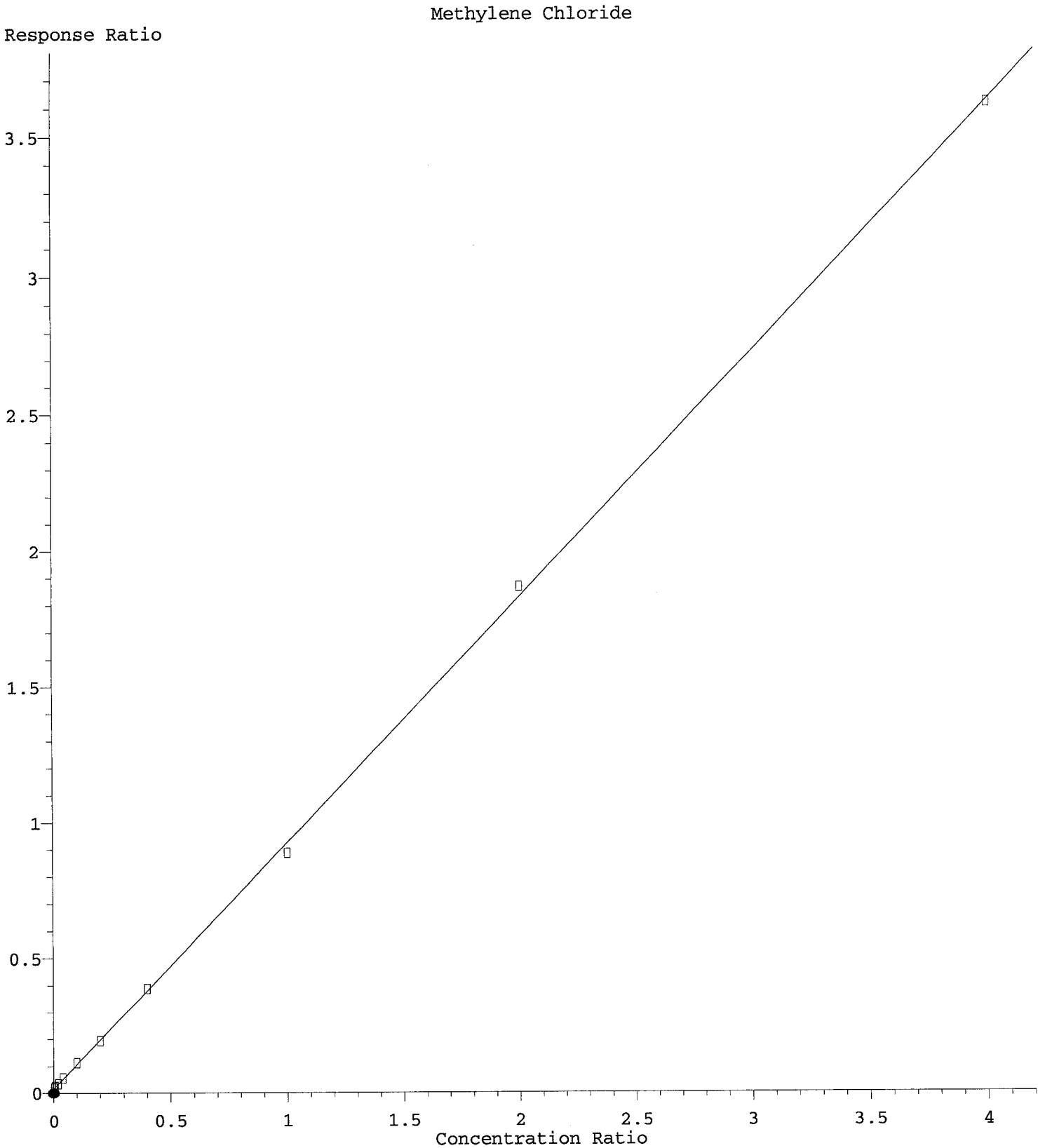
TIC: VI19102421.D\data.ms

(12) Iodomethane

3.400min (+ 0.018) 6.13 ug/L m

response 130

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

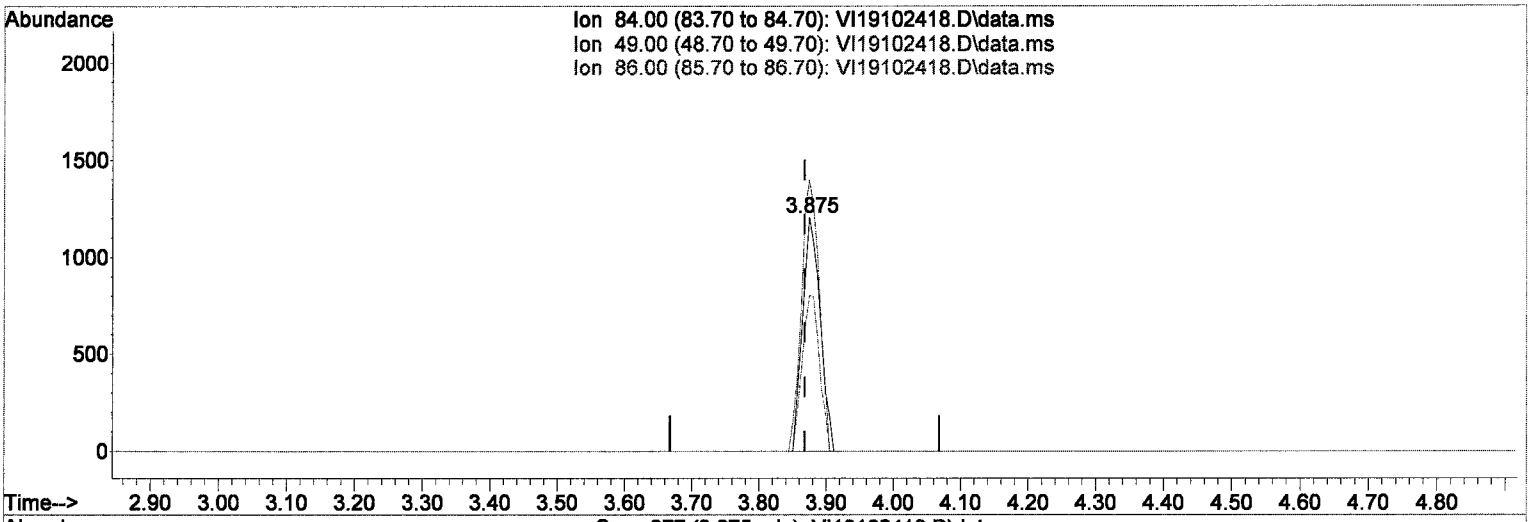


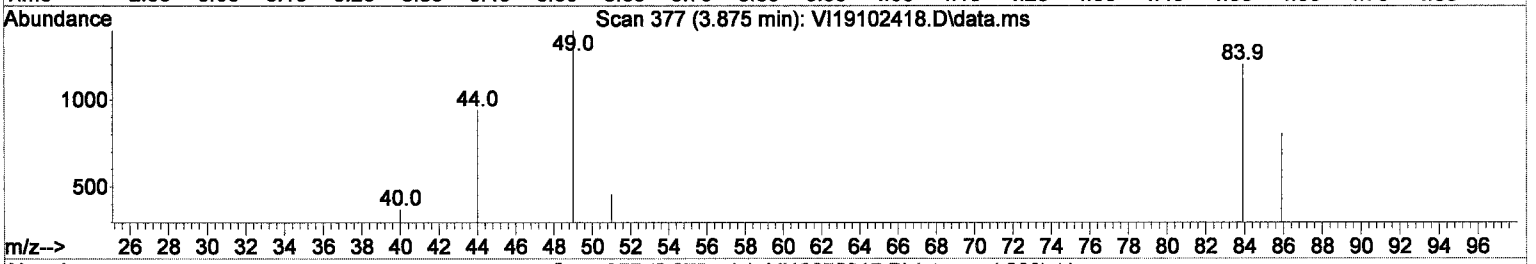
R = -2.46e-003 A*A + 9.12e-001 A + 1.58e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025W.M
Calibration Table Last Updated: Fri Oct 25 08:34:03 2019

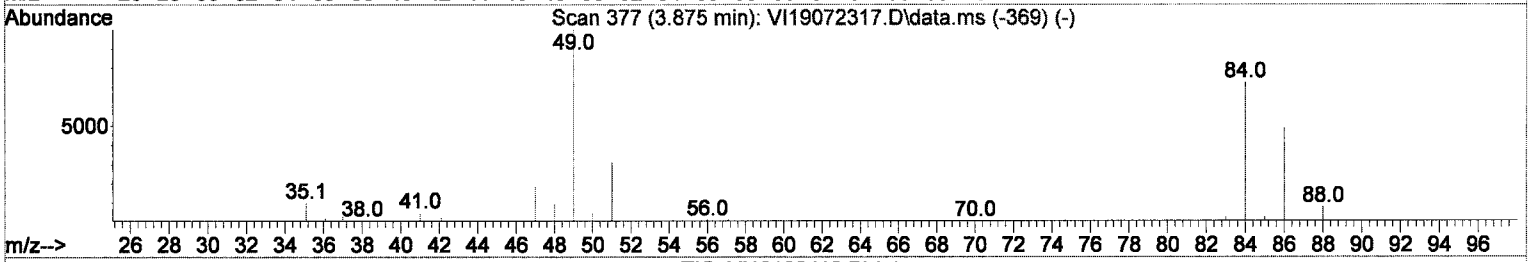
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:42:34 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration







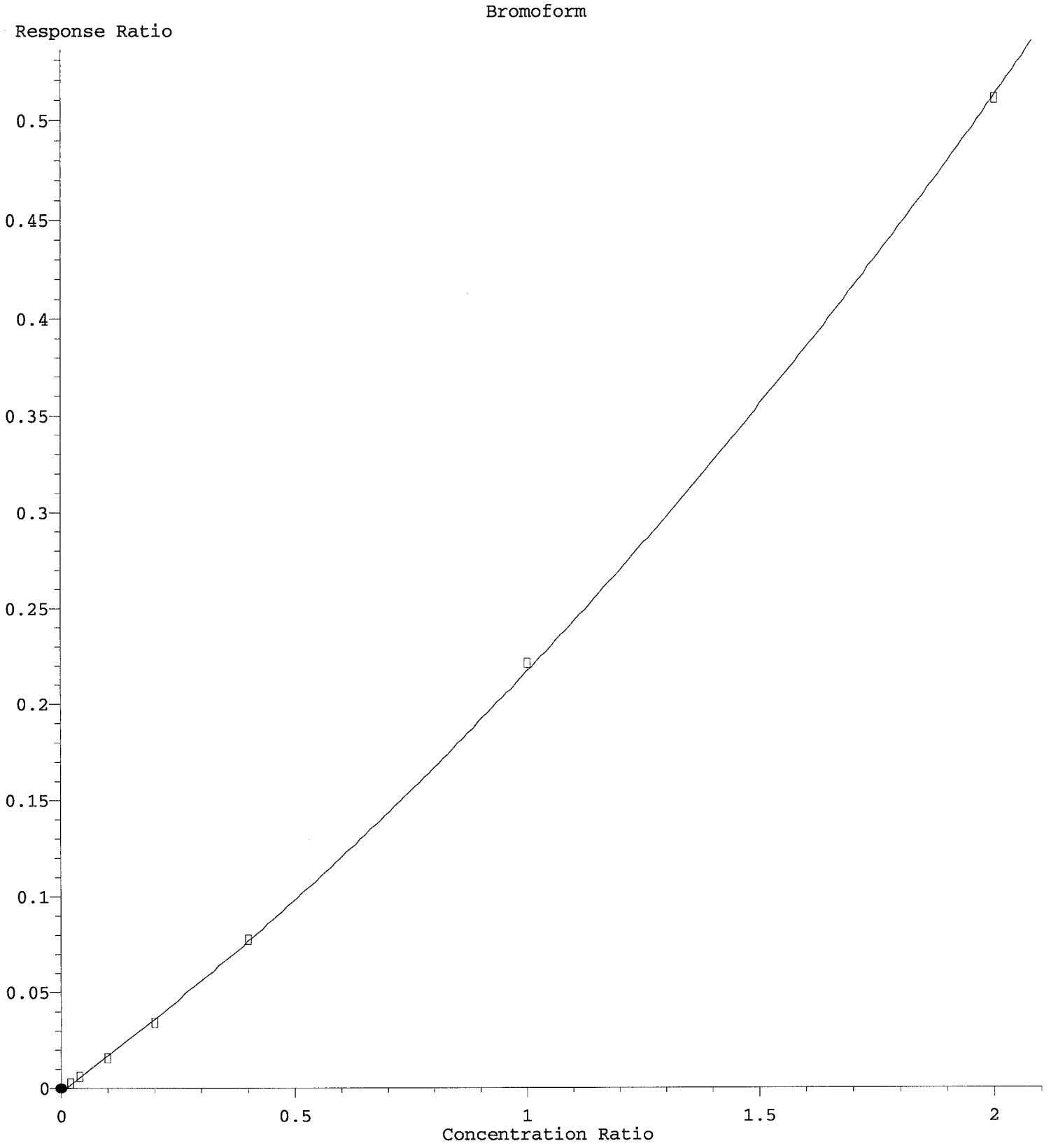
TIC: VI19102418.D\data.ms

(14) Methylene Chloride

3.875min (+ 0.007) 0.18 ug/L

response 2201

Ion	Exp%	Act%
84.00	100.00	100.00
49.00	134.70	116.13
86.00	61.50	66.92
0.00	0.00	0.00

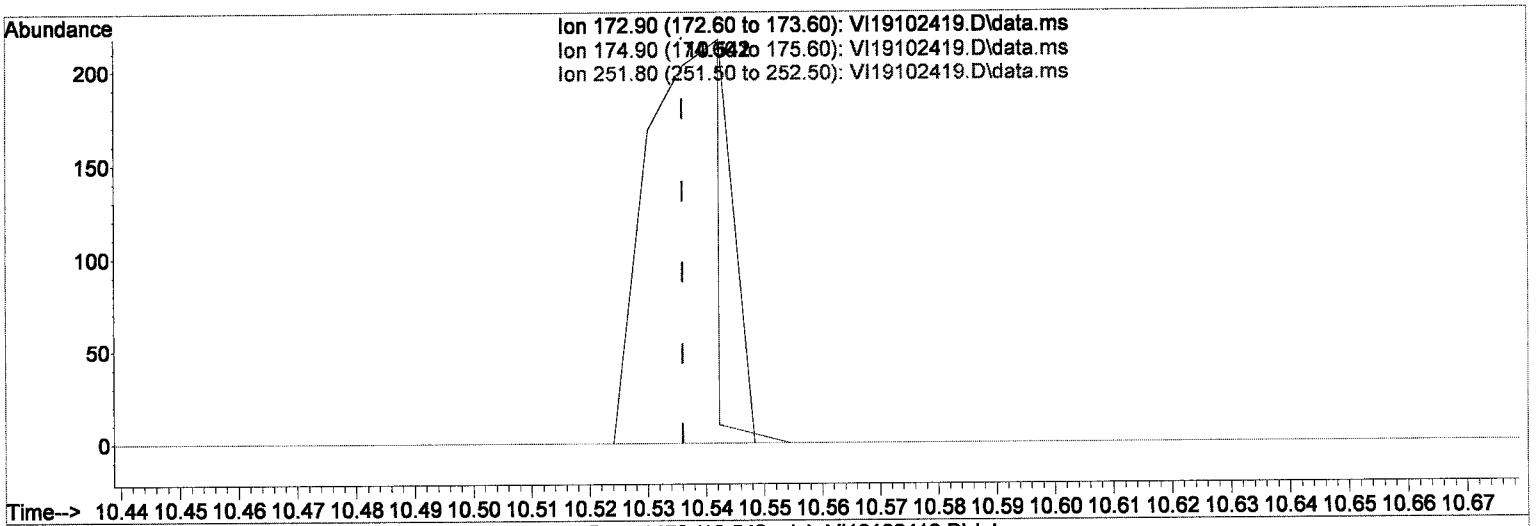


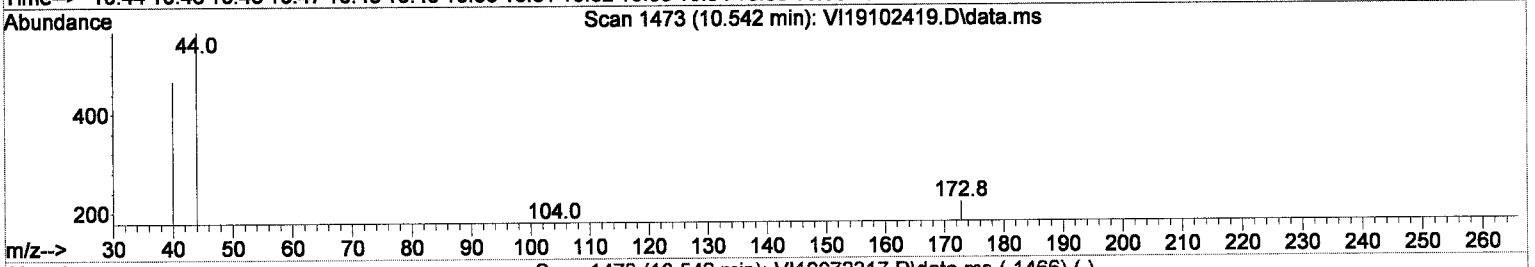
R = 3.82e-002 A*A + 1.80e-001 A - 1.40e-003
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025W.M
Calibration Table Last Updated: Fri Oct 25 08:48:07 2019

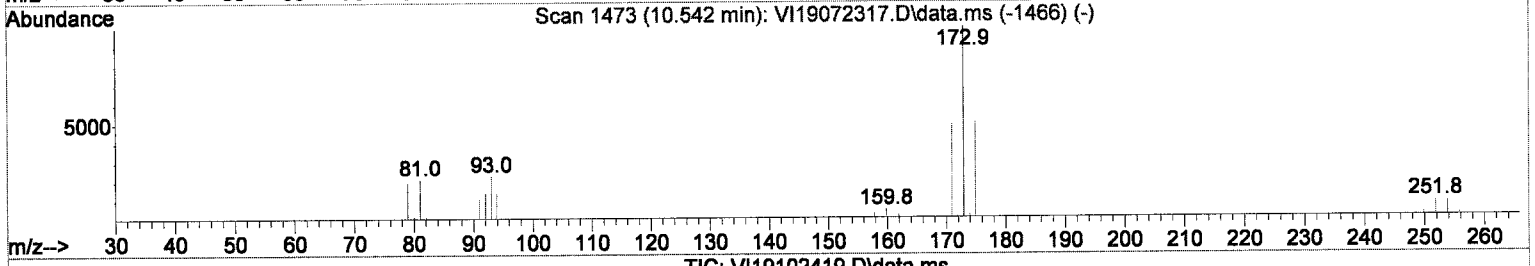
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:48:10 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration







TIC: VI19102419.D\data.ms

(64) Bromoform (P)

10.542min (+ 0.006) 0.38 ug/L m

response -4

Ion	Exp%	Act%
172.90	100.00	100.00
174.90	49.20	0.00#
251.80	13.30	0.00
0.00	0.00	-0.00

10/25

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102432.D
Acq On : 24 Oct 2019 10:38 pm
Operator : MM
Sample : 9J24043-ICV1
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

MM 10/25/19

Quant Time: Oct 25 08:52:53 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
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	103	0.00
2		Dichlorodifluoromethane	20.000	25.235	-26.2#	133	0.00
3	P	Chloromethane	20.000	20.727	-3.6	115	0.00
4	C	Vinyl Chloride	20.000	22.118	-10.6	111	0.00
5		Bromomethane	20.000	22.648	-13.2	122	0.00
6		Chloroethane	20.000	17.519	12.4	102	0.00
7		Trichlorofluoromethane	20.000	20.686	-3.4	101	0.00
8		~~Ethanol~~	~~1250.000~~	~~37.145~~	~~97.0#~~	~~3~~	~~0.00~~
9	C	1,1-Dichloroethene	20.000	19.721	1.4	100	0.00
10		Carbon Disulfide	20.000	18.350	8.2	94	0.00
11		Freon 113	20.000	19.089	4.6	95	0.00
12		Iodomethane	20.000	16.515	17.4	117	0.00
13		Acrolein	20.000	20.473	-2.4	103	0.00
14		Methylene Chloride	20.000	19.959	0.2	101	0.00
15		Acetone	40.000	37.600	6.0	97	0.00
16		t-1,2-Dichloroethene	20.000	20.982	-4.9	100	0.00
17		n-Hexane	20.000	19.272	3.6	95	0.00
18		Methyl-tert-butyl-ether	20.000	19.588	2.1	99	0.00
19		~~tert-Butanol (TBA)~~	~~1250.000~~	~~28.139~~	~~97.7#~~	~~2~~	~~0.00~~
20		~~Diisopropyl ether (DIPE)~~	~~5.000~~	~~0.181~~	~~96.4#~~	~~3~~	~~0.00~~
21	P	1,1-Dichloroethane	20.000	20.526	-2.6	102	0.00
22		Acrylonitrile	20.000	19.587	2.1	96	0.00
23		~~Ethyl-tert-butyl ether (ET~~	~~5.000~~	~~0.158~~	~~96.8#~~	~~3~~	~~0.00~~
24		Vinyl Acetate	20.000	19.888	0.6	99	0.00
25		c-1,2-Dichloroethene	20.000	20.039	-0.2	99	0.00
26		2,2-Dichloropropane	20.000	17.720	11.4	89	0.00
27		Bromochloromethane	20.000	22.053	-10.3	101	0.00
28	C	Chloroform	20.000	20.857	-4.3	100	0.00
29		Carbon Tetrachloride	20.000	20.695	-3.5	104	0.00
30		Tetrahydrofuran	20.000	19.026	4.9	95	0.00
31		1,1,1-Trichloroethane	20.000	19.935	0.3	99	0.00
32	S	Dibromofluoromethane (S)	50.000	50.291	-0.6	104	0.00
33		1,1-Dichloropropene	20.000	19.605	2.0	98	0.00
34		2-Butanone (MEK)	40.000	37.882	5.3	94	0.00
35		Benzene	20.000	19.670	1.6	99	0.00
36		~~tert-Amyl methyl ether (TA~~	~~5.000~~	~~0.175~~	~~96.5#~~	~~3~~	~~0.01~~
37		1,2-Dichloroethane (EDC)	20.000	20.160	-0.8	99	0.00
38		iso-Butyl Alcohol	500.000	519.105	-3.8	100	0.00
39	S	1,4-Difluorobenzene (S)	50.000	50.364	-0.7	104	0.00
40		Trichloroethene (TCE)	20.000	21.245	-6.2	102	0.00
41		~~Tert-Amyl-Ethyl-Ether (TAEE~~	~~5.000~~	~~0.144~~	~~97.1#~~	~~3~~	~~0.00~~
42		Dibromomethane	20.000	21.130	-5.6	102	0.00
43	C	1,2-Dichloropropane	20.000	20.286	-1.4	101	0.00
44		Bromodichloromethane	20.000	20.751	-3.8	102	0.00
45		Chlorobenzene-d5 (I)	50.000	50.000	0.0	104	0.00
46		2-Chloroethyl Vinyl Ether	20.000	20.093	-0.5	99	0.00
47		c-1,3-Dichloropropene	20.000	19.890	0.5	98	0.00
48	S	Toluene-d8 (S)	50.000	49.306	1.4	104	0.00
49	C	Toluene	20.000	19.385	3.1	99	0.00
50		Tetrachloroethene (PCE)	20.000	20.889	-4.4	101	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102432.D
Acq On : 24 Oct 2019 10:38 pm
Operator : MM
Sample : 9J24043-ICV1
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:53 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
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		4-Methyl-2-Pentanone (MIBK)	40.000	41.038	-2.6	97	0.00
52		t-1,3-Dichloropropene	20.000	20.701	-3.5	102	0.00
53		1,1,2-Trichloroethane	20.000	21.234	-6.2	103	0.00
54		Dibromochloromethane	20.000	23.749	-18.7	108	0.00
55		1,3-Dichloropropane	20.000	20.475	-2.4	100	0.00
56		1,2-Dibromoethane (EDB)	20.000	20.657	-3.3	100	0.00
57		2-Hexanone	40.000	40.560	-1.4	97	0.00
58	P	Chlorobenzene	20.000	20.598	-3.0	102	0.00
59	C	Ethylbenzene	20.000	20.146	-0.7	102	0.00
60		1,1,1,2-Tetrachloroethane	20.000	21.774	-8.9	105	0.00
61		m,p-Xylenes (2)	40.000	40.933	-2.3	100	0.00
62		o-Xylene	20.000	20.989	-4.9	101	0.00
63		Styrene	20.000	20.857	-4.3	100	0.00
64	P	Bromoform	20.000	21.372	-6.9	111	0.00
65		Isopropylbenzene	20.000	20.931	-4.7	101	0.00
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	104	0.00
67	S	4-Bromofluorobenzene (S)	50.000	49.582	0.8	105	0.00
68		Bromobenzene	20.000	20.988	-4.9	103	0.00
69		n-Propylbenzene	20.000	20.099	-0.5	100	0.00
70	P	1,1,2,2-Tetrachloroethane	20.000	20.344	-1.7	100	0.00
71		2-Chlorotoluene	20.000	19.935	0.3	99	0.00
72		1,3,5-Trimethylbenzene	20.000	20.663	-3.3	100	0.00
73		1,2,3-Trichloropropane	20.000	20.663	-3.3	103	0.00
74		t-1,4-Dichloro-2-butene	20.000	17.538	12.3	87	0.00
75		4-Chlorotoluene	20.000	20.563	-2.8	102	0.00
76		tert-Butylbenzene	20.000	20.366	-1.8	100	0.00
77		1,2,4-Trimethylbenzene	20.000	20.724	-3.6	99	0.00
78		sec-Butylbenzene	20.000	20.458	-2.3	100	0.00
79		4-Isopropyltoluene	20.000	21.662	-8.3	100	0.00
80		1,3-Dichlorobenzene	20.000	20.840	-4.2	103	0.00
81		1,4-Dichlorobenzene	20.000	20.477	-2.4	102	0.00
82		n-Butylbenzene	20.000	22.267	-11.3	101	0.00
83		1,2-Dichlorobenzene	20.000	20.819	-4.1	103	0.00
84		1,2-Dibromo-3-Chloropropane	20.000	20.036	-0.2	102	0.00
85		Hexachlorobutadiene	20.000	21.851	-9.3	105	0.00
86		1,2,4-Trichlorobenzene	20.000	22.259	-11.3	104	0.00
87		Naphthalene	20.000	21.916	-9.6	103	0.00
88		1,2,3-Trichlorobenzene	20.000	22.607	-13.0	106	0.00

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102433.D
Acq On : 24 Oct 2019 11:05 pm
Operator : MM
Sample : 9J24043-ICV2
Misc : 1X 5mL 5/1250PPB OXY
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

M 10/25/19

Quant Time: Oct 25 08:52:56 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
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	99	0.00
2		Dichlorodifluoromethane	20.000	0.142	99.3#	1	0.00
3	P	Chloromethane	20.000	0.423	97.9#	2	0.00
4	C	Vinyl Chloride	20.000	0.200	99.0#	1	0.00
5		Bromomethane	20.000	0.740	96.3#	4	0.00
6		Chloroethane	20.000	0.736	96.3#	4	0.03
7		Trichlorofluoromethane	20.000	0.052	99.7#	0	0.01
8		Ethanol	1250.000	1059.187	15.3	80	0.00
9	C	1,1-Dichloroethene	20.000	0.161	99.2#	1	0.00
10		Carbon Disulfide	20.000	0.494	97.5#	2	0.01
11		Freon 113	20.000	0.000	100.0#	0	-3.28#
12		Iodomethane	20.000	6.269	68.7#	3	0.00
13		Acrolein	20.000	0.000	100.0#	0	-3.61#
14		Methylene Chloride	20.000	0.401	98.0#	6	0.00
15		Acetone	40.000	1.018	97.5#	3	0.01
16		t-1,2-Dichloroethene	20.000	0.302	98.5#	1	0.00
17		n-Hexane	20.000	0.000	100.0#	0	-4.12#
18		Methyl-tert-butyl-ether	20.000	0.085	99.6#	0	0.00
19		tert-Butanol (TBA)	1250.000	1179.792	5.6	83	0.00
20		Diisopropyl ether (DIPE)	5.000	4.407	11.9	82	0.00
21	P	1,1-Dichloroethane	20.000	0.254	98.7#	1	0.00
22		Acrylonitrile	20.000	0.000	100.0#	0	-4.74#
23		Ethyl-tert-butyl ether (ET	5.000	4.402	12.0	82	0.00
24		Vinyl Acetate	20.000	0.689	96.6#	3	-0.02
25		c-1,2-Dichloroethene	20.000	0.236	98.8#	1	0.00
26		2,2-Dichloropropane	20.000	0.080	99.6#	0	0.01
27		Bromochloromethane	20.000	0.000	100.0#	0	-5.44#
28	C	Chloroform	20.000	0.223	98.9#	1	0.00
29		Carbon Tetrachloride	20.000	0.000	100.0#	0	-5.66#
30		Tetrahydrofuran	20.000	0.000	100.0#	0	-5.70#
31		1,1,1-Trichloroethane	20.000	0.094	99.5#	0	0.00
32	S	Dibromofluoromethane (S)	50.000	49.641	0.7	99	0.00
33		1,1-Dichloropropene	20.000	0.226	98.9#	1	0.00
34		2-Butanone (MEK)	40.000	0.000	100.0#	0	-5.85#
35		Benzene	20.000	0.266	98.7#	1	0.00
36		tert-Amyl methyl ether (TA	5.000	4.185	16.3	80	0.00
37		1,2-Dichloroethane (EDC)	20.000	0.071	99.6#	0	0.01
38		iso-Butyl Alcohol	500.000	0.000	100.0#	0	-6.37#
39	S	1,4-Difluorobenzene (S)	50.000	50.455	-0.9	100	0.00
40		Trichloroethene (TCE)	20.000	0.257	98.7#	1	0.01
41		Tert-Amyl-Ethyl-Ether (TAEE	5.000	4.278	14.4	78	0.00
42		Dibromomethane	20.000	0.000	100.0#	0	-7.20#
43	C	1,2-Dichloropropane	20.000	0.177	99.1#	1	0.00
44		Bromodichloromethane	20.000	0.108	99.5#	1	0.00
45		Chlorobenzene-d5 (I)	50.000	50.000	0.0	97	0.00
46		2-Chloroethyl Vinyl Ether	20.000	0.000	100.0#	0	-8.02#
47		c-1,3-Dichloropropene	20.000	0.143	99.3#	1	0.00
48	S	Toluene-d8 (S)	50.000	50.620	-1.2	99	0.00
49	C	Toluene	20.000	0.283	98.6#	1	0.00
50		Tetrachloroethene (PCE)	20.000	0.334	98.3#	1	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102433.D
Acq On : 24 Oct 2019 11:05 pm
Operator : MM
Sample : 9J24043-ICV2
Misc : 1X 5mL 5/1250PPB OXY
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:56 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
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		4-Methyl-2-Pentanone (MIBK)	40.000	0.000	100.0#	0	-8.80#
52		t-1,3-Dichloropropene	20.000	0.080	99.6#	0	0.02
53		1,1,2-Trichloroethane	20.000	0.000	100.0#	0	-9.00#
54		Dibromochloromethane	20.000	0.000	100.0#	0	-9.19#
55		1,3-Dichloropropane	20.000	0.089	99.6#	0	0.00
56		1,2-Dibromoethane (EDB)	20.000	0.000	100.0#	0	-9.42#
57		2-Hexanone	40.000	0.000	100.0#	0	-9.65#
58	P	Chlorobenzene	20.000	0.297	98.5#	1	0.00
59	C	Ethylbenzene	20.000	0.274	98.6#	1	0.00
60		1,1,1,2-Tetrachloroethane	20.000	0.153	99.2#	1	0.00
61		m,p-Xylenes (2)	40.000	0.530	98.7#	1	0.00
62		o-Xylene	20.000	0.258	98.7#	1	0.00
63		Styrene	20.000	0.234	98.8#	1	0.00
64	P	Bromoform	20.000	0.000	100.0#	0	-10.54#
65		Isopropylbenzene	20.000	0.224	98.9#	1	0.00
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	92	0.00
67	S	4-Bromofluorobenzene (S)	50.000	50.894	-1.8	94	0.00
68		Bromobenzene	20.000	0.267	98.7#	1	0.00
69		n-Propylbenzene	20.000	0.308	98.5#	1	0.00
70	P	1,1,2,2-Tetrachloroethane	20.000	0.000	100.0#	0	-11.14#
71		2-Chlorotoluene	20.000	0.261	98.7#	1	0.00
72		1,3,5-Trimethylbenzene	20.000	0.279	98.6#	1	0.00
73		1,2,3-Trichloropropane	20.000	0.000	100.0#	0	-11.25#
74		t-1,4-Dichloro-2-butene	20.000	0.000	100.0#	0	-11.28#
75		4-Chlorotoluene	20.000	0.357	98.2#	2	0.00
76		tert-Butylbenzene	20.000	0.243	98.8#	1	0.00
77		1,2,4-Trimethylbenzene	20.000	0.300	98.5#	1	0.00
78		sec-Butylbenzene	20.000	0.275	98.6#	1	0.00
79		4-Isopropyltoluene	20.000	0.295	98.5#	1	0.00
80		1,3-Dichlorobenzene	20.000	0.371	98.1#	2	0.00
81		1,4-Dichlorobenzene	20.000	0.404	98.0#	2	0.00
82		n-Butylbenzene	20.000	0.398	98.0#	2	0.00
83		1,2-Dichlorobenzene	20.000	0.272	98.6#	1	0.00
84		1,2-Dibromo-3-Chloropropane	20.000	0.000	100.0#	0	-12.80#
85		Hexachlorobutadiene	20.000	0.497	97.5#	2	0.00
86		1,2,4-Trichlorobenzene	20.000	0.570	97.2#	2	0.00
87		Naphthalene	20.000	0.356	98.2#	1	0.00
88		1,2,3-Trichlorobenzene	20.000	0.570	97.2#	2	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Calibration Status Report VOA-GCMS9

Method Path : C:\msdchem\1\methods\
Method File : VI191025G.M
Title : NWTPH-Gx by GC/MS
Last Update : Fri Oct 25 10:31:05 2019
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	50	50	50	C:\msdchem\1\data\2019-10\9J24043\VI19102439.D
2	100	100	50	C:\msdchem\1\data\2019-10\9J24043\VI19102440.D
3	250	250	50	C:\msdchem\1\data\2019-10\9J24043\VI19102441.D
4	500	500	50	C:\msdchem\1\data\2019-10\9J24043\VI19102442.D
5	1000	1000	50	C:\msdchem\1\data\2019-10\9J24043\VI19102452.D
6	2500	2500	50	C:\msdchem\1\data\2019-10\9J24043\VI19102444.D
7	5000	5000	50	C:\msdchem\1\data\2019-10\9J24043\VI19102445.D
8	10K	10000	50	C:\msdchem\1\data\2019-10\9J24043\VI19102446.D

#	ID	Update Time	Quant Time	Acquisition Time
1	50	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 1:46 am
2	100	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 2:13 am
3	250	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 2:40 am
4	500	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 3:07 am
5	1000	Oct 25 10:31 2019	Oct 25 10:30 2019	25 Oct 2019 10:13 am
6	2500	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 4:00 am
7	5000	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 4:27 am
8	10K	Oct 25 09:04 2019	Oct 25 08:55 2019	25 Oct 2019 4:54 am

VI191025G.M Fri Oct 25 10:41:17 2019

Response Factor Report VOA-GCMS9

Method Path : C:\msdchem\1\methods\
Method File : VI191025G.M
Title : NWTPH-Gx by GC/MS
Last Update : Fri Oct 25 10:31:05 2019
Response Via : Initial Calibration

Calibration Files
50 =VI19102439.D 100 =VI19102440.D 250 =VI19102441.D 500 =VI19102442.D 1000=VI19102452.D 2500=VI19102444.D
5000=VI19102445.D 10K =VI19102446.D

		Compound	50	100	250	500	1000	2500	5000	10K	Avg	%RSD
1)	I	Pentafluorobenzene...	----------ISTD----------									
2)	S	1,4-Difluorobe...	1.634	1.635	1.620	1.616	1.606	1.628	1.624	1.644	1.626	0.73
3)	S	4-Bromofluorob...	0.521	0.525	0.529	0.536	0.539	0.555	0.563	0.574	0.543	3.54
4)	H	NWTPH-Gx (TPH)	0.926	1.028	1.244	1.386	1.437	1.550	1.569	1.699	1.355	19.99
5)	H	TPHg (C5-C9)	3.091	2.191	1.950	1.925	1.927	1.943	1.882	1.984	2.112	19.26
6)	H	TPHg (C6-C10)	2.666	1.908	1.665	1.633	1.632	1.643	1.597	1.694	1.805	20.00
7)	H	CA-LUFT (C5-C12)	3.259	2.422	2.257	2.271	2.291	2.353	2.307	2.441	2.450	13.62
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-GCMS9

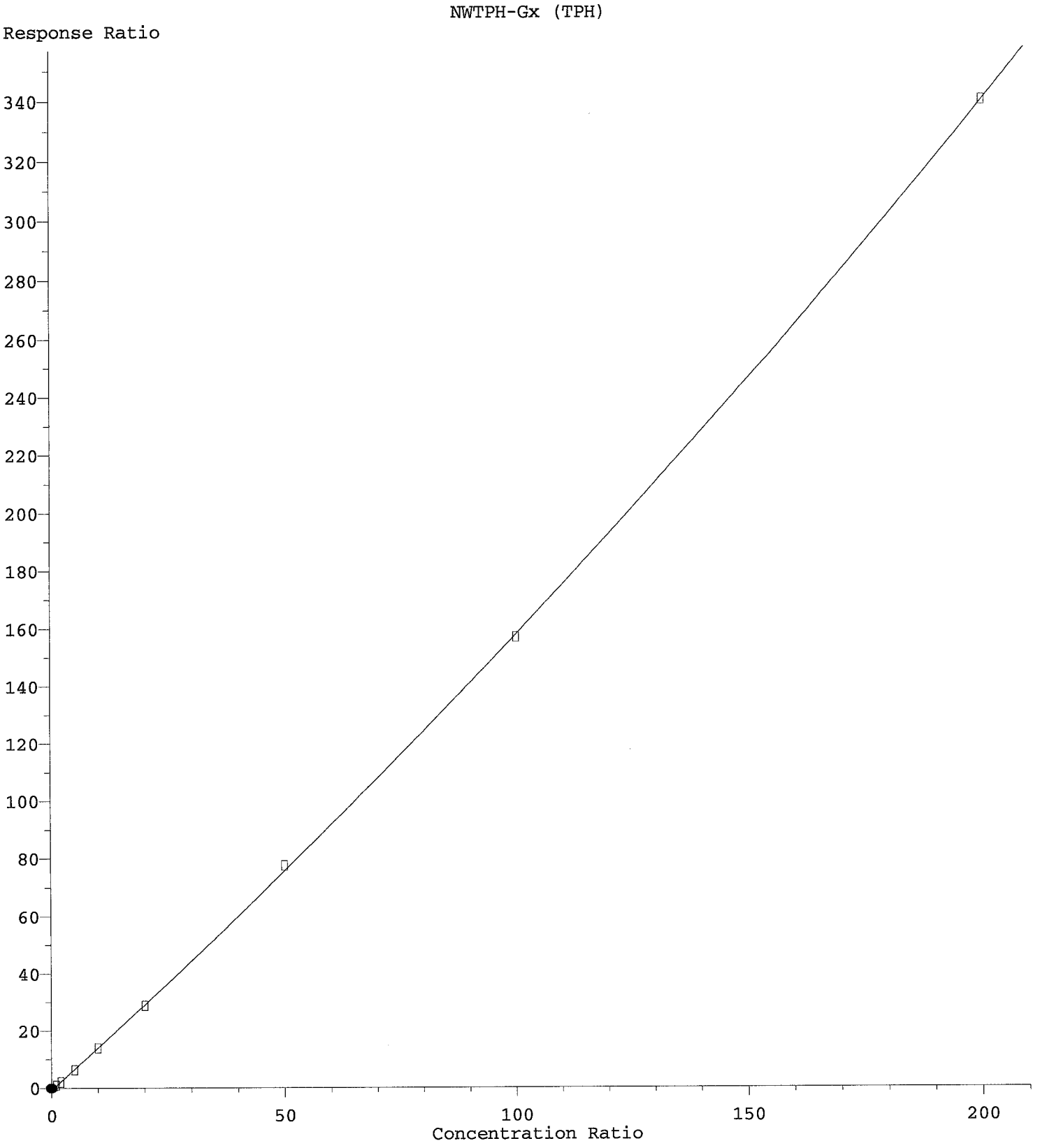
Method Path : C:\msdchem\1\methods\
Method File : VI191025G.M
Title : NWTPH-Gx by GC/MS
Last Update : Fri Oct 25 10:31:05 2019
Response Via : Initial Calibration

Total Cpnds : 13

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene (IS)	168	6.217	1.000	A	2	A	B
2	S	1,4-Difluorobenzene (Sur)	114	6.783	1.091	A	2	A	B
3	S	4-Bromofluorobenzene (Sur)	174	10.974	1.765	A	2	A	B
4	H	NWTPH-Gx (TPH)	TIC	9.890	1.591	Q	0	A	B
5	H	TPHg (C5-C9)	TIC	9.890	1.591	Q	0	A	B
6	H	TPHg (C6-C10)	TIC	9.890	1.591	Q	0	A	B
7	H	CA-LUFT (C5-C12)	TIC	9.890	1.591	Q	0	A	B
8		Benzene (NR)	78	6.120	0.984	A	2	A	B
9	S	Toluene-d8 (NR)	98	8.298	1.335	A	2	A	B
10		Toluene (NR)	91	8.358	1.344	A	2	A	B
11	S	Chlorobenzene-d5 (NR)	117	9.916	1.595	A	2	A	B
12	S	1,4-Dichlorobenzene-d4 (NR)	150	11.850	1.906	A	2	A	B
13		Naphthalene (NR)	128	13.627	2.192	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

VI191025G.M Fri Oct 25 10:41:12 2019

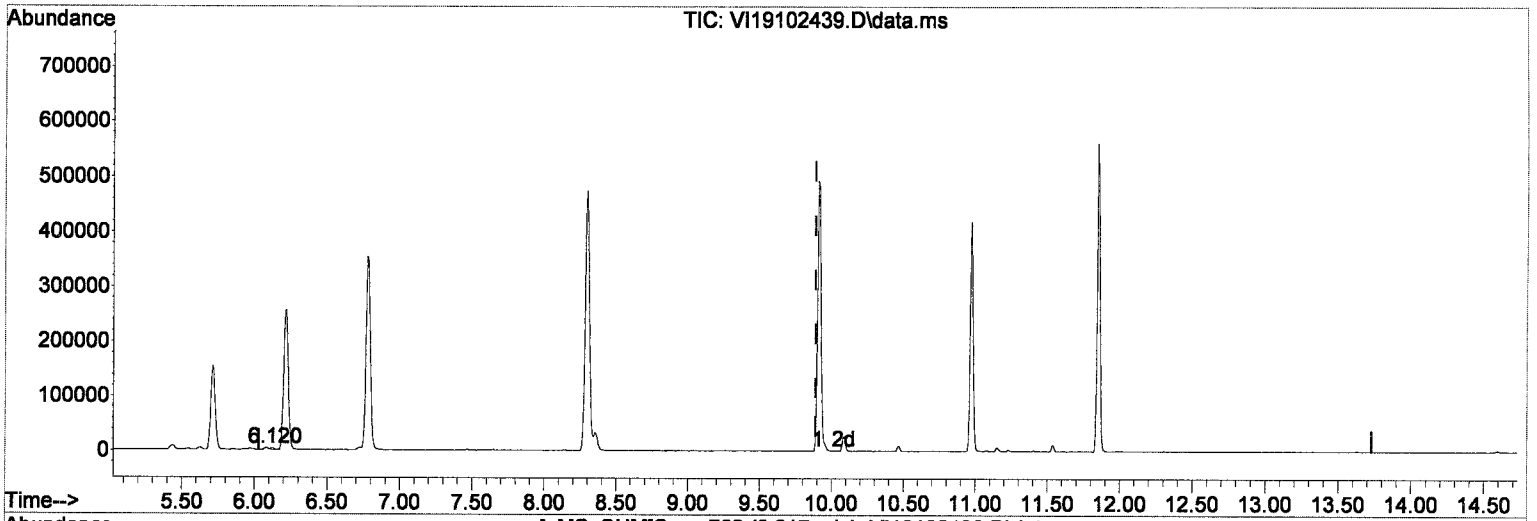


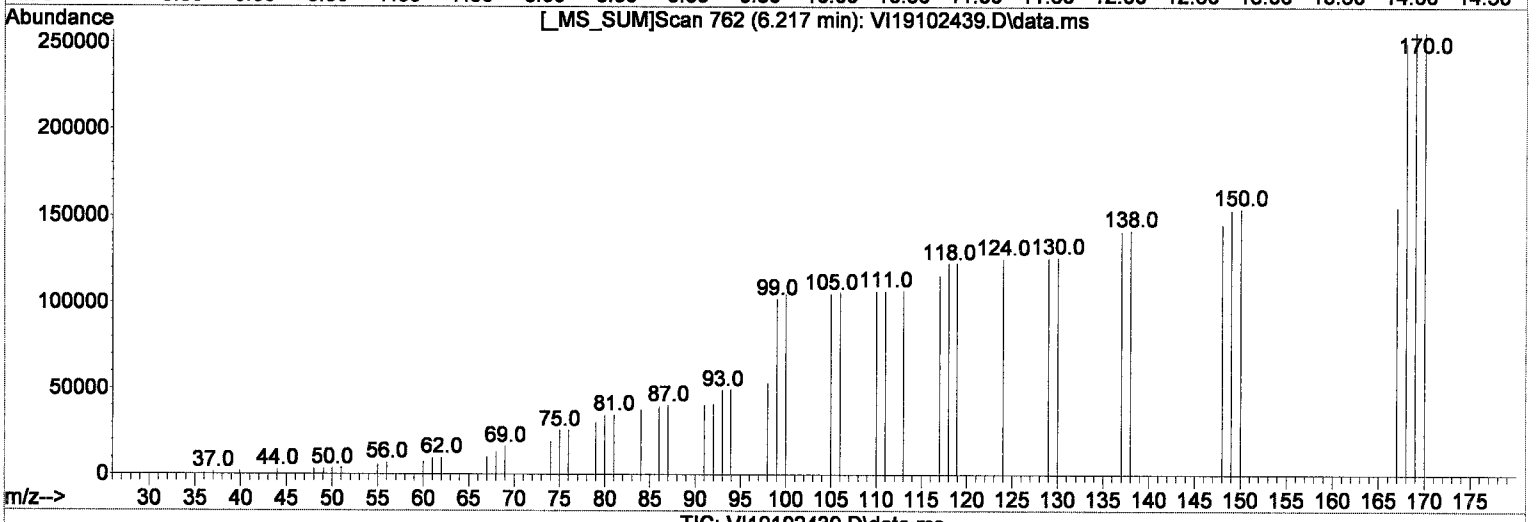
R = 1.17e-003 A*A + 1.47e+000 A - 7.24e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:32:52 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





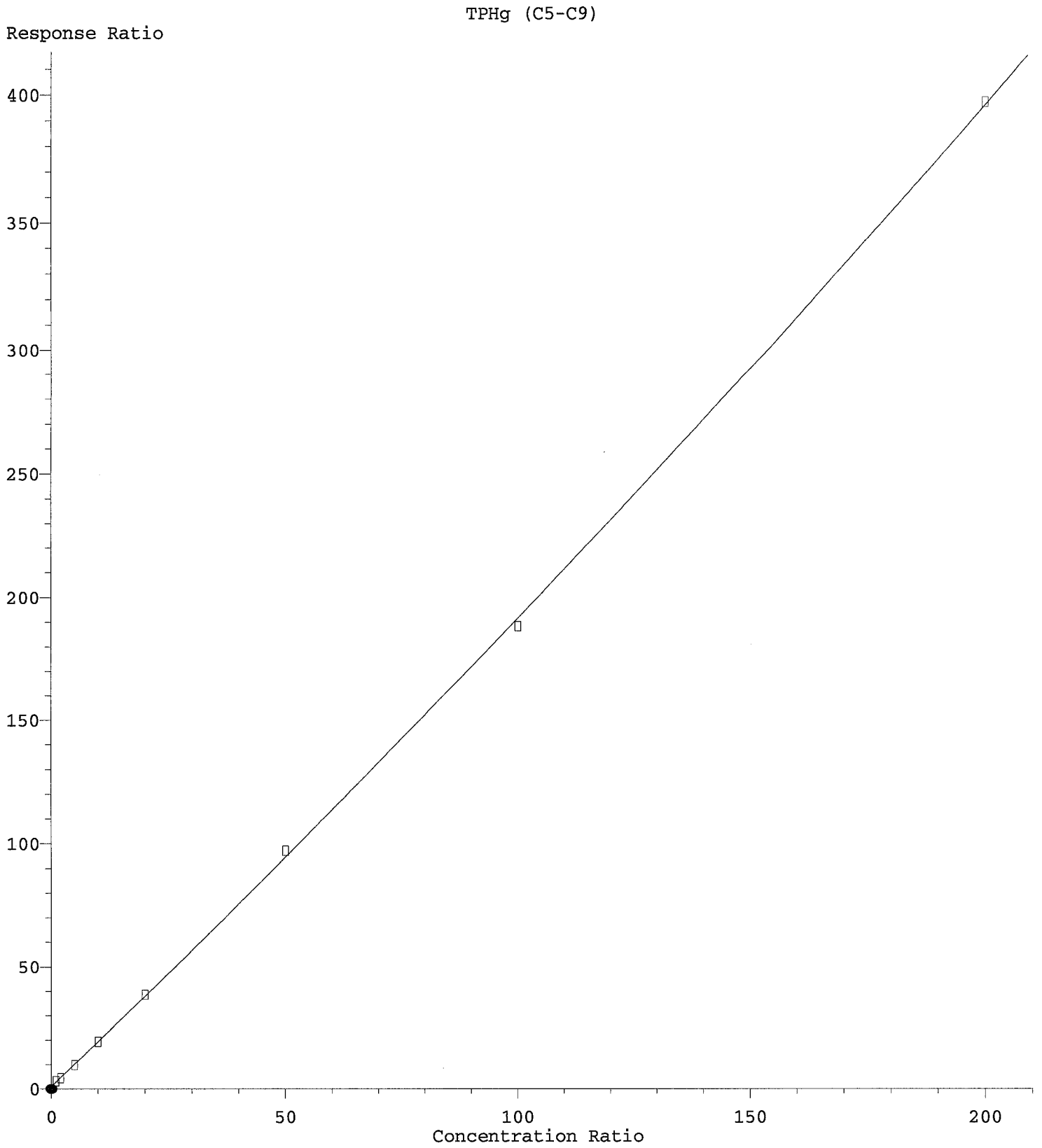
TIC: VI19102439.D\data.ms

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

9.890min (0.000) 25.47 ug/L m

response 5099

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

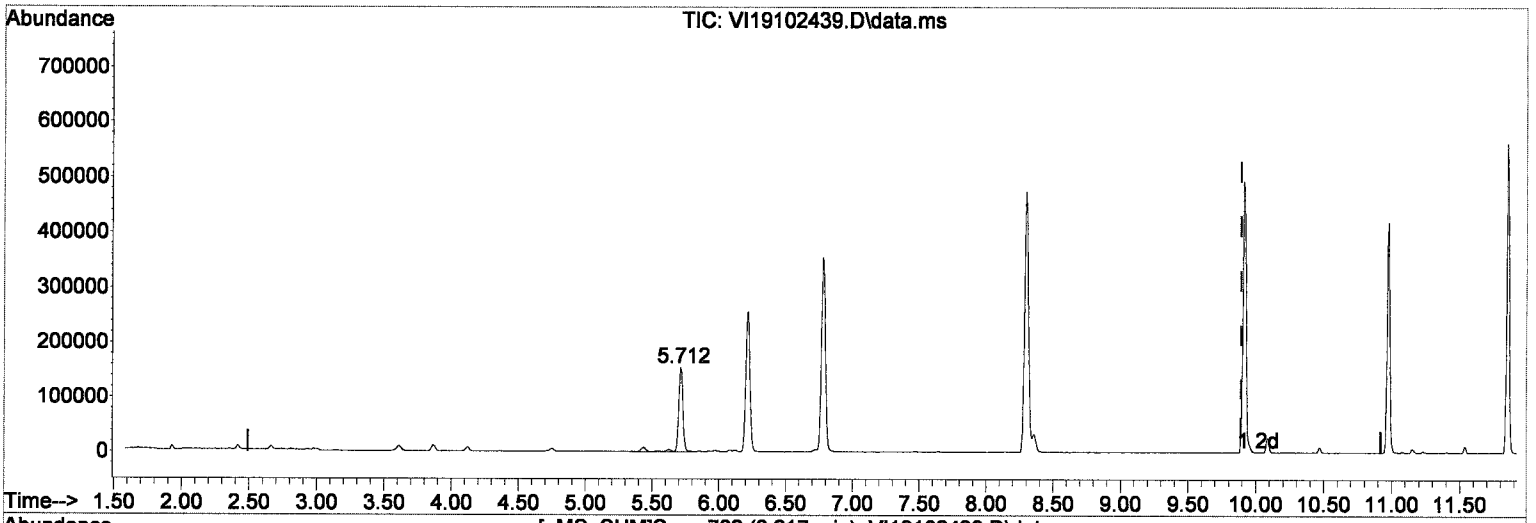


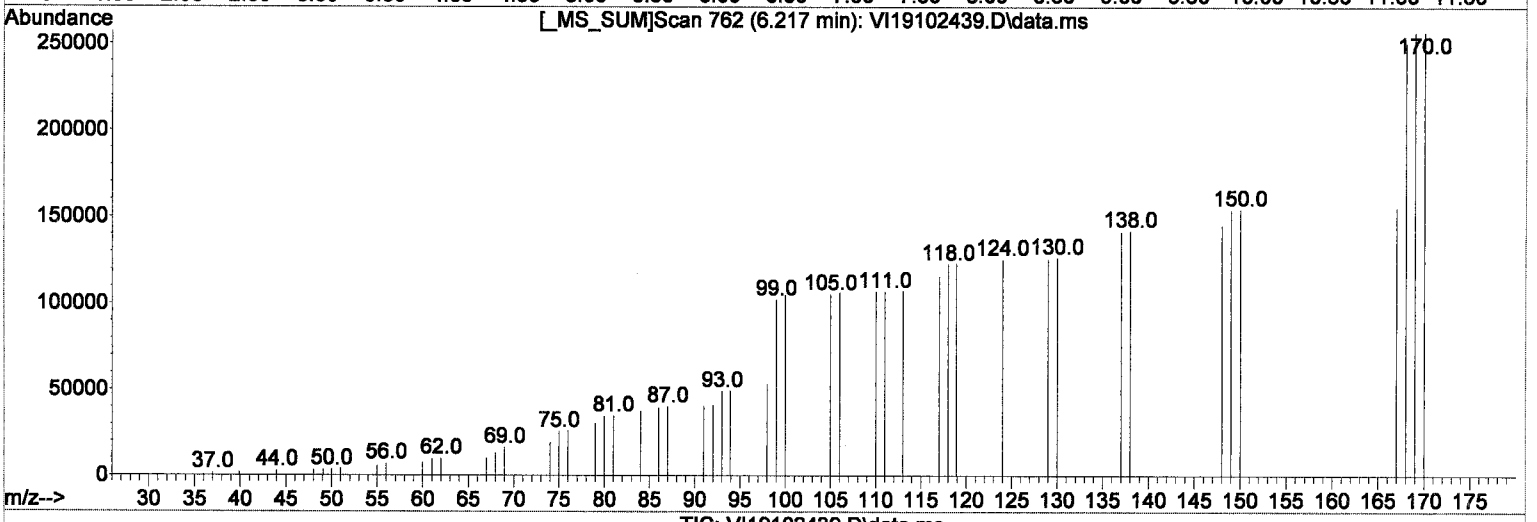
R = 6.91e-004 A*A + 1.84e+000 A + 1.03e+000
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w/(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:32:52 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





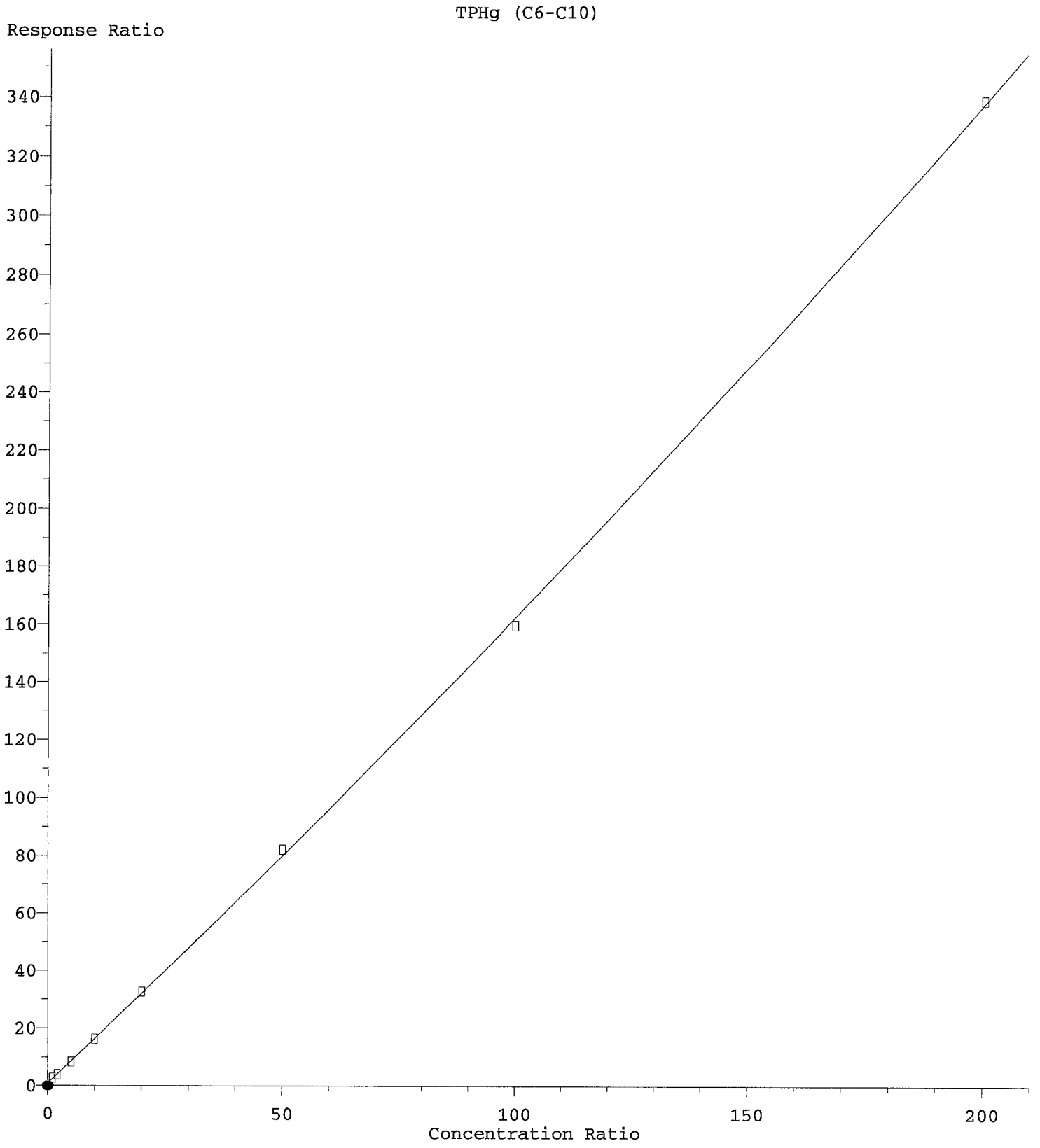
TIC: VI19102439.D\data.ms

(5) TPHg (C5-C9) (H)

9.890min (0.000) 19.12 ug/L m

response 362226

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

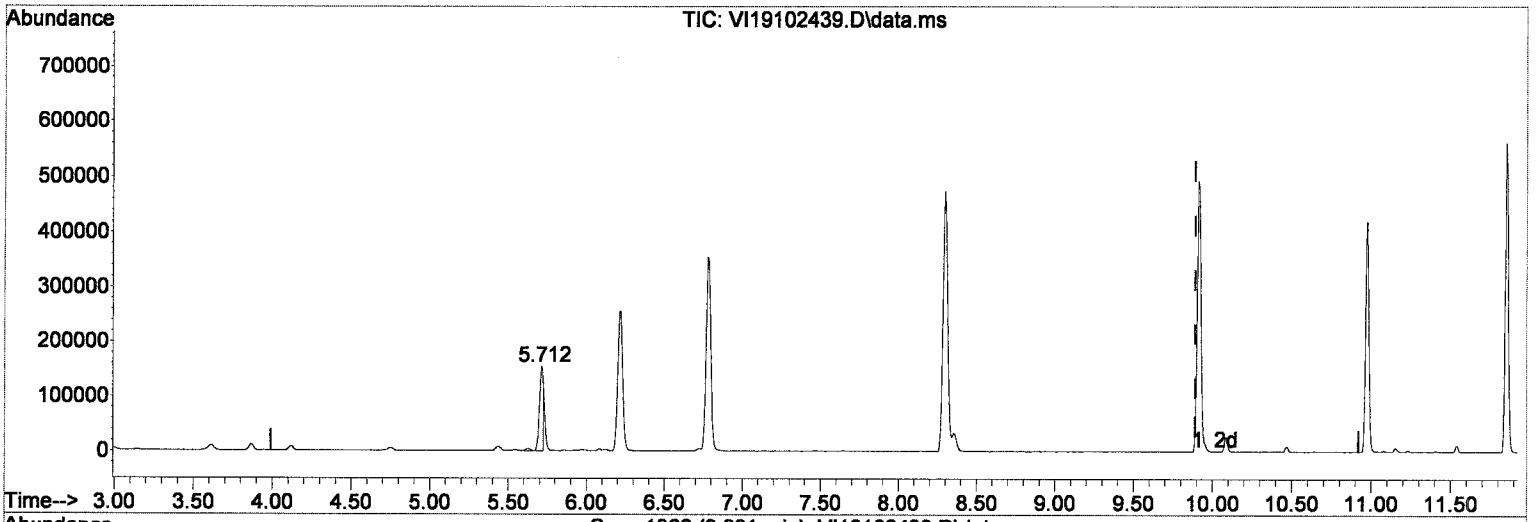


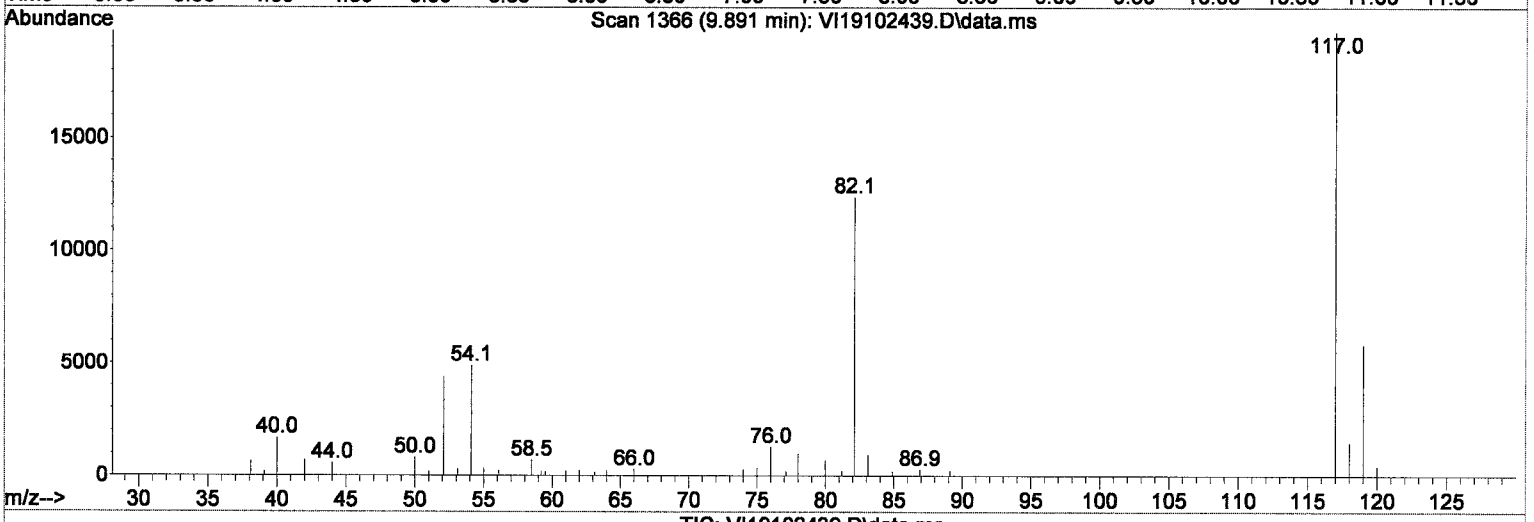
R = 6.87e-004 A*A + 1.55e+000 A + 9.51e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:32:52 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





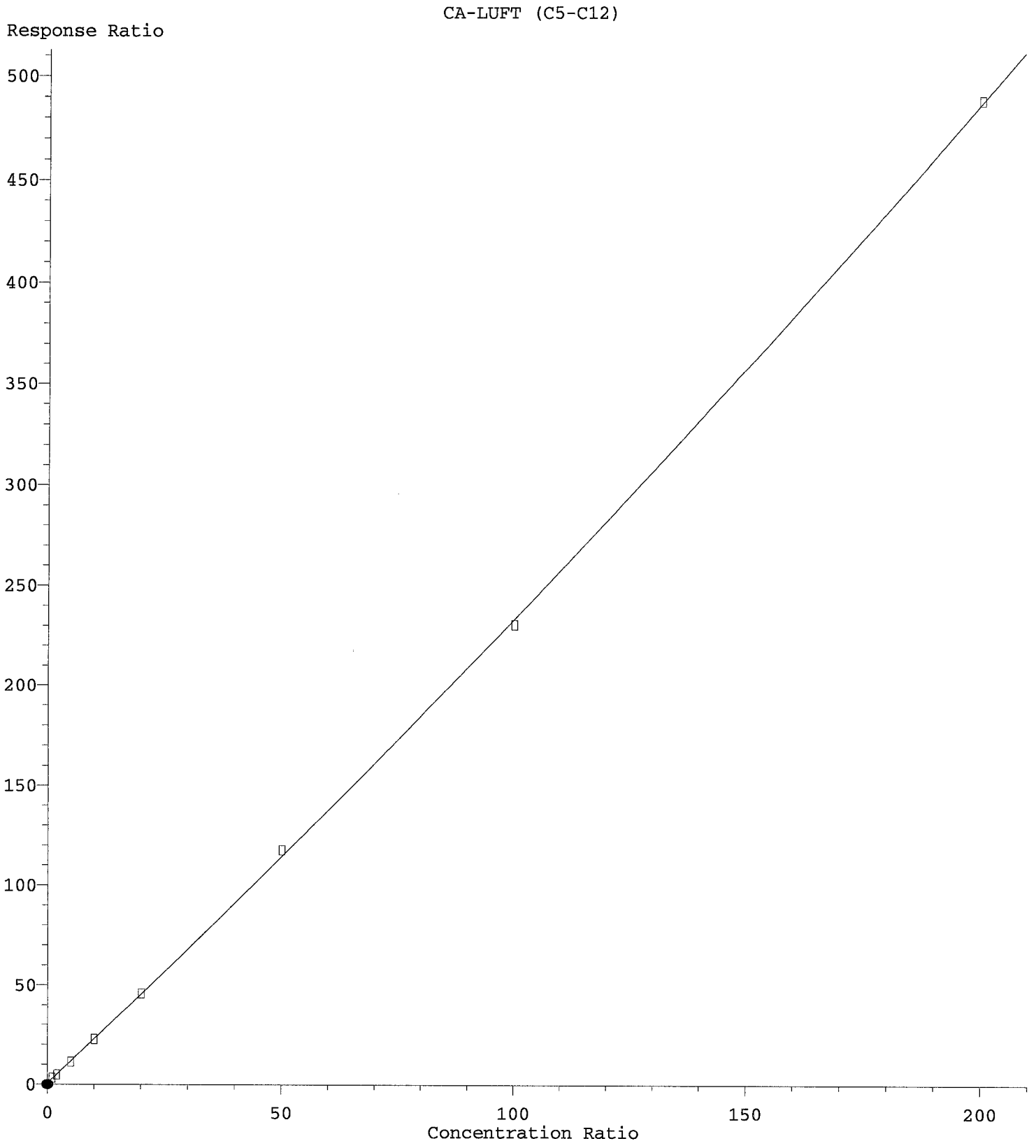
TIC: VI19102439.D\data.ms

(6) TPHg (C6-C10) (H)

9.890min (0.000) 12.28 ug/L m

response 278598

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

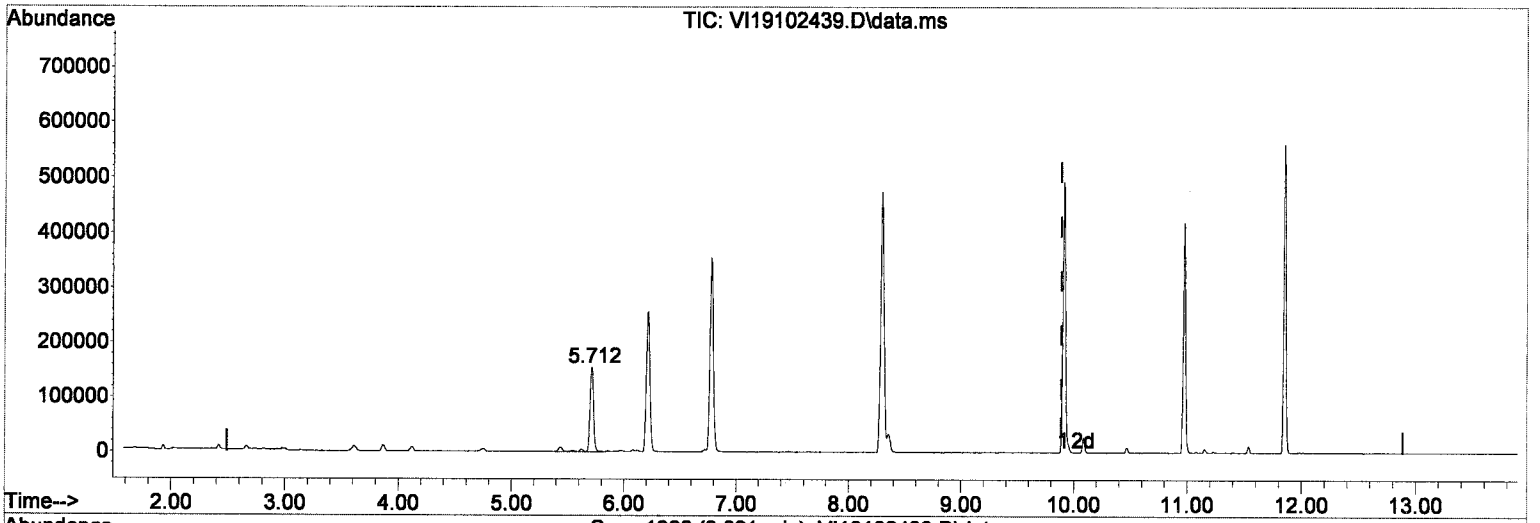


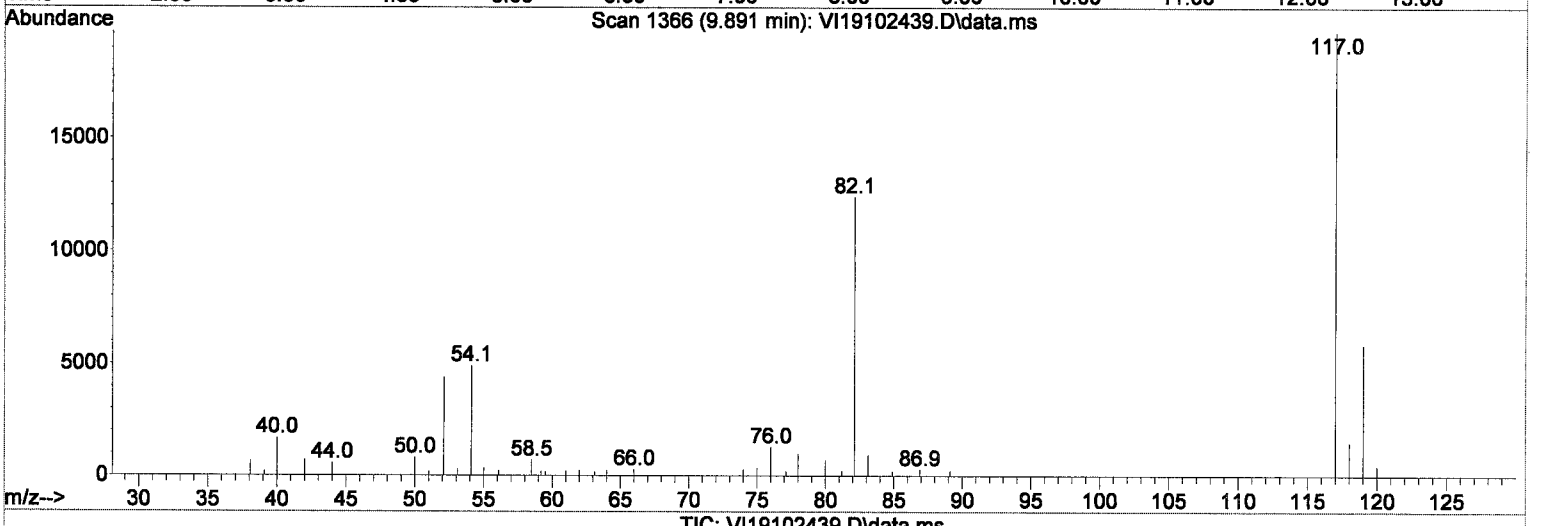
R = 1.05e-003 A*A + 2.22e+000 A + 7.45e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\V1191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\REQUANT\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:32:52 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19102439.D\data.ms

(7) CA-LUFT (C5-C12) (H)

9.890min (0.000) 22.21 ug/L m

response 362637

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102453.D
Acq On : 25 Oct 2019 10:40 am
Operator : MM
Sample : 9J24043-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:55:48 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	50.000	50.000	0.0	103	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	49.705	0.6	103	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	48.785	2.4	102	0.00
4	H	NWTPH-Gx (TPH)	500.000	512.008	-2.4	108	0.00
5	H	TPHg (C5-C9)	500.000	489.707	2.1	102	0.00
6	H	TPHg (C6-C10)	500.000	503.040	-0.6	105	0.00
7	H	CA-LUFT (C5-C12)	500.000	493.527	1.3	104	0.00
8		Benzene (NR)	-1.000	0.000	0.0	100	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	102	0.00
10		Toluene (NR)	-1.000	0.000	0.0	103	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	103	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	100	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	0.00

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

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J24043

Analysis Included

8015D-Mod Gasoline (C6-C10) by GC/MS
CA LUFT GRO
NWTPH-Gx

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9J24043-TUN2	MS Tune	Water		A19I040	10/24/2019 11:59:00PM
9J24043-ICB2	Initial Cal Blank	Water		A19I040	10/25/2019 1:19:00AM
9J24043-CALC	Cal Standard	Water	A19J388	"	10/25/2019 1:46:00AM
9J24043-CALD	Cal Standard	Water	A19J389	"	10/25/2019 2:13:00AM
9J24043-CALE	Cal Standard	Water	A19J390	"	10/25/2019 2:40:00AM
9J24043-CALF	Cal Standard	Water	A19J391	"	10/25/2019 3:07:00AM
9J24043-CALH	Cal Standard	Water	A19J393	"	10/25/2019 4:00:00AM
9J24043-CALI	Cal Standard	Water	A19J394	"	10/25/2019 4:27:00AM
9J24043-CALJ	Cal Standard	Water	A19J395	"	10/25/2019 4:54:00AM
9J24043-CALG	Cal Standard	Water	A19J392	"	10/25/2019 10:13:00AM
9J24043-ICV3	Initial Cal Check	Water	A19G350	"	10/25/2019 10:40:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J2503** Instrument: **VOA-GCMS9**

8015D-Mod Gasoline (C6-C10 Sequence: **9J24043** Matrix: **Water**

9J24043-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALD	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALF	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALG	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALH	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALI	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9J24043-CALJ	**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: 9J24043

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: **A9J2503** Instrument: **VOA-GCMS9**

NWTPH-Gx Sequence: **9J24043** Matrix: **Water**

9J24043-ICV3	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.

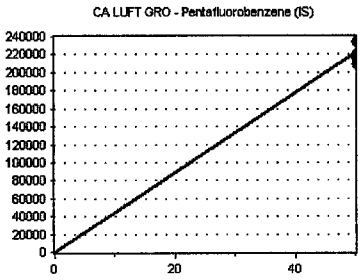
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **CA LUFT GRO** Instrument Cal ID: **VI191025W.M VI191025G.M**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

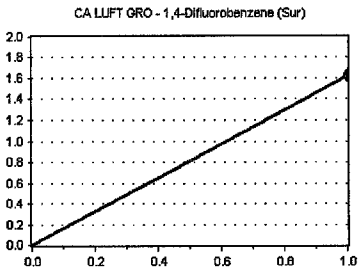


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	6.22
9J24043-CALJ	50	234183	4683.660	6.22

AVE RF **4433.073** RF RSD **4.95** AVE RT **6.22**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

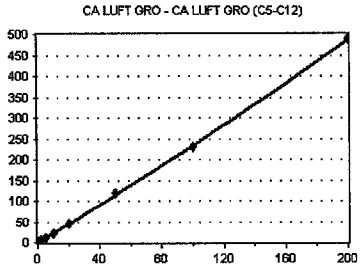


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	50	384961	1.644	6.78

AVE RF **1.626** RF RSD **0.73** AVE RT **6.78**

CA LUFT GRO (C5-C12)

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

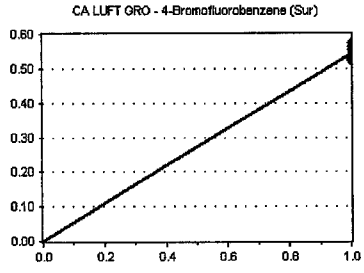


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	681991	3.259	9.89
9J24043-CALD	100	1014687	2.422	9.89
9J24043-CALE	250	2493143	2.257	9.89
9J24043-CALF	500	4877141	2.271	9.89
9J24043-CALG	1000	1.073362E+07	2.291	9.89
9J24043-CALH	2500	2.54612E+07	2.353	9.89
9J24043-CALI	5000	5.393736E+07	2.307	9.89
9J24043-CALJ	10000	1.143412E+08	2.441	9.89

AVE RF **2.450** RF RSD **13.62** AVE RT **9.89**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	109139	0.521	10.97
9J24043-CALD	50	110020	0.525	10.97
9J24043-CALE	50	116770	0.529	10.97
9J24043-CALF	50	115043	0.536	10.97
9J24043-CALG	50	126230	0.539	10.97
9J24043-CALH	50	120135	0.555	10.97
9J24043-CALI	50	131653	0.563	10.97
9J24043-CALJ	50	134509	0.574	10.97

AVE RF **0.543** RF RSD **3.54** AVE RT **10.97**

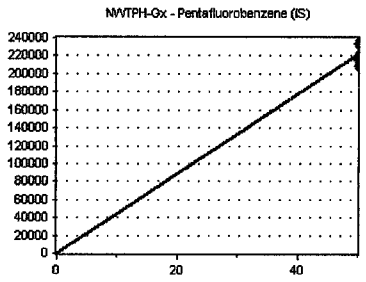
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **NWTPH-Gx** Instrument Cal ID: **VI191025W.M VI191025G.M**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

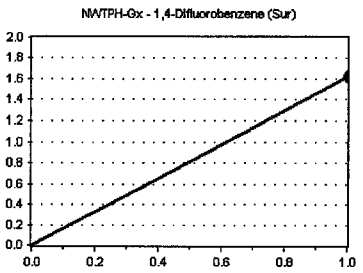


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	6.22
9J24043-CALJ	50	234183	4683.660	6.22

AVE RF **4433.073** RF RSD **4.95** AVE RT **6.22**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

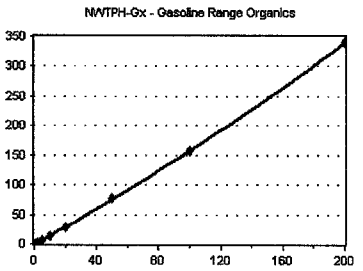


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	50	384961	1.644	6.78

AVE RF **1.626** RF RSD **0.73** AVE RT **6.78**

Gasoline Range Organics

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

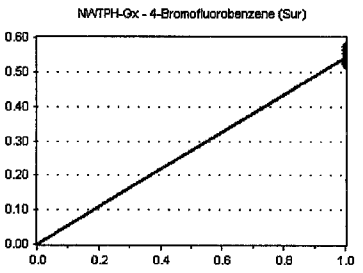


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	193702	0.926	9.89
9J24043-CALD	100	430822	1.028	9.89
9J24043-CALE	250	1374008	1.244	9.89
9J24043-CALF	500	2976997	1.386	9.89
9J24043-CALG	1000	6735895	1.437	9.89
9J24043-CALH	2500	1.67752E+07	1.550	9.89
9J24043-CALI	5000	3.669824E+07	1.569	9.89
9J24043-CALJ	10000	7.956248E+07	1.699	9.89

AVE RF **1.355** RF RSD **19.99** AVE RT **9.89**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	109139	0.521	10.97
9J24043-CALD	50	110020	0.525	10.97
9J24043-CALE	50	116770	0.529	10.97
9J24043-CALF	50	115043	0.536	10.97
9J24043-CALG	50	126230	0.539	10.97
9J24043-CALH	50	120135	0.555	10.97
9J24043-CALI	50	131653	0.563	10.97
9J24043-CALJ	50	134509	0.574	10.97

AVE RF **0.543** RF RSD **3.54** AVE RT **10.97**

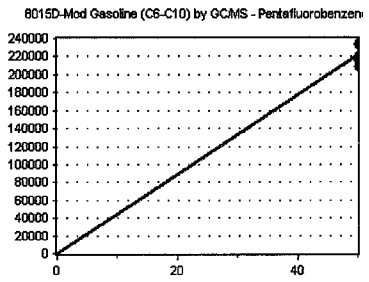
Element Calibration Review Sheet

Calibration ID: **A9J2503** Instrument: **VOA-GCMS9** Calibration Date: **10/25/2019**

Analysis: **8015D-Mod Gasoline (C6-C1** Instrument Cal ID: **VI191025W.M VI191025G.M**

Pentafluorobenzene (IS)

Curve Fit: **AVERAGE RF**

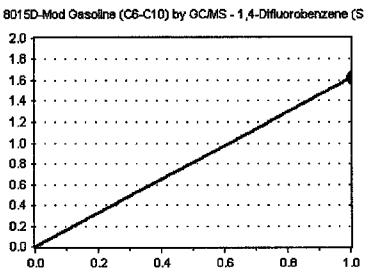


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	6.22
9J24043-CALJ	50	234183	4683.660	6.22

AVE RF **4433.073** RF RSD **4.95** AVE RT **6.22**

1,4-Difluorobenzene (Sur)

Curve Fit: **AVERAGE RF**

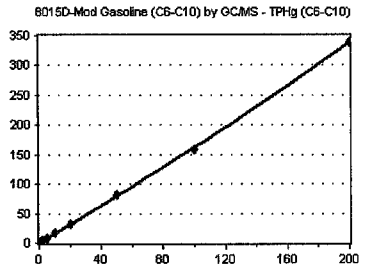


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	50	384961	1.644	6.78

AVE RF **1.626** RF RSD **0.73** AVE RT **6.78**

TPHg (C6-C10)

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

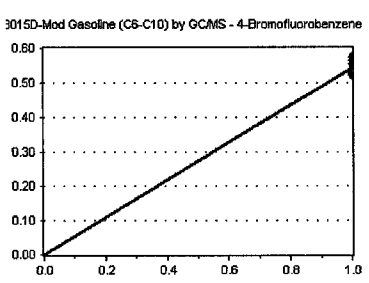


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	557886	2.666	9.89
9J24043-CALD	100	799328	1.908	9.89
9J24043-CALE	250	1839524	1.665	9.89
9J24043-CALF	500	3507779	1.633	9.89
9J24043-CALG	1000	7648071	1.632	9.89
9J24043-CALH	2500	1.778026E+07	1.643	9.89
9J24043-CALI	5000	3.735262E+07	1.597	9.89
9J24043-CALJ	10000	7.933946E+07	1.694	9.89

AVE RF **1.805** RF RSD **20.00** AVE RT **9.89**

4-Bromofluorobenzene (Sur)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	109139	0.521	10.97
9J24043-CALD	50	110020	0.525	10.97
9J24043-CALE	50	116770	0.529	10.97
9J24043-CALF	50	115043	0.536	10.97
9J24043-CALG	50	126230	0.539	10.97
9J24043-CALH	50	120135	0.555	10.97
9J24043-CALI	50	131653	0.563	10.97
9J24043-CALJ	50	134509	0.574	10.97

AVE RF **0.543** RF RSD **3.54** AVE RT **10.97**

Injection Log

Directory: v:\data\2019-10\9J24043

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Vi19102414.d	1.	9J24043-IBL1	1X 5mL DI	24 Oct 2019 14:34
2	2	Vi19102415.d	1.	9J24043-TUN1	A19I040 BFB (IS/...	24 Oct 2019 15:01
3	3	Vi19102416.d	1.	9J24043-ICB1	1X 5mL DI	24 Oct 2019 15:28
4	4	Vi19102417.d	1.	9J24043-CAL1	1X 5mL 0.1/0.2...	24 Oct 2019 15:55
5	5	Vi19102418.d	1.	9J24043-CAL2	1X 5mL 0.2/0.4...	24 Oct 2019 16:21
6	6	Vi19102419.d	1.	9J24043-CAL3	1X 5mL 0.4/0.8...	24 Oct 2019 16:48
7	7	Vi19102420.d	1.	9J24043-CAL4	1X 5mL 1/2PPB ...	24 Oct 2019 17:15
8	8	Vi19102421.d	1.	9J24043-CAL5	1X 5mL 2/4PPB ...	24 Oct 2019 17:42
9	9	Vi19102422.d	1.	9J24043-CAL6	1X 5mL 5/10PPB...	24 Oct 2019 18:09
10	10	Vi19102423.d	1.	9J24043-CAL7	1X 5mL 10/20PP...	24 Oct 2019 18:36
11	11	Vi19102424.d	1.	9J24043-CAL8	1X 5mL 20/40PP...	24 Oct 2019 19:03
12	12	Vi19102425.d	1.	9J24043-CAL9	1X 5mL 50/100P...	24 Oct 2019 19:30
13	13	Vi19102426.d	1.	9J24043-IBL2	1X 5mL DI	24 Oct 2019 19:57
14	14	Vi19102427.d	1.	9J24043-CALA	1X 5mL 100/200...	24 Oct 2019 20:24
15	15	Vi19102428.d	1.	9J24043-IBL3	1X 5mL DI	24 Oct 2019 20:51
16	16	Vi19102429.d	1.	9J24043-CALB	1X 5mL 200/400...	24 Oct 2019 21:17
17	17	Vi19102430.d	1.	9J24043-IBL4	1X 5mL DI	24 Oct 2019 21:44
18	18	Vi19102431.d	1.	9J24043-IBL5	1X 5mL DI	24 Oct 2019 22:11
19	19	Vi19102432.d	1.	9J24043-ICV1	1X 5mL 20/40PP...	24 Oct 2019 22:38
20	20	Vi19102433.d	1.	9J24043-ICV2	1X 5mL 5/1250P...	24 Oct 2019 23:05
21	21	Vi19102434.d	1.	9J24043-IBL6	1X 5mL DI	24 Oct 2019 23:32
22	22	Vi19102435.d	1.	9J24043-TUN2	A19I040 BFB (IS/...	24 Oct 2019 23:59
23	23	Vi19102436.d	1.	9J24043-RT1	A18A167 VPH RT STD	25 Oct 2019 00:26
24	24	Vi19102437.d	1.	9J24043-IBL7	1X 5mL DI	25 Oct 2019 00:52
25	25	Vi19102438.d	1.	9J24043-ICB2	1X 5mL DI	25 Oct 2019 01:19
26	26	Vi19102439.d	1.	9J24043-CALC	1X 5mL 50PPB GX	25 Oct 2019 01:46
27	27	Vi19102440.d	1.	9J24043-CALD	1X 5mL 100PPB GX	25 Oct 2019 02:13
28	28	Vi19102441.d	1.	9J24043-CALE	1X 5mL 250PPB GX	25 Oct 2019 02:40
29	29	Vi19102442.d	1.	9J24043-CALF	1X 5mL 500PPB GX	25 Oct 2019 03:07
30	30	Vi19102443.d	1.	9J24043-CALG	1X 5mL 1000PPB GX	25 Oct 2019 03:34
31	31	Vi19102444.d	1.	9J24043-CALH	1X 5mL 2500PPB GX	25 Oct 2019 04:00
32	32	Vi19102445.d	1.	9J24043-CALI	1X 5mL 5000PPB GX	25 Oct 2019 04:27
33	33	Vi19102446.d	1.	9J24043-CALJ	1X 5mL 10000PP...	25 Oct 2019 04:54
34	34	Vi19102447.d	1.	9J24043-IBL8	1X 5mL DI	25 Oct 2019 05:21
35	35	Vi19102448.d	1.	9J24043-IBL9	1X 5mL DI	25 Oct 2019 05:48
36	36	Vi19102449.d	1.	9J24043-ICV3	1X 5mL 500PPB GX	25 Oct 2019 06:15
37	37	Vi19102450.d	1.	9J24043-IBLA	1X 5mL DI	25 Oct 2019 06:42

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102414.D
Acq On : 24 Oct 2019 2:34 pm
Operator : MM
Sample : 9J24043-IBL1
Misc : 1X 5mL DI
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

NR

Quant Time: Oct 25 08:52:04 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

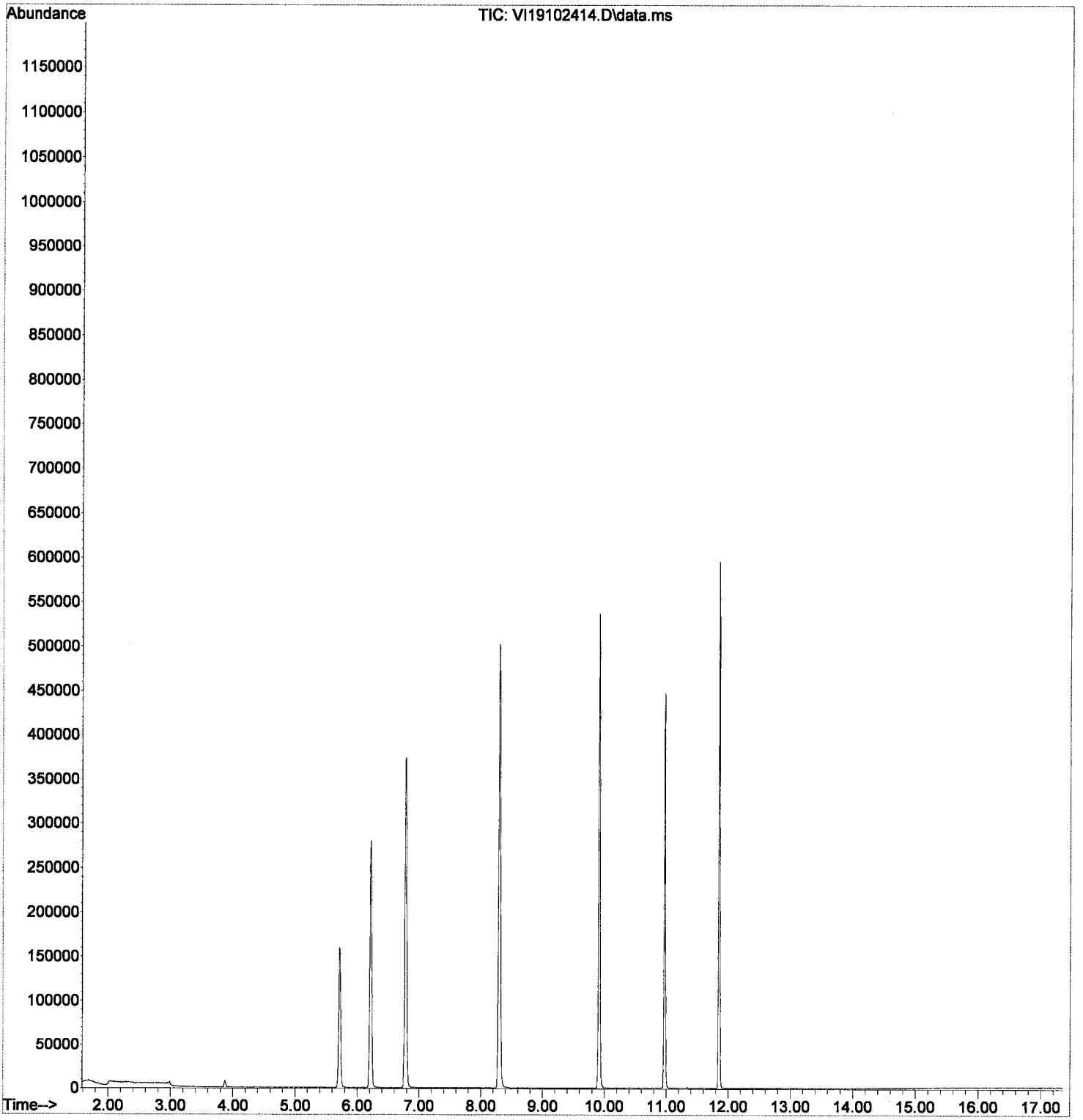
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	116268	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.909	117	306026	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	138672	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.712	111	110907	48.55	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	362815	49.39	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	408743	50.89	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	116096	51.81	ug/L	0.00
Target Compounds						Qvalue
6) Chloroethane	2.451	64	166	0.14	ug/L	# 58
14) Methylene Chloride	3.868	84	3943	0.99	ug/L	87
15) Acetone	3.948	43	891	0.87	ug/L	93

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102414.D
Acq On : 24 Oct 2019 2:34 pm
Operator : MM
Sample : 9J24043-IBL1
Misc : 1X 5mL DI
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:04 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

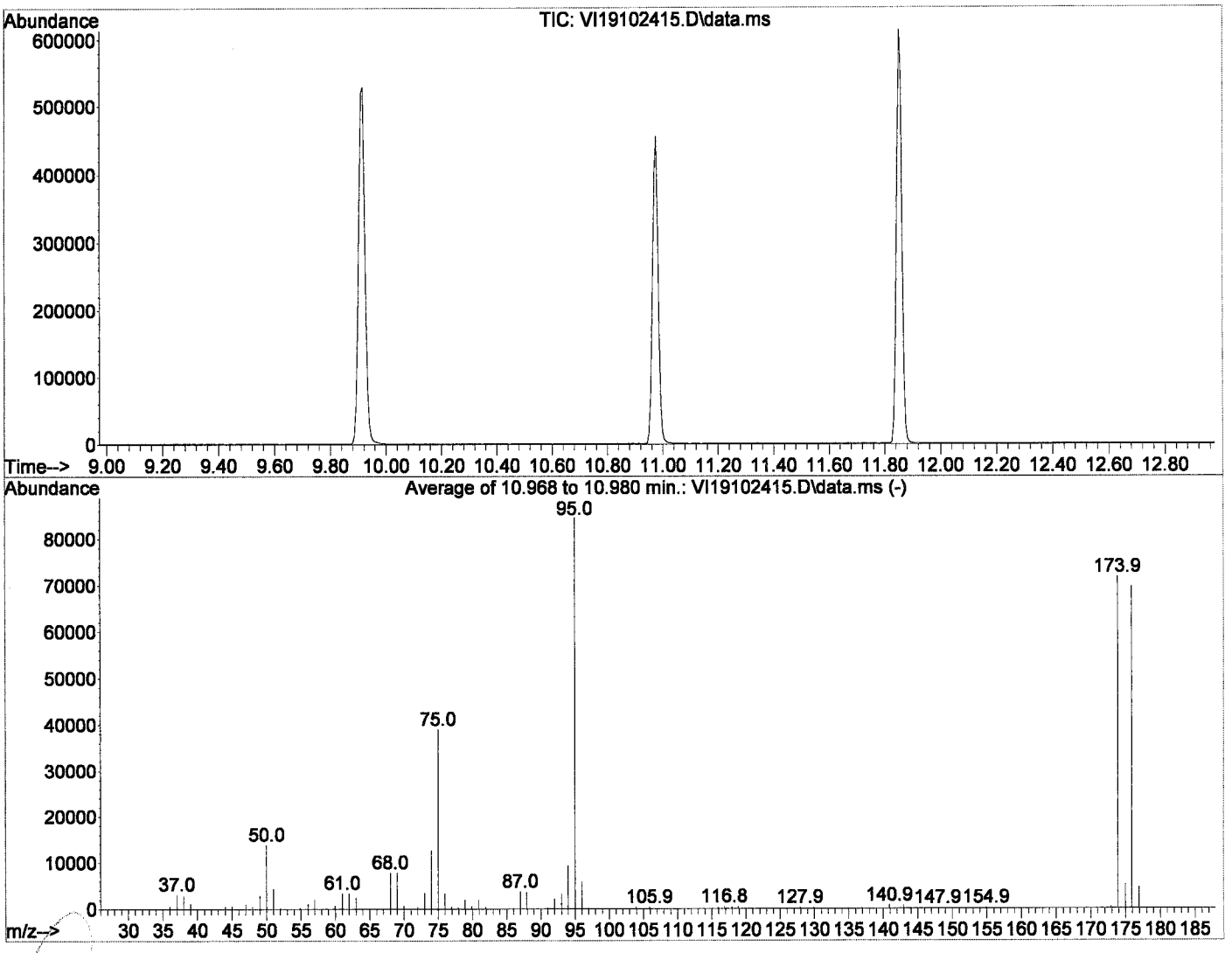


BFB

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102415.D
Acq On : 24 Oct 2019 3:01 pm
Operator : MM
Sample : 9J24043-TUN1
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\VI191025W.M
Title : EPA 8260: Volatile Organic Compounds
Last Update : Fri Oct 25 08:32:21 2019



AutoFind: Scans 1543, 1544, 1545; Background Corrected with Scan 1536

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	117.9	84595	PASS
96	95	5	9	6.8	5736	PASS
173	174	0.00	2	0.4	280	PASS
174	95	50	200	84.8	71757	PASS
175	174	5	9	7.2	5145	PASS
176	174	95	105	97.0	69587	PASS
177	176	5	10	6.5	4525	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102415.D
Acq On : 24 Oct 2019 3:01 pm
Operator : MM
Sample : 9J24043-TUN1
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:12 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

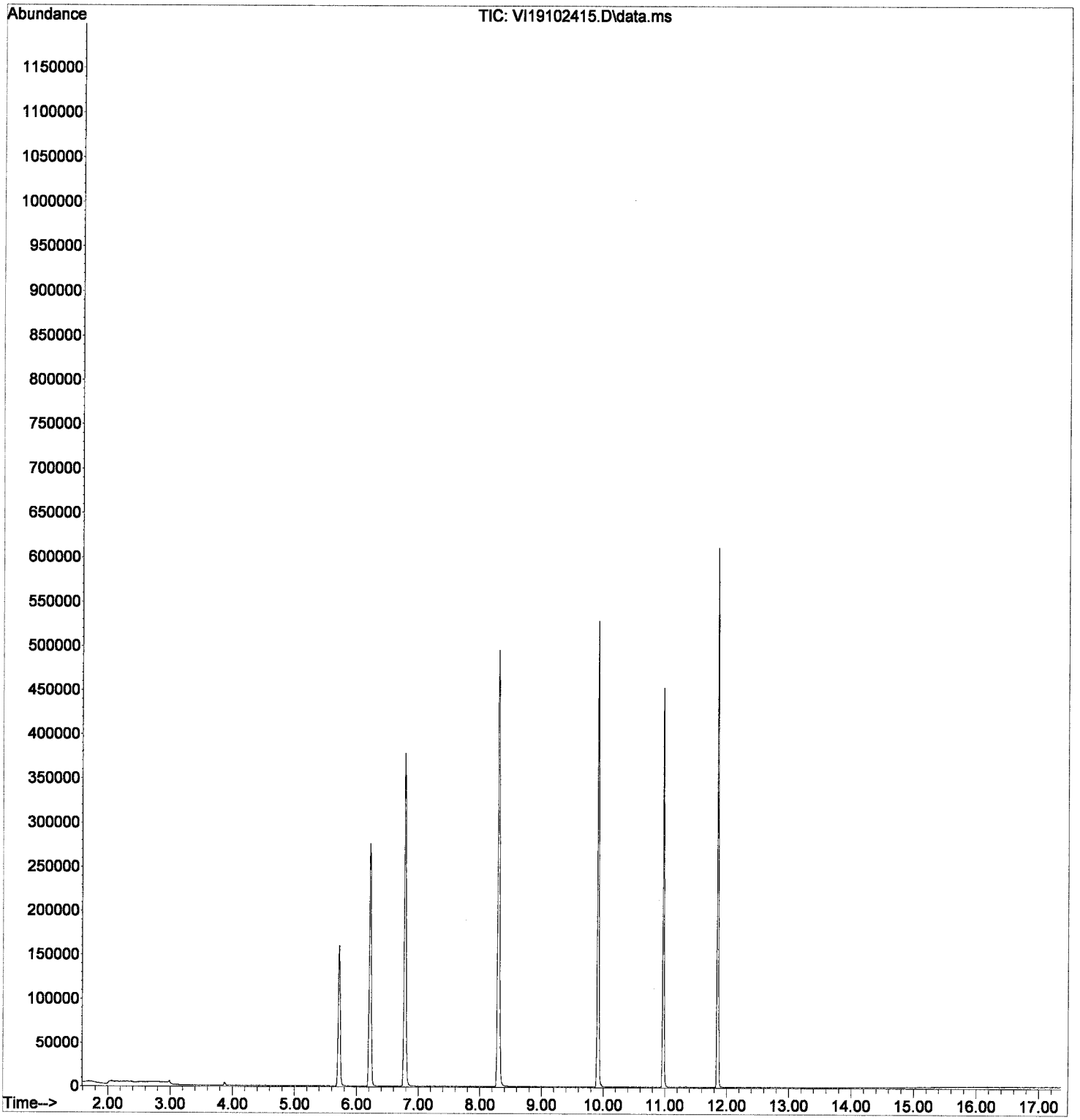
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	115135	50.00	ug/L	0.00
45) Chlorobenzene-d5 (I)	9.916	117	306446	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	141323	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	110753	48.96	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	360182	49.52	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	404469	50.29	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	115450	50.56	ug/L	0.00
Target Compounds						Qvalue
3) Chloromethane	1.904	50	226	0.09	ug/L #	47
6) Chloroethane	2.463	64	432	0.38	ug/L #	36
14) Methylene Chloride	3.875	84	1793	Below Cal	#	76
15) Acetone	3.948	43	857	0.85	ug/L #	44
19) tert-Butanol (TBA)	4.307	59	115	0.26	ug/L	46

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102415.D
Acq On : 24 Oct 2019 3:01 pm
Operator : MM
Sample : 9J24043-TUN1
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:12 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102416.D
Acq On : 24 Oct 2019 3:28 pm
Operator : MM
Sample : 9J24043-ICB1
Misc : 1X 5mL DI
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

10/25/19

Quant Time: Oct 25 08:52:24 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

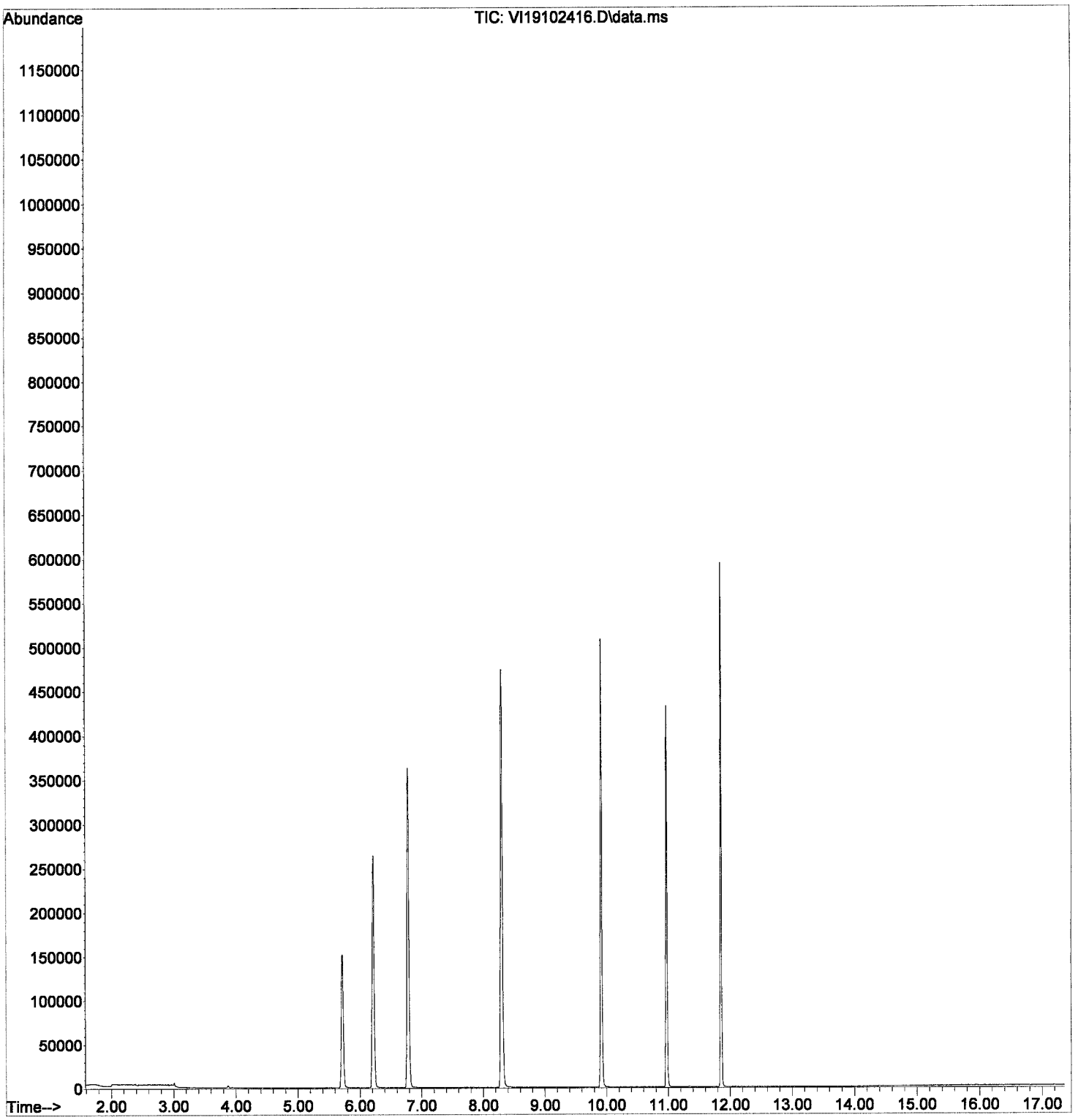
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	109157	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	292802	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	134268	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.712	111	106415	49.62 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.782	114	343590	49.82 ug/L	0.00
48) Toluene-d8 (S)	8.297	98	387024	50.36 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	109949	50.68 ug/L	0.00
Target Compounds					Qvalue
3) Chloromethane	1.897	50	228	0.10 ug/L #	47
6) Chloroethane	2.530	64	212	0.19 ug/L #	36
14) Methylene Chloride	3.868	84	1359	Below Cal	85
15) Acetone	3.948	43	763	0.80 ug/L #	44

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102416.D
Acq On : 24 Oct 2019 3:28 pm
Operator : MM
Sample : 9J24043-ICB1
Misc : 1X 5mL DI
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:24 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102417.D
Acq On : 24 Oct 2019 3:55 pm
Operator : MM
Sample : 9J24043-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOCR
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:17:09 2019
Quant Method : C:\msdchem\1\methods\~~VI191025W~~.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	116102	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.909	117	307577	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	139681	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.712	111	111441	46.79	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	364447	54.80	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	406288	51.17	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	116090	51.67	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.897	50	479	0.18	ug/L	91
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	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	0.000		0	N.D.		
13) Acrolein	0.000		0	N.D.		
14) Methylene Chloride	3.875	84	2024	Below Cal		84
15) Acetone	0.000		0	N.D.	d	
16) t-1,2-Dichloroethene	0.000		0	N.D.		
17) n-Hexane	0.000		0	N.D.		
18) Methyl-tert-butyl-ether	0.000		0	N.D.	d	
19) tert-Butanol (TBA)	4.300	59	2472	6.89	ug/L	83
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.	d	
22) Acrylonitrile	0.000		0	N.D.		
23) Ethyl-tert-butyl ether...	0.000		0	N.D.		
24) Vinyl Acetate	0.000		0	N.D.		
25) c-1,2-Dichloroethene	0.000		0	N.D.		
26) 2,2-Dichloropropane	0.000		0	N.D.		
27) Bromochloromethane	0.000		0	N.D.		
28) Chloroform	0.000		0	N.D.		
29) Carbon Tetrachloride	0.000		0	N.D.		
30) Tetrahydrofuran	0.000		0	N.D.		
31) 1,1,1-Trichloroethane	0.000		0	N.D.		
33) 1,1-Dichloropropene	0.000		0	N.D.		
34) 2-Butanone (MEK)	0.000		0	N.D.	d	
35) Benzene	6.132	78	917	0.12	ug/L	55
36) tert-Amyl methyl ether...	0.000		0	N.D.		
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.	d	
38) iso-Butyl Alcohol	0.000		0	N.D.		
40) Trichloroethene (TCE)	0.000		0	N.D.		
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.		
42) Dibromomethane	0.000		0	N.D.		
43) 1,2-Dichloropropane	0.000		0	N.D.		
44) Bromodichloromethane	0.000		0	N.D.		
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102417.D
Acq On : 24 Oct 2019 3:55 pm
Operator : MM
Sample : 9J24043-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOCR
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:17:09 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	978	0.11	ug/L	85
50) Tetrachloroethene (PCE)	0.000		0	N.D.		
51) 4-Methyl-2-Pentanone (...	0.000		0	N.D.	d	
52) t-1,3-Dichloropropene	0.000		0	N.D.		
53) 1,1,2-Trichloroethane	0.000		0	N.D.		
54) Dibromochloromethane	0.000		0	N.D.		
55) 1,3-Dichloropropane	0.000		0	N.D.	d	
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.		
57) 2-Hexanone	0.000		0	N.D.		
58) Chlorobenzene	9.934	112	480	0.09	ug/L #	35
59) Ethylbenzene	9.952	91	942	0.10	ug/L	91
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
61) m,p-Xylenes (2)	10.086	91	1368	0.27	ug/L	84
62) o-Xylene	10.469	91	585	0.15	ug/L	89
63) Styrene	0.000		0	N.D.	d	
64) Bromoform	0.000		0	N.D.		
65) Isopropylbenzene	0.000		0	N.D.	d	
68) Bromobenzene	11.059	156	124	0.06	ug/L #	82
69) n-Propylbenzene	11.078	91	873	0.10	ug/L	58
70) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
71) 2-Chlorotoluene	0.000		0	N.D.		
72) 1,3,5-Trimethylbenzene	11.230	105	556	0.10	ug/L	92
73) 1,2,3-Trichloropropane	0.000		0	N.D.		
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.		
75) 4-Chlorotoluene	0.000		0	N.D.	d	
76) tert-Butylbenzene	0.000		0	N.D.	d	
77) 1,2,4-Trimethylbenzene	11.540	105	536	0.17	ug/L	80
78) sec-Butylbenzene	0.000		0	N.D.	d	
79) 4-Isopropyltoluene	11.728	119	481	0.20	ug/L	68
80) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
81) 1,4-Dichlorobenzene	11.868	146	311	0.08	ug/L #	41
82) n-Butylbenzene	12.045	91	379	0.08	ug/L	81
83) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.		
85) Hexachlorobutadiene	0.000		0	N.D.		
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
87) Naphthalene	0.000		0	N.D.	d	
88) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102417.D
Acq On : 24 Oct 2019 3:55 pm
Operator : MM
Sample : 9J24043-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOCR
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:12 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	116102	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.909	117	307577	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	139681	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	111441	46.79	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	364447	54.80	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	406288	51.17	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	116090	51.67	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.			
3) Chloromethane	1.897	50	479	0.18	ug/L		91
4) Vinyl Chloride	2.001	62	158	0.07	ug/L	#	50
5) Bromomethane	2.372	96	279	0.15	ug/L	#	64
6) Chloroethane	2.506	64	114	0.09	ug/L	#	61
7) Trichlorofluoromethane	2.676	101	188	0.05	ug/L	#	27
8) Ethanol	3.236	45	213	4.59	ug/L	#	29
9) 1,1-Dichloroethene	3.236	61	133	0.05	ug/L	#	28
10) Carbon Disulfide	3.254	76	531	0.11	ug/L		78
11) Freon 113	0.000		0	N.D.			
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.			
14) Methylene Chloride	3.875	84	2024	Below Cal			84
15) Acetone	3.948	43	877	0.88	ug/L	#	44
16) t-1,2-Dichloroethene	0.000		0	N.D.			
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.167	73	444	0.08	ug/L		63
19) tert-Butanol (TBA)	4.300	59	2472	6.89	ug/L		83
20) Diisopropyl ether (DIPE)	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.690	63	147	0.04	ug/L	#	48
22) Acrylonitrile	0.000		0	N.D.			
23) Ethyl-tert-butyl ether...	0.000		0	N.D.			
24) Vinyl Acetate	0.000		0	N.D.			
25) c-1,2-Dichloroethene	0.000		0	N.D.			
26) 2,2-Dichloropropane	0.000		0	N.D.			
27) Bromochloromethane	0.000		0	N.D.			
28) Chloroform	0.000		0	N.D.			
29) Carbon Tetrachloride	0.000		0	N.D.			
30) Tetrahydrofuran	0.000		0	N.D.			
31) 1,1,1-Trichloroethane	0.000		0	N.D.			
33) 1,1-Dichloropropene	0.000		0	N.D.			
34) 2-Butanone (MEK)	5.882	43	122	0.08	ug/L		52
35) Benzene	6.132	78	917	0.12	ug/L		55
36) tert-Amyl methyl ether...	0.000		0	N.D.			
37) 1,2-Dichloroethane (EDC)	6.345	62	176	0.05	ug/L		54
38) iso-Butyl Alcohol	0.000		0	N.D.			
40) Trichloroethene (TCE)	0.000		0	N.D.			
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.			
42) Dibromomethane	0.000		0	N.D.			
43) 1,2-Dichloropropane	0.000		0	N.D.			
44) Bromodichloromethane	0.000		0	N.D.			
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.			
47) c-1,3-Dichloropropene	0.000		0	N.D.			

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102417.D
Acq On : 24 Oct 2019 3:55 pm
Operator : MM
Sample : 9J24043-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOCR
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:12 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

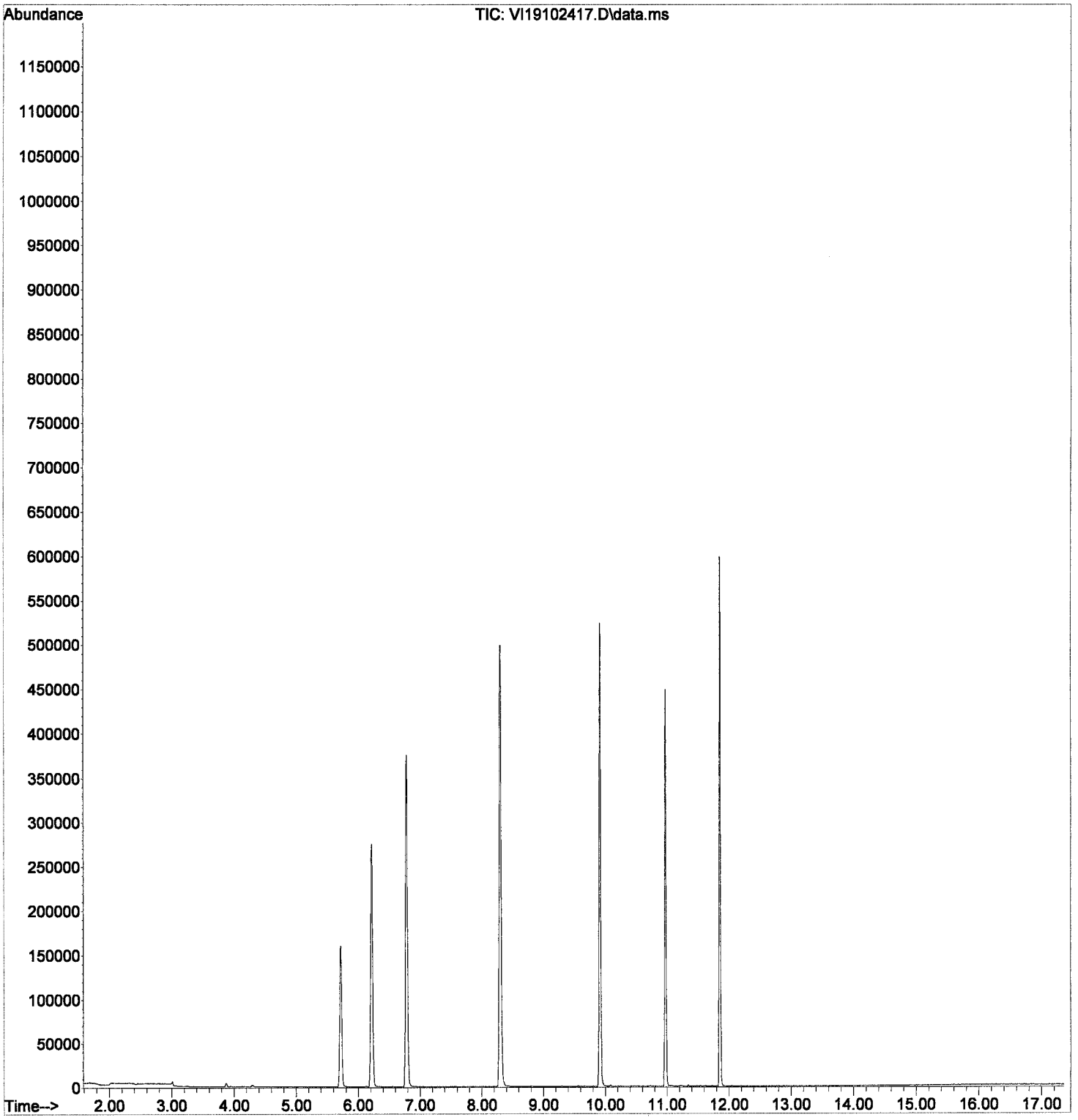
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	978	0.11	ug/L		85
50) Tetrachloroethene (PCE)	0.000		0	N.D.			
51) 4-Methyl-2-Pentanone (...	8.808	43	433	0.16	ug/L	#	43
52) t-1,3-Dichloropropene	0.000		0	N.D.			
53) 1,1,2-Trichloroethane	0.000		0	N.D.			
54) Dibromochloromethane	0.000		0	N.D.			
55) 1,3-Dichloropropane	9.289	76	204	0.06	ug/L	#	27
56) 1,2-Dibromoethane (EDB)	0.000		0	N.D.			
57) 2-Hexanone	0.000		0	N.D.			
58) Chlorobenzene	9.934	112	480	0.09	ug/L	#	35
59) Ethylbenzene	9.952	91	942	0.10	ug/L		91
60) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
61) m,p-Xylenes (2)	10.086	91	1368	0.27	ug/L		84
62) o-Xylene	10.469	91	585	0.15	ug/L		89
63) Styrene	10.524	104	329	0.22	ug/L	#	42
64) Bromoform	0.000		0	N.D.			
65) Isopropylbenzene	10.731	105	805	0.22	ug/L		54
68) Bromobenzene	11.059	156	124	0.06	ug/L	#	82
69) n-Propylbenzene	11.078	91	873	0.10	ug/L		58
70) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
71) 2-Chlorotoluene	0.000		0	N.D.			
72) 1,3,5-Trimethylbenzene	11.230	105	556	0.10	ug/L		92
73) 1,2,3-Trichloropropane	0.000		0	N.D.			
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.339	91	458	0.09	ug/L	#	45
76) tert-Butylbenzene	11.485	91	177	0.06	ug/L	#	74
77) 1,2,4-Trimethylbenzene	11.540	105	536	0.17	ug/L		80
78) sec-Butylbenzene	11.619	105	687	0.10	ug/L		59
79) 4-Isopropyltoluene	11.728	119	481	0.20	ug/L		68
80) 1,3-Dichlorobenzene	11.801	146	273	0.08	ug/L	#	76
81) 1,4-Dichlorobenzene	11.868	146	311	0.08	ug/L	#	41
82) n-Butylbenzene	12.045	91	379	0.08	ug/L		81
83) 1,2-Dichlorobenzene	12.185	146	241	0.07	ug/L	#	25
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	0.000		0	N.D.			
86) 1,2,4-Trichlorobenzene	0.000		0	N.D.			
87) Naphthalene	13.633	128	452	0.48	ug/L		81
88) 1,2,3-Trichlorobenzene	0.000		0	N.D.			

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102417.D
Acq On : 24 Oct 2019 3:55 pm
Operator : MM
Sample : 9J24043-CAL1
Misc : 1X 5mL 0.1/0.2PPB VOCR
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:12 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:19:21 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	114788	50.00	ug/L	0.00
45) Chlorobenzene-d5 (I)	9.916	117	302974	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	135021	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	110610	46.98	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	359462	54.66	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	403793	51.63	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	113180	52.11	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	1.904	50	669	0.25	ug/L	89
4) Vinyl Chloride	2.007	62	406	0.17	ug/L	91
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	0.000		0	N.D.	d	
10) Carbon Disulfide	0.000		0	N.D.	d	
11) Freon 113	0.000		0	N.D.	d	
12) Iodomethane	0.000		0	N.D.		
13) Acrolein	0.000		0	N.D.		
14) Methylene Chloride	3.875	84	2201	Below Cal		87
15) Acetone	3.954	43	1168	1.18	ug/L	93
16) t-1,2-Dichloroethene	4.045	61	360	0.14	ug/L	74
17) n-Hexane	0.000		0	N.D.		
18) Methyl-tert-butyl-ether	0.000		0	N.D.	d	
19) tert-Butanol (TBA)	4.300	59	4690	13.22	ug/L	91
20) Diisopropyl ether (DIPE)	0.000		0	N.D.		
21) 1,1-Dichloroethane	0.000		0	N.D.	d	
22) Acrylonitrile	0.000		0	N.D.		
23) Ethyl-tert-butyl ether...	0.000		0	N.D.		
24) Vinyl Acetate	0.000		0	N.D.	d	
25) c-1,2-Dichloroethene	0.000		0	N.D.	d	
26) 2,2-Dichloropropane	0.000		0	N.D.	d	
27) Bromochloromethane	0.000		0	N.D.		
28) Chloroform	5.529	83	587	0.15	ug/L	74
29) Carbon Tetrachloride	0.000		0	N.D.	d	
30) Tetrahydrofuran	0.000		0	N.D.		
31) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
33) 1,1-Dichloropropene	0.000		0	N.D.	d	
34) 2-Butanone (MEK)	0.000		0	N.D.	d	
35) Benzene	6.126	78	1584	0.20	ug/L	77
36) tert-Amyl methyl ether...	0.000		0	N.D.		
37) 1,2-Dichloroethane (EDC)	0.000		0	N.D.	d	
38) iso-Butyl Alcohol	0.000		0	N.D.	d	
40) Trichloroethene (TCE)	6.752	130	372	0.19	ug/L #	75
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.		
42) Dibromomethane	0.000		0	N.D.	d	
43) 1,2-Dichloropropane	0.000		0	N.D.	d	
44) Bromodichloromethane	0.000		0	N.D.	d	
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.		
47) c-1,3-Dichloropropene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:19:21 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.352	91	1744	0.21	ug/L		93
50) Tetrachloroethene (PCE)	8.808	166	267	0.14	ug/L	#	25
51) 4-Methyl-2-Pentanone (...	8.796	43	890	0.33	ug/L		85
52) t-1,3-Dichloropropene	0.000		0	N.D.	d		
53) 1,1,2-Trichloroethane	9.009	97	288	0.14	ug/L	#	10
54) Dibromochloromethane	0.000		0	N.D.			
55) 1,3-Dichloropropane	9.289	76	568	0.17	ug/L		84
56) 1,2-Dibromoethane (EDB)	9.423	107	279	0.13	ug/L		84
57) 2-Hexanone	0.000		0	N.D.	d		
58) Chlorobenzene	9.928	112	1045	0.19	ug/L	#	25
59) Ethylbenzene	9.952	91	1835	0.21	ug/L		93
60) 1,1,1,2-Tetrachloroethane	9.989	131	129	0.07	ug/L	#	74
61) m,p-Xylenes (2)	10.086	91	2470	0.45	ug/L		93
62) o-Xylene	10.469	91	1221	0.26	ug/L		90
63) Styrene	10.518	104	754	0.31	ug/L		82
64) Bromoform	0.000		0	N.D.			
65) Isopropylbenzene	10.737	105	1347	0.29	ug/L		86
68) Bromobenzene	11.059	156	432	0.22	ug/L		89
69) n-Propylbenzene	11.078	91	1649	0.19	ug/L		94
70) 1,1,2,2-Tetrachloroethane	11.138	85	305	0.17	ug/L	#	75
71) 2-Chlorotoluene	0.000		0	N.D.	d		
72) 1,3,5-Trimethylbenzene	11.230	105	1127	0.20	ug/L		79
73) 1,2,3-Trichloropropane	0.000		0	N.D.			
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.339	91	1020	0.20	ug/L		80
76) tert-Butylbenzene	11.485	91	602	0.19	ug/L	#	77
77) 1,2,4-Trimethylbenzene	11.540	105	1066	0.27	ug/L		83
78) sec-Butylbenzene	11.619	105	1301	0.19	ug/L		81
79) 4-Isopropyltoluene	11.722	119	919	0.29	ug/L		98
80) 1,3-Dichlorobenzene	11.802	146	629	0.18	ug/L		91
81) 1,4-Dichlorobenzene	11.862	146	725	0.19	ug/L	#	31
82) n-Butylbenzene	12.045	91	805	0.17	ug/L		79
83) 1,2-Dichlorobenzene	12.185	146	624	0.19	ug/L		90
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	0.000		0	N.D.			
86) 1,2,4-Trichlorobenzene	13.347	180	244	0.16	ug/L		66
87) Naphthalene	13.627	128	924	0.58	ug/L		81
88) 1,2,3-Trichlorobenzene	13.791	180	261	0.17	ug/L		76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:16 2019
Quant Method : C:\msdchem\1\methods\VI~~191025W~~.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	114788	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.916	117	302974	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	135021	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	110610	46.98	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	359462	54.66	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	403793	51.63	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	113180	52.11	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	202	0.09	ug/L	#	49
3) Chloromethane	1.904	50	669	0.25	ug/L		89
4) Vinyl Chloride	2.007	62	406	0.17	ug/L		91
5) Bromomethane	2.366	96	403	0.22	ug/L	#	8
6) Chloroethane	2.512	64	534	0.44	ug/L	#	62
7) Trichlorofluoromethane	2.670	101	442	0.12	ug/L	#	76
8) Ethanol	3.242	45	573	12.50	ug/L	#	29
9) 1,1-Dichloroethene	3.236	61	354	0.12	ug/L	#	62
10) Carbon Disulfide	3.260	76	912	0.19	ug/L		78
11) Freon 113	3.297	101	119	0.06	ug/L	#	19
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.			
14) Methylene Chloride	3.875	84	2201	Below Cal			87
15) Acetone	3.954	43	1168	1.18	ug/L		93
16) t-1,2-Dichloroethene	4.045	61	360	0.14	ug/L		74
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.167	73	1035	0.18	ug/L		63
19) tert-Butanol (TBA)	4.300	59	4690	13.22	ug/L		91
20) Diisopropyl ether (DIPE)	0.000		0	N.D.			
21) 1,1-Dichloroethane	4.690	63	650	0.18	ug/L	#	48
22) Acrylonitrile	0.000		0	N.D.			
23) Ethyl-tert-butyl ether...	0.000		0	N.D.			
24) Vinyl Acetate	4.982	43	476	0.11	ug/L		74
25) c-1,2-Dichloroethene	5.243	61	345	0.12	ug/L	#	70
26) 2,2-Dichloropropane	5.359	77	299	0.12	ug/L	#	30
27) Bromochloromethane	0.000		0	N.D.			
28) Chloroform	5.529	83	587	0.15	ug/L		74
29) Carbon Tetrachloride	5.675	117	123	0.05	ug/L	#	14
30) Tetrahydrofuran	0.000		0	N.D.			
31) 1,1,1-Trichloroethane	5.730	97	415	0.13	ug/L	#	25
33) 1,1-Dichloropropene	5.864	75	388	0.15	ug/L	#	43
34) 2-Butanone (MEK)	5.876	43	395	0.26	ug/L		52
35) Benzene	6.126	78	1584	0.20	ug/L		77
36) tert-Amyl methyl ether...	0.000		0	N.D.			
37) 1,2-Dichloroethane (EDC)	6.351	62	371	0.12	ug/L		54
38) iso-Butyl Alcohol	6.387	43	468	3.43	ug/L		89
40) Trichloroethene (TCE)	6.752	130	372	0.19	ug/L	#	75
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.			
42) Dibromomethane	7.196	93	115	0.08	ug/L	#	2
43) 1,2-Dichloropropane	7.312	63	259	0.12	ug/L	#	35
44) Bromodichloromethane	7.379	83	222	0.08	ug/L	#	27
46) 2-Chloroethyl Vinyl Ether	0.000		0	N.D.			
47) c-1,3-Dichloropropene	8.097	75	326	0.11	ug/L	#	31

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:16 2019
Quant Method : C:\msdchem\1\methods\~~VI191025W~~.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

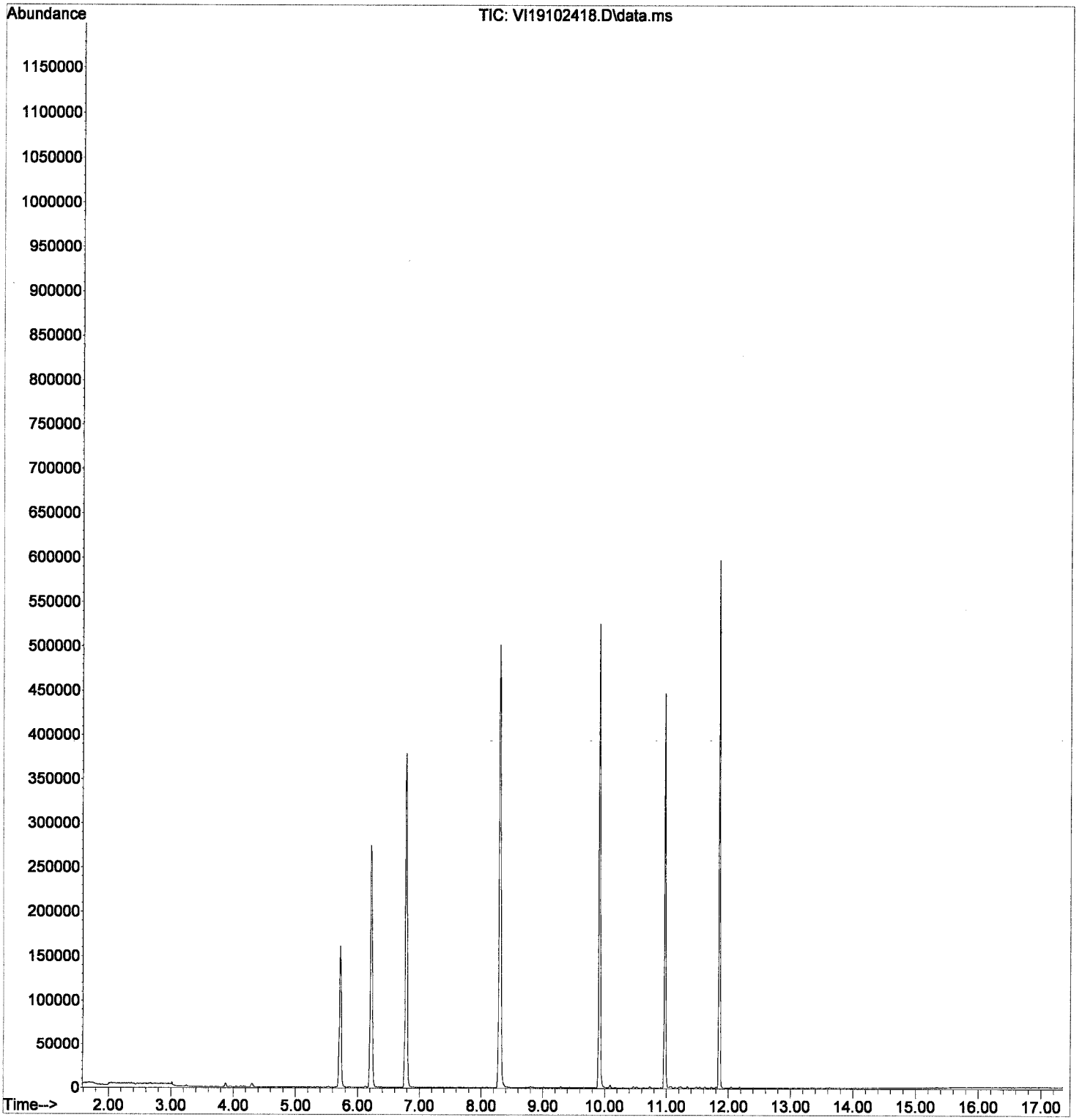
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.352	91	1744	0.21	ug/L		93
50) Tetrachloroethene (PCE)	8.808	166	267	0.14	ug/L	#	25
51) 4-Methyl-2-Pentanone (...	8.796	43	890	0.33	ug/L		85
52) t-1,3-Dichloropropene	8.839	75	300	0.11	ug/L	#	45
53) 1,1,2-Trichloroethane	9.009	97	288	0.14	ug/L	#	10
54) Dibromochloromethane	0.000		0	N.D.			
55) 1,3-Dichloropropane	9.289	76	568	0.17	ug/L		84
56) 1,2-Dibromoethane (EDB)	9.423	107	279	0.13	ug/L		84
57) 2-Hexanone	9.666	43	516	0.27	ug/L	#	35
58) Chlorobenzene	9.928	112	1045	0.19	ug/L	#	25
59) Ethylbenzene	9.952	91	1835	0.21	ug/L		93
60) 1,1,1,2-Tetrachloroethane	9.989	131	129	0.07	ug/L	#	74
61) m,p-Xylenes (2)	10.086	91	2470	0.45	ug/L		93
62) o-Xylene	10.469	91	1221	0.26	ug/L		90
63) Styrene	10.518	104	754	0.31	ug/L		82
64) Bromoform	0.000		0	N.D.			
65) Isopropylbenzene	10.737	105	1347	0.29	ug/L		86
68) Bromobenzene	11.059	156	432	0.22	ug/L		89
69) n-Propylbenzene	11.078	91	1649	0.19	ug/L		94
70) 1,1,2,2-Tetrachloroethane	11.138	85	305	0.17	ug/L	#	75
71) 2-Chlorotoluene	11.211	126	229	0.14	ug/L	#	88
72) 1,3,5-Trimethylbenzene	11.230	105	1127	0.20	ug/L		79
73) 1,2,3-Trichloropropane	0.000		0	N.D.			
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.339	91	1020	0.20	ug/L		80
76) tert-Butylbenzene	11.485	91	602	0.19	ug/L	#	77
77) 1,2,4-Trimethylbenzene	11.540	105	1066	0.27	ug/L		83
78) sec-Butylbenzene	11.619	105	1301	0.19	ug/L		81
79) 4-Isopropyltoluene	11.722	119	919	0.29	ug/L		98
80) 1,3-Dichlorobenzene	11.802	146	629	0.18	ug/L		91
81) 1,4-Dichlorobenzene	11.862	146	725	0.19	ug/L	#	31
82) n-Butylbenzene	12.045	91	805	0.17	ug/L		79
83) 1,2-Dichlorobenzene	12.185	146	624	0.19	ug/L		90
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	0.000		0	N.D.			
86) 1,2,4-Trichlorobenzene	13.347	180	244	0.16	ug/L		66
87) Naphthalene	13.627	128	924	0.58	ug/L		81
88) 1,2,3-Trichlorobenzene	13.791	180	261	0.17	ug/L		76

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102418.D
Acq On : 24 Oct 2019 4:21 pm
Operator : MM
Sample : 9J24043-CAL2
Misc : 1X 5mL 0.2/0.4PPB VOCR
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:16 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:21:58 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	111985	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	294372	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	134501	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	108083	47.05	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.777	114	352302	54.92	ug/L		-0.01
48) Toluene-d8 (S)	8.297	98	396027	52.12	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	112304	51.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.672	85	562	0.26	ug/L		90
3) Chloromethane	1.891	50	1136	0.44	ug/L		91
4) Vinyl Chloride	1.995	62	967	0.42	ug/L		83
5) Bromomethane	2.360	96	839	0.47	ug/L		69
6) Chloroethane	0.000		0	N.D.	d		
7) Trichlorofluoromethane	2.664	101	958	0.26	ug/L		86
8) Ethanol	3.230	45	1315	29.40	ug/L		96
9) 1,1-Dichloroethene	3.230	61	1038	0.37	ug/L		87
10) Carbon Disulfide	0.000		0	N.D.	d		
11) Freon 113	0.000		0	N.D.	d		
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.			
14) Methylene Chloride	3.869	84	2646	Below Cal			89
15) Acetone	3.948	43	1616	1.67	ug/L		96
16) t-1,2-Dichloroethene	4.039	61	963	0.38	ug/L		98
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.167	73	2309	0.41	ug/L		94
19) tert-Butanol (TBA)	4.294	59	10086	29.13	ug/L		91
20) Diisopropyl ether (DIPE)	4.562	45	638	0.11	ug/L		76
21) 1,1-Dichloroethane	4.684	63	1323	0.37	ug/L		87
22) Acrylonitrile	0.000		0	N.D.	d		
23) Ethyl-tert-butyl ether...	0.000		0	N.D.	d		
24) Vinyl Acetate	0.000		0	N.D.	d		
25) c-1,2-Dichloroethene	5.244	61	1008	0.36	ug/L		91
26) 2,2-Dichloropropane	5.347	77	853	0.34	ug/L		76
27) Bromochloromethane	5.444	130	391	0.28	ug/L		94
28) Chloroform	5.529	83	1292	0.34	ug/L		95
29) Carbon Tetrachloride	5.651	117	618	0.24	ug/L		90
30) Tetrahydrofuran	0.000		0	N.D.	d		
31) 1,1,1-Trichloroethane	5.730	97	1012	0.32	ug/L		93
33) 1,1-Dichloropropene	5.870	75	1049	0.41	ug/L	#	43
34) 2-Butanone (MEK)	0.000		0	N.D.	d		
35) Benzene	6.120	78	3381	0.44	ug/L		99
36) tert-Amyl methyl ether...	6.247	73	580	0.11	ug/L	#	21
37) 1,2-Dichloroethane (EDC)	6.332	62	1073	0.34	ug/L		54
38) iso-Butyl Alcohol	6.387	43	1172	8.80	ug/L		84
40) Trichloroethene (TCE)	6.746	130	718	0.37	ug/L		74
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.			
42) Dibromomethane	7.202	93	378	0.27	ug/L		86
43) 1,2-Dichloropropane	7.312	63	797	0.38	ug/L		95
44) Bromodichloromethane	7.379	83	800	0.29	ug/L		93
46) 2-Chloroethyl Vinyl Ether	8.036	63	359	1.00	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	1014	0.36	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:21:58 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	3505	0.43	ug/L		93
50) Tetrachloroethene (PCE)	8.796	166	787	0.42	ug/L		94
51) 4-Methyl-2-Pentanone (...	8.808	43	1912	0.73	ug/L		91
52) t-1,3-Dichloropropene	8.839	75	610	0.22	ug/L	#	45
53) 1,1,2-Trichloroethane	9.003	97	717	0.36	ug/L		82
54) Dibromochloromethane	9.186	129	505	0.24	ug/L		86
55) 1,3-Dichloropropane	9.289	76	1253	0.38	ug/L		95
56) 1,2-Dibromoethane (EDB)	9.423	107	615	0.30	ug/L		96
57) 2-Hexanone	9.660	43	1346	0.71	ug/L		91
58) Chlorobenzene	9.928	112	2226	0.43	ug/L	#	64
59) Ethylbenzene	9.952	91	3584	0.42	ug/L		99
60) 1,1,1,2-Tetrachloroethane	9.989	131	470	0.26	ug/L	#	66
61) m,p-Xylenes (2)	10.086	91	5197	0.91	ug/L		96
62) o-Xylene	10.469	91	2605	0.49	ug/L		93
63) Styrene	10.518	104	1656	0.51	ug/L		93
64) Bromoform	0.000		0	N.D.	d		
65) Isopropylbenzene	10.731	105	3067	0.54	ug/L		92
68) Bromobenzene	11.059	156	875	0.45	ug/L		92
69) n-Propylbenzene	11.078	91	3544	0.42	ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.139	85	671	0.38	ug/L		87
71) 2-Chlorotoluene	11.205	126	719	0.43	ug/L		98
72) 1,3,5-Trimethylbenzene	11.230	105	2289	0.41	ug/L		92
73) 1,2,3-Trichloropropane	11.248	110	271	0.32	ug/L		91
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.339	91	2178	0.44	ug/L		99
76) tert-Butylbenzene	11.485	91	1248	0.40	ug/L		99
77) 1,2,4-Trimethylbenzene	11.540	105	2387	0.51	ug/L		98
78) sec-Butylbenzene	11.619	105	2990	0.44	ug/L		97
79) 4-Isopropyltoluene	11.729	119	2236	0.56	ug/L		92
80) 1,3-Dichlorobenzene	11.802	146	1412	0.41	ug/L		95
81) 1,4-Dichlorobenzene	11.862	146	1564	0.42	ug/L	#	54
82) n-Butylbenzene	12.045	91	1867	0.40	ug/L		85
83) 1,2-Dichlorobenzene	12.185	146	1284	0.39	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	0.000		0	N.D.			
86) 1,2,4-Trichlorobenzene	13.347	180	615	0.40	ug/L		89
87) Naphthalene	13.633	128	2009	0.81	ug/L		81
88) 1,2,3-Trichlorobenzene	13.779	180	687	0.45	ug/L		72

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:19 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	111985	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	294372	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	134501	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	108083	47.05	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.777	114	352302	54.92	ug/L		-0.01
48) Toluene-d8 (S)	8.297	98	396027	52.12	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	112304	51.91	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.672	85	562	0.26	ug/L		90
3) Chloromethane	1.891	50	1136	0.44	ug/L		91
4) Vinyl Chloride	1.995	62	967	0.42	ug/L		83
5) Bromomethane	2.360	96	839	0.47	ug/L		69
6) Chloroethane	2.512	64	672	0.57	ug/L	#	66
7) Trichlorofluoromethane	2.664	101	958	0.26	ug/L		86
8) Ethanol	3.230	45	1315	29.40	ug/L		96
9) 1,1-Dichloroethene	3.230	61	1038	0.37	ug/L		87
10) Carbon Disulfide	3.242	76	1798	0.39	ug/L		78
11) Freon 113	3.285	101	569	0.31	ug/L	#	63
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	0.000		0	N.D.			
14) Methylene Chloride	3.869	84	2646	Below Cal			89
15) Acetone	3.948	43	1616	1.67	ug/L		96
16) t-1,2-Dichloroethene	4.039	61	963	0.38	ug/L		98
17) n-Hexane	0.000		0	N.D.			
18) Methyl-tert-butyl-ether	4.167	73	2309	0.41	ug/L		94
19) tert-Butanol (TBA)	4.294	59	10086	29.13	ug/L		91
20) Diisopropyl ether (DIPE)	4.562	45	638	0.11	ug/L		76
21) 1,1-Dichloroethane	4.684	63	1323	0.37	ug/L		87
22) Acrylonitrile	4.751	53	129	0.12	ug/L	#	15
23) Ethyl-tert-butyl ether...	4.945	59	438	0.09	ug/L	#	38
24) Vinyl Acetate	4.964	43	1231	0.29	ug/L		74
25) c-1,2-Dichloroethene	5.244	61	1008	0.36	ug/L		91
26) 2,2-Dichloropropane	5.347	77	853	0.34	ug/L		76
27) Bromochloromethane	5.444	130	391	0.28	ug/L		94
28) Chloroform	5.529	83	1292	0.34	ug/L		95
29) Carbon Tetrachloride	5.651	117	618	0.24	ug/L		90
30) Tetrahydrofuran	5.712	42	281	0.30	ug/L	#	62
31) 1,1,1-Trichloroethane	5.730	97	1012	0.32	ug/L		93
33) 1,1-Dichloropropene	5.870	75	1049	0.41	ug/L	#	43
34) 2-Butanone (MEK)	5.864	43	1016	0.69	ug/L		52
35) Benzene	6.120	78	3381	0.44	ug/L		99
36) tert-Amyl methyl ether...	6.247	73	580	0.11	ug/L	#	21
37) 1,2-Dichloroethane (EDC)	6.332	62	1073	0.34	ug/L		54
38) iso-Butyl Alcohol	6.387	43	1172	8.80	ug/L		84
40) Trichloroethene (TCE)	6.746	130	718	0.37	ug/L		74
41) Tert-Amyl-Ethyl-Ether ...	0.000		0	N.D.			
42) Dibromomethane	7.202	93	378	0.27	ug/L		86
43) 1,2-Dichloropropane	7.312	63	797	0.38	ug/L		95
44) Bromodichloromethane	7.379	83	800	0.29	ug/L		93
46) 2-Chloroethyl Vinyl Ether	8.036	63	359	1.00	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	1014	0.36	ug/L		89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:19 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

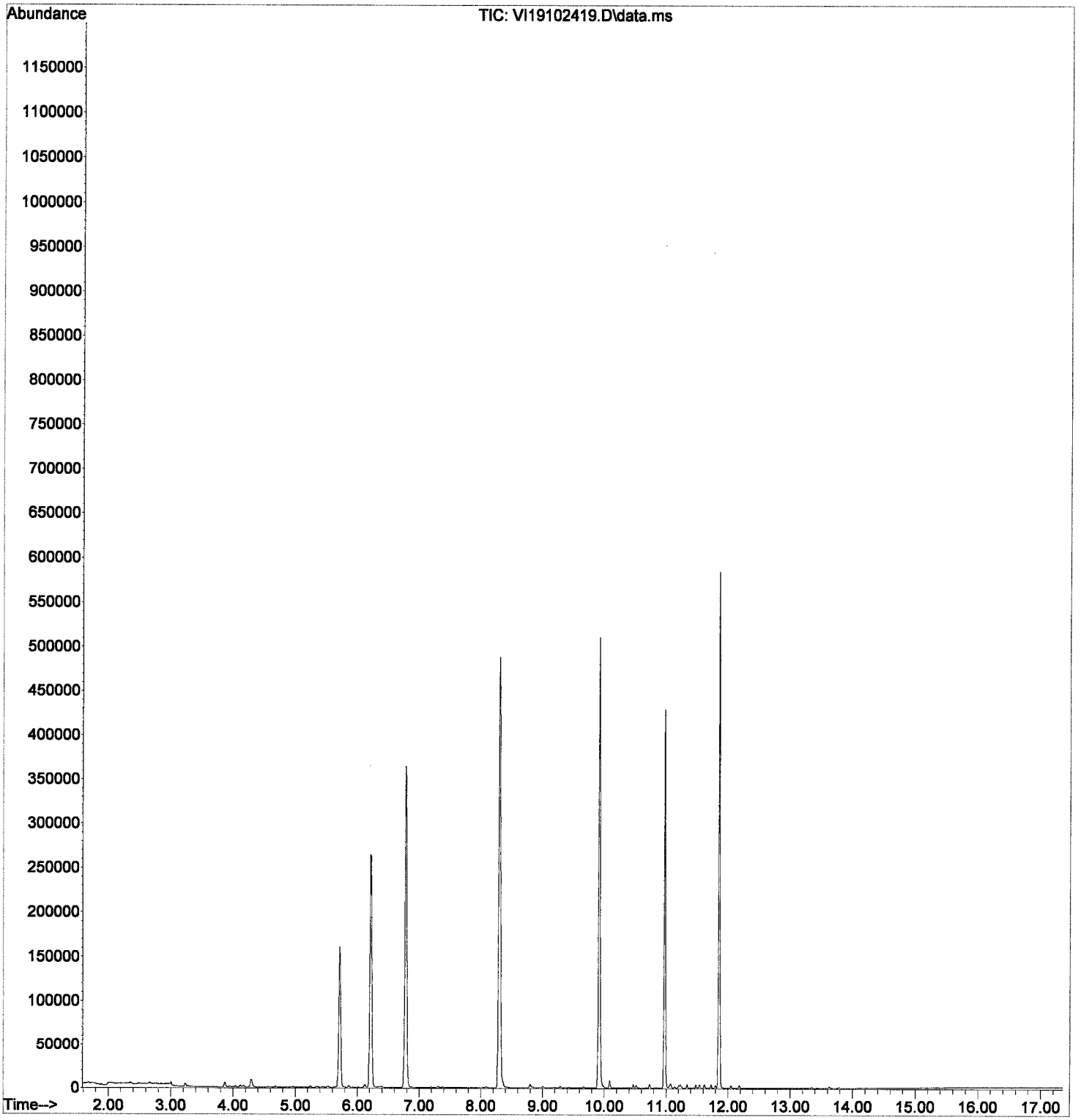
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	3505	0.43	ug/L		93
50) Tetrachloroethene (PCE)	8.796	166	787	0.42	ug/L		94
51) 4-Methyl-2-Pentanone (...	8.808	43	1912	0.73	ug/L		91
52) t-1,3-Dichloropropene	8.839	75	610	0.22	ug/L	#	45
53) 1,1,2-Trichloroethane	9.003	97	717	0.36	ug/L		82
54) Dibromochloromethane	9.186	129	505	0.24	ug/L		86
55) 1,3-Dichloropropane	9.289	76	1253	0.38	ug/L		95
56) 1,2-Dibromoethane (EDB)	9.423	107	615	0.30	ug/L		96
57) 2-Hexanone	9.660	43	1346	0.71	ug/L		91
58) Chlorobenzene	9.928	112	2226	0.43	ug/L	#	64
59) Ethylbenzene	9.952	91	3584	0.42	ug/L		99
60) 1,1,1,2-Tetrachloroethane	9.989	131	470	0.26	ug/L	#	66
61) m,p-Xylenes (2)	10.086	91	5197	0.91	ug/L		96
62) o-Xylene	10.469	91	2605	0.49	ug/L		93
63) Styrene	10.518	104	1656	0.51	ug/L		93
64) Bromoform	10.542	173	215	0.15	ug/L	#	36
65) Isopropylbenzene	10.731	105	3067	0.54	ug/L		92
68) Bromobenzene	11.059	156	875	0.45	ug/L		92
69) n-Propylbenzene	11.078	91	3544	0.42	ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.139	85	671	0.38	ug/L		87
71) 2-Chlorotoluene	11.205	126	719	0.43	ug/L		98
72) 1,3,5-Trimethylbenzene	11.230	105	2289	0.41	ug/L		92
73) 1,2,3-Trichloropropane	11.248	110	271	0.32	ug/L		91
74) t-1,4-Dichloro-2-butene	0.000		0	N.D.			
75) 4-Chlorotoluene	11.339	91	2178	0.44	ug/L		99
76) tert-Butylbenzene	11.485	91	1248	0.40	ug/L		99
77) 1,2,4-Trimethylbenzene	11.540	105	2387	0.51	ug/L		98
78) sec-Butylbenzene	11.619	105	2990	0.44	ug/L		97
79) 4-Isopropyltoluene	11.729	119	2236	0.56	ug/L		92
80) 1,3-Dichlorobenzene	11.802	146	1412	0.41	ug/L		95
81) 1,4-Dichlorobenzene	11.862	146	1564	0.42	ug/L	#	54
82) n-Butylbenzene	12.045	91	1867	0.40	ug/L		85
83) 1,2-Dichlorobenzene	12.185	146	1284	0.39	ug/L		95
84) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.			
85) Hexachlorobutadiene	0.000		0	N.D.			
86) 1,2,4-Trichlorobenzene	13.347	180	615	0.40	ug/L		89
87) Naphthalene	13.633	128	2009	0.81	ug/L		81
88) 1,2,3-Trichlorobenzene	13.779	180	687	0.45	ug/L		72

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102419.D
Acq On : 24 Oct 2019 4:48 pm
Operator : MM
Sample : 9J24043-CAL3
Misc : 1X 5mL 0.4/0.8PPB VOCR
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:19 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102420.D
Acq On : 24 Oct 2019 5:15 pm
Operator : MM
Sample : 9J24043-CAL4
Misc : 1X 5mL 1/2PPB VOCR
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	116043	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	310797	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	143979	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	111608	46.89	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	366642	55.15	ug/L		0.00
48) Toluene-d8 (S)	8.298	98	410518	51.17	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	118563	51.20	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	1583	0.69	ug/L		98
3) Chloromethane	1.892	50	2407	0.90	ug/L		90
4) Vinyl Chloride	1.995	62	2351	0.98	ug/L		95
5) Bromomethane	2.360	96	1763	0.95	ug/L	#	71
6) Chloroethane	2.500	64	2425	1.99	ug/L		75
7) Trichlorofluoromethane	2.664	101	2784	0.73	ug/L		90
8) Ethanol	3.236	45	3446	74.35	ug/L		88
9) 1,1-Dichloroethene	3.230	61	2476	0.85	ug/L		86
10) Carbon Disulfide	3.248	76	4573	0.95	ug/L		96
11) Freon 113	3.285	101	1717	0.90	ug/L		98
12) Iodomethane	0.000		0	N.D.			
13) Acrolein	3.625	56	420	1.01	ug/L		60
14) Methylene Chloride	3.869	84	3939	Below Cal			91
15) Acetone	3.948	43	2940	2.94	ug/L		92
16) t-1,2-Dichloroethene	4.039	61	2657	1.01	ug/L		94
17) n-Hexane	4.124	86	357	1.11	ug/L	#	60
18) Methyl-tert-butyl-ether	4.167	73	5789	1.00	ug/L		81
19) tert-Butanol (TBA)	4.295	59	25977	72.41	ug/L		88
20) Diisopropyl ether (DIPE)	4.562	45	1604	0.27	ug/L		98
21) 1,1-Dichloroethane	4.684	63	3672	0.99	ug/L		94
22) Acrylonitrile	4.751	53	876	0.80	ug/L		79
23) Ethyl-tert-butyl ether...	4.939	59	1449	0.28	ug/L		83
24) Vinyl Acetate	4.964	43	3620	0.82	ug/L		88
25) c-1,2-Dichloroethene	5.244	61	2744	0.95	ug/L		83
26) 2,2-Dichloropropane	5.353	77	2316	0.90	ug/L		92
27) Bromochloromethane	5.450	130	1188	0.83	ug/L		88
28) Chloroform	5.530	83	3341	0.84	ug/L		98
29) Carbon Tetrachloride	5.663	117	1791	0.66	ug/L		91
30) Tetrahydrofuran	5.706	42	945	0.99	ug/L		87
31) 1,1,1-Trichloroethane	5.730	97	2903	0.89	ug/L		93
33) 1,1-Dichloropropene	5.864	75	2749	1.05	ug/L		93
34) 2-Butanone (MEK)	5.858	43	2900	1.90	ug/L		90
35) Benzene	6.126	78	8314	1.05	ug/L		96
36) tert-Amyl methyl ether...	6.247	73	1462	0.28	ug/L		60
37) 1,2-Dichloroethane (EDC)	6.339	62	2623	0.81	ug/L		91
38) iso-Butyl Alcohol	6.375	43	3120	22.60	ug/L		86
40) Trichloroethene (TCE)	6.740	130	2166	1.08	ug/L		94
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	950	0.29	ug/L		74
42) Dibromomethane	7.196	93	1285	0.90	ug/L		96
43) 1,2-Dichloropropane	7.306	63	1944	0.91	ug/L		93
44) Bromodichloromethane	7.379	83	2259	0.78	ug/L		96
46) 2-Chloroethyl Vinyl Ether	8.030	63	1378	1.78	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	2667	0.91	ug/L		93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102420.D
Acq On : 24 Oct 2019 5:15 pm
Operator : MM
Sample : 9J24043-CAL4
Misc : 1X 5mL 1/2PPB VOCR
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:23 2019
Quant Method : C:\msdchem\1\methods\VI~~191025W~~.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

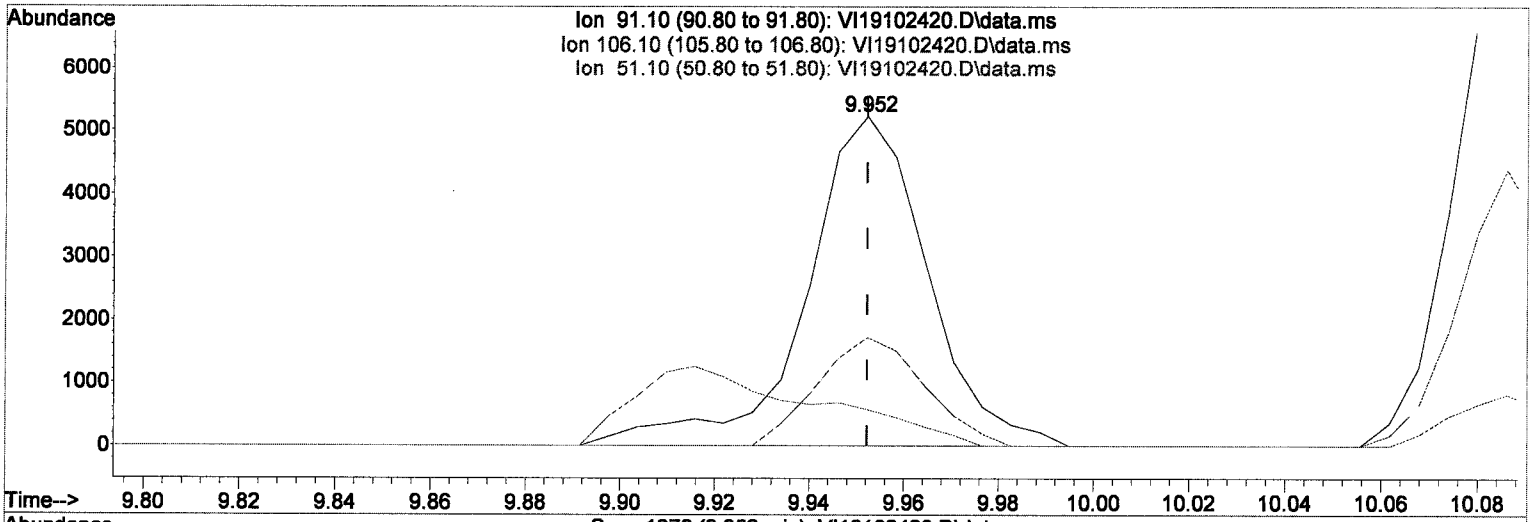
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.352	91	9040	1.04	ug/L		99
50) Tetrachloroethene (PCE)	8.796	166	1994	1.00	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.802	43	5042	1.83	ug/L		93
52) t-1,3-Dichloropropene	8.839	75	2122	0.72	ug/L		95
53) 1,1,2-Trichloroethane	9.003	97	1944	0.93	ug/L		92
54) Dibromochloromethane	9.186	129	1349	0.61	ug/L		88
55) 1,3-Dichloropropane	9.289	76	3361	0.96	ug/L		93
56) 1,2-Dibromoethane (EDB)	9.423	107	1928	0.90	ug/L		93
57) 2-Hexanone	9.660	43	3526	1.77	ug/L		99
58) Chlorobenzene	9.928	112	5770	1.05	ug/L		93
59) Ethylbenzene	9.952	91	~~9335~~ 8761	1.03	ug/L		97
60) 1,1,1,2-Tetrachloroethane	9.989	131	1476	0.77	ug/L		91
61) m,p-Xylenes (2)	10.086	91	12789	2.05	ug/L		99
62) o-Xylene	10.463	91	6630	1.11	ug/L		97
63) Styrene	10.518	104	4878	1.15	ug/L		95
64) Bromoform	10.536	173	795	0.51	ug/L		91
65) Isopropylbenzene	10.731	105	7662	1.14	ug/L		98
68) Bromobenzene	11.059	156	2220	1.07	ug/L		88
69) n-Propylbenzene	11.078	91	9160	1.02	ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.139	85	1876	1.00	ug/L		85
71) 2-Chlorotoluene	11.205	126	1910	1.07	ug/L		98
72) 1,3,5-Trimethylbenzene	11.230	105	6197	1.03	ug/L		90
73) 1,2,3-Trichloropropane	11.248	110	887	0.97	ug/L		97
74) t-1,4-Dichloro-2-butene	11.285	53	531	0.74	ug/L	#	41
75) 4-Chlorotoluene	11.339	91	5461	1.02	ug/L		98
76) tert-Butylbenzene	11.485	91	3551	1.07	ug/L		94
77) 1,2,4-Trimethylbenzene	11.534	105	6319	1.16	ug/L		93
78) sec-Butylbenzene	11.619	105	7450	1.03	ug/L		98
79) 4-Isopropyltoluene	11.729	119	6086	1.25	ug/L		98
80) 1,3-Dichlorobenzene	11.796	146	3650	1.00	ug/L		96
81) 1,4-Dichlorobenzene	11.863	146	4177	1.04	ug/L		86
82) n-Butylbenzene	12.045	91	4997	1.00	ug/L		93
83) 1,2-Dichlorobenzene	12.185	146	3650	1.04	ug/L		97
84) 1,2-Dibromo-3-Chloropr...	12.799	157	447	0.82	ug/L	#	69
85) Hexachlorobutadiene	13.310	223	443	0.91	ug/L		96
86) 1,2,4-Trichlorobenzene	13.347	180	1833	1.10	ug/L		94
87) Naphthalene	13.627	128	5345	1.42	ug/L		98
88) 1,2,3-Trichlorobenzene	13.785	180	1879	1.15	ug/L		89

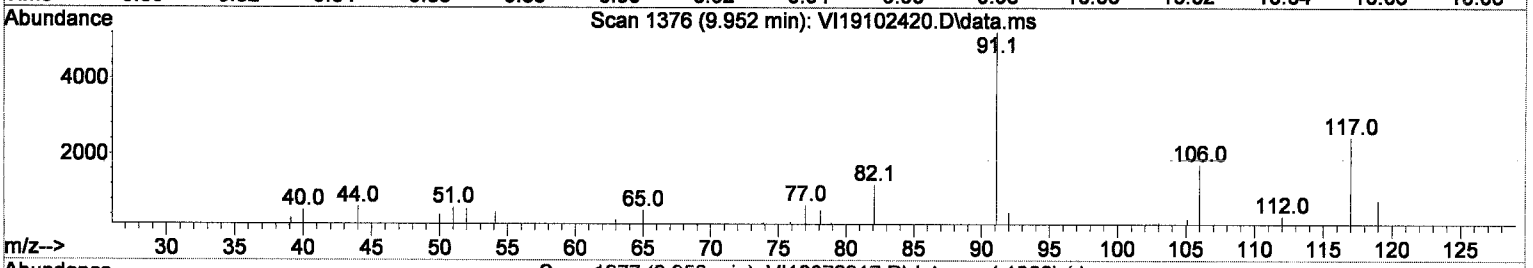
(#) = qualifier out of range (m) = manual integration (+) = signals summed

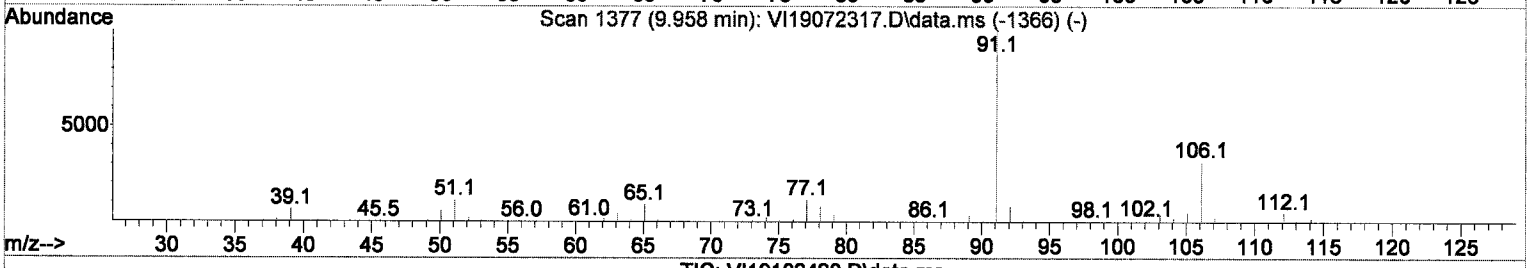
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102420.D
Acq On : 24 Oct 2019 5:15 pm
Operator : MM
Sample : 9J24043-CAL4
Misc : 1X 5mL 1/2PPB VOCR
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102420.D\data.ms

(59) Ethylbenzene (C)

9.952min (+ 0.000) 1.03 ug/L

response 9335

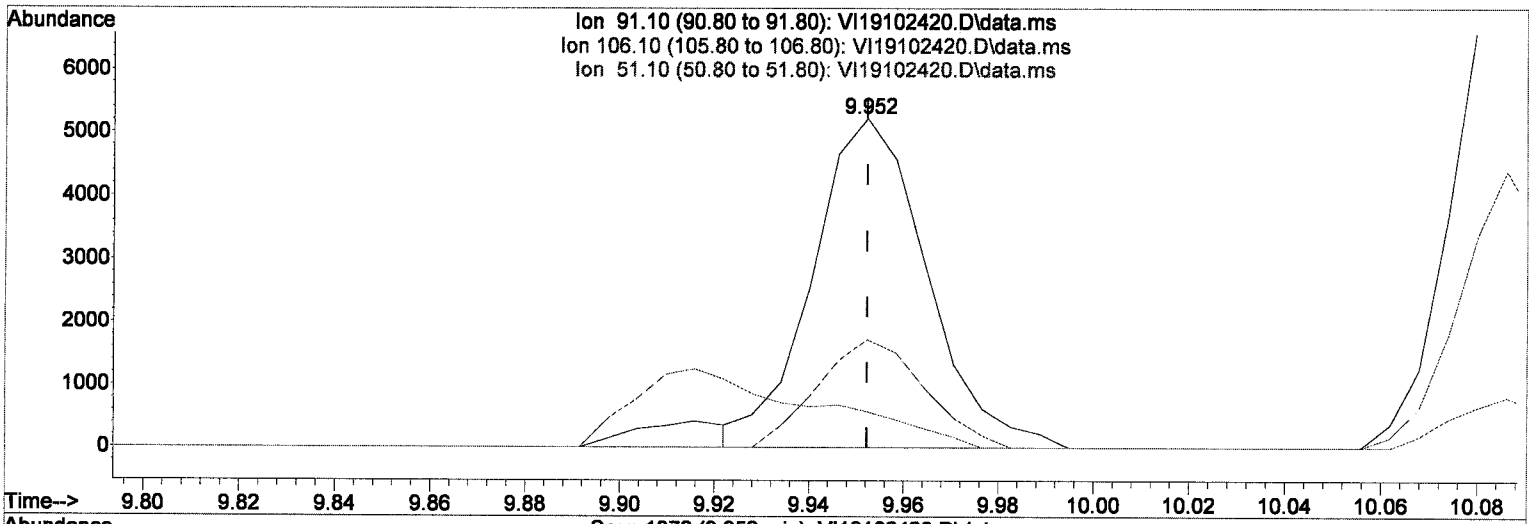
Ion	Exp%	Act%
91.10	100.00	100.00
106.10	30.80	32.98
51.10	10.40	11.11
0.00	0.00	0.00

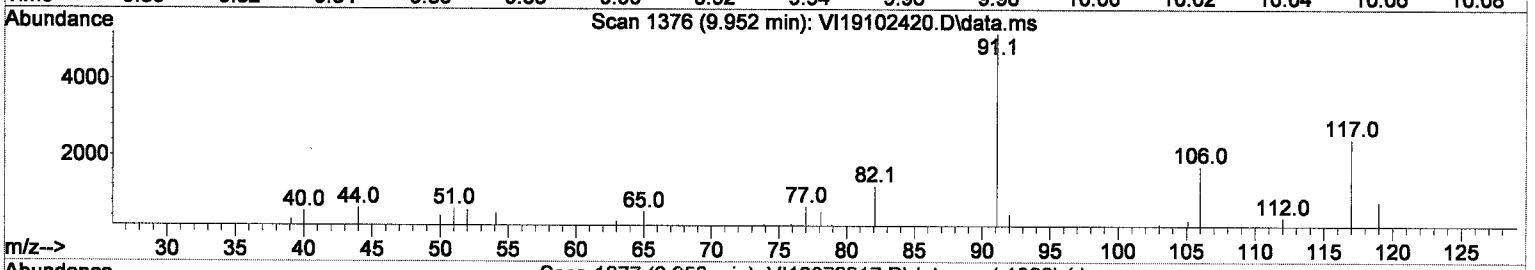
M.2

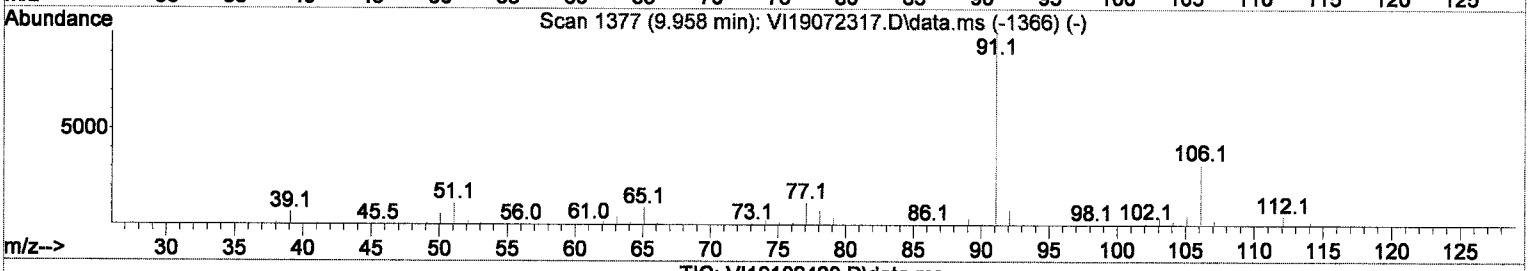
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102420.D
Acq On : 24 Oct 2019 5:15 pm
Operator : MM
Sample : 9J24043-CAL4
Misc : 1X 5mL 1/2PPB VOCR
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102420.D\data.ms

(59) Ethylbenzene (C)

9.952min (+ 0.000) 0.96 ug/L m

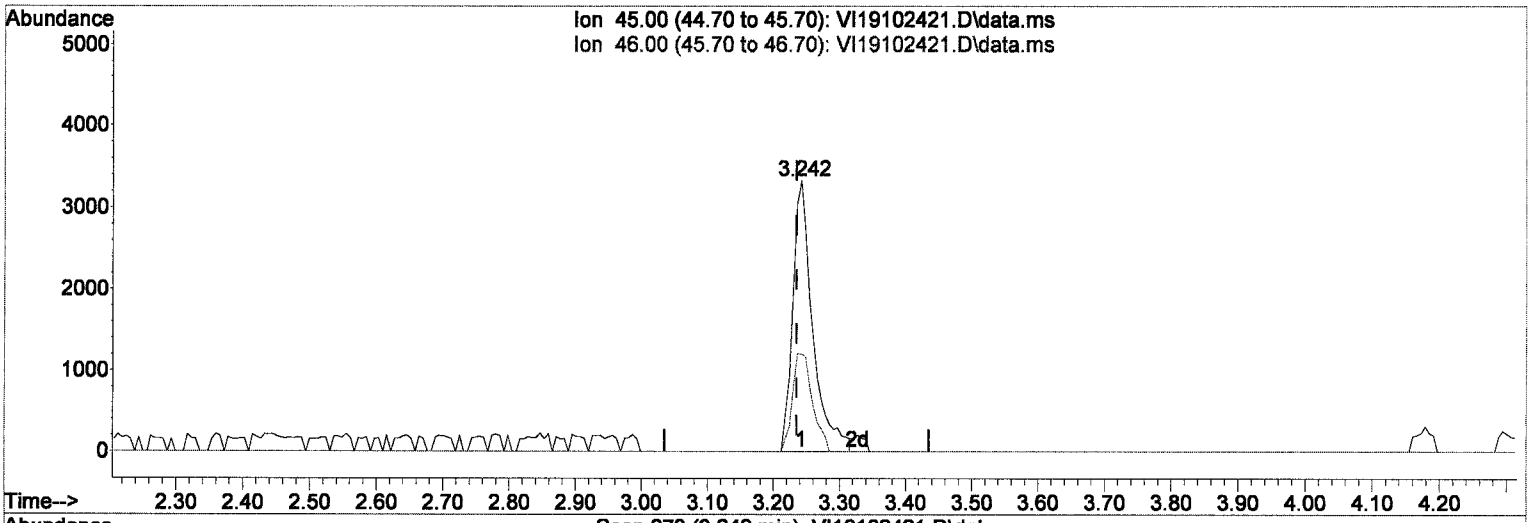
response 8761

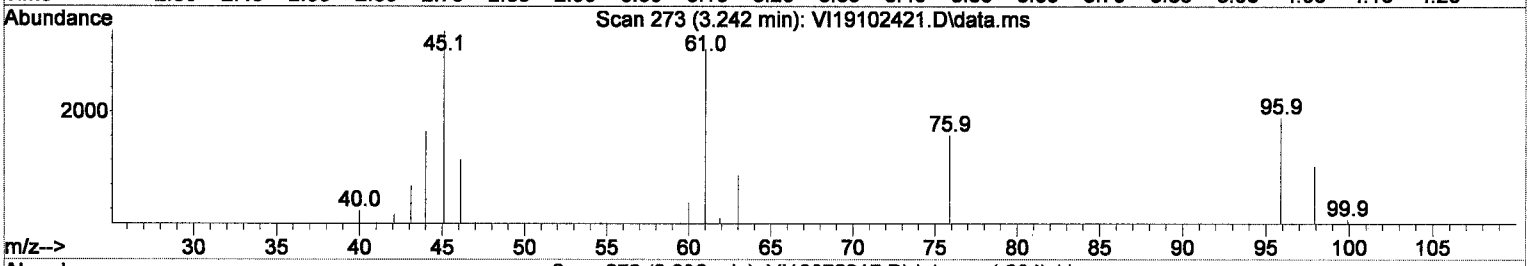
Ion	Exp%	Act%
91.10	100.00	100.00
106.10	30.80	32.98
51.10	10.40	11.11
0.00	0.00	0.00

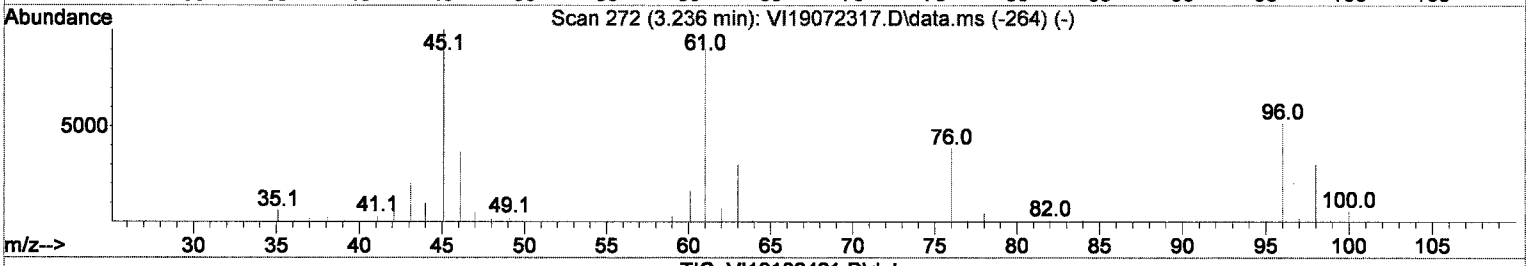
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102421.D\data.ms

(8) Ethanol

3.242min (+ 0.007) 157.83 ug/L

response 6984

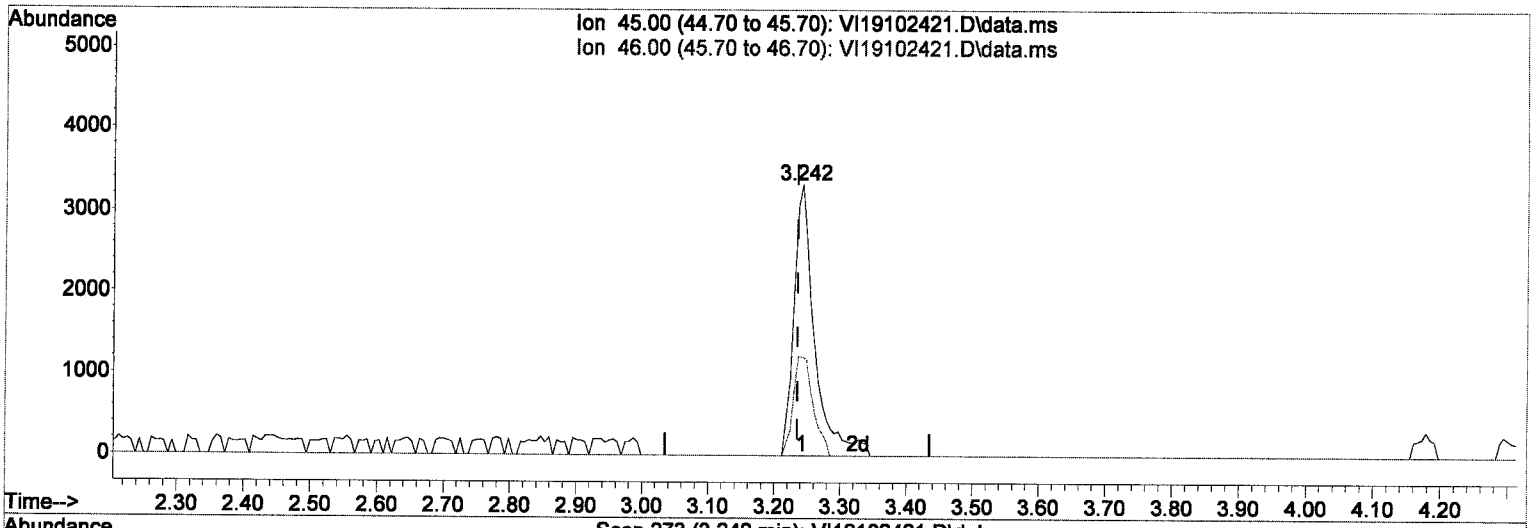
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	36.12
0.00	0.00	0.00
0.00	0.00	0.00

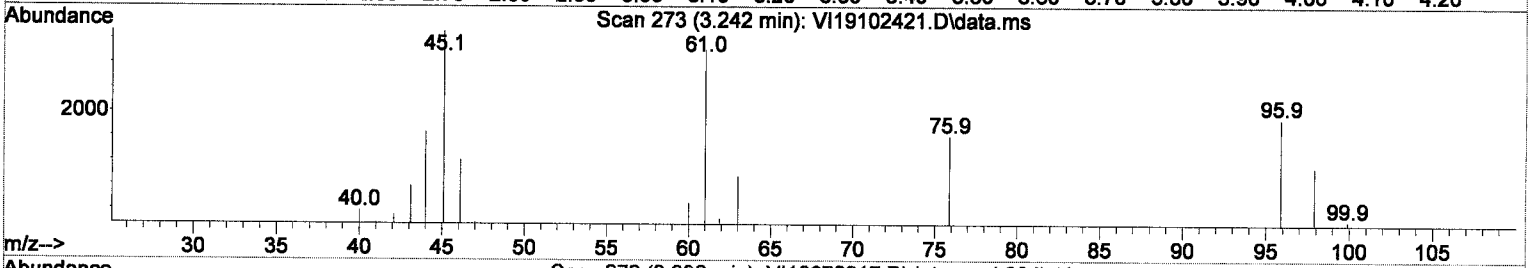
M.2.

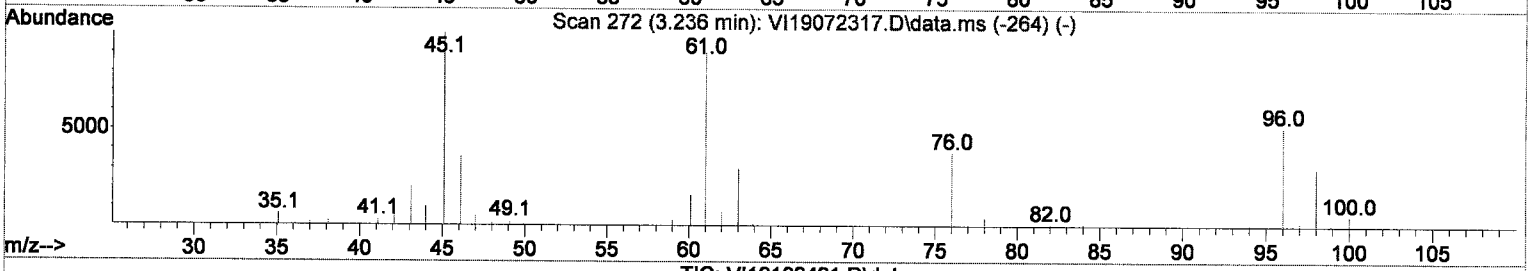
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102421.D\data.ms

(8) Ethanol

3.242min (+ 0.007) 163.37 ug/L m

response 7229

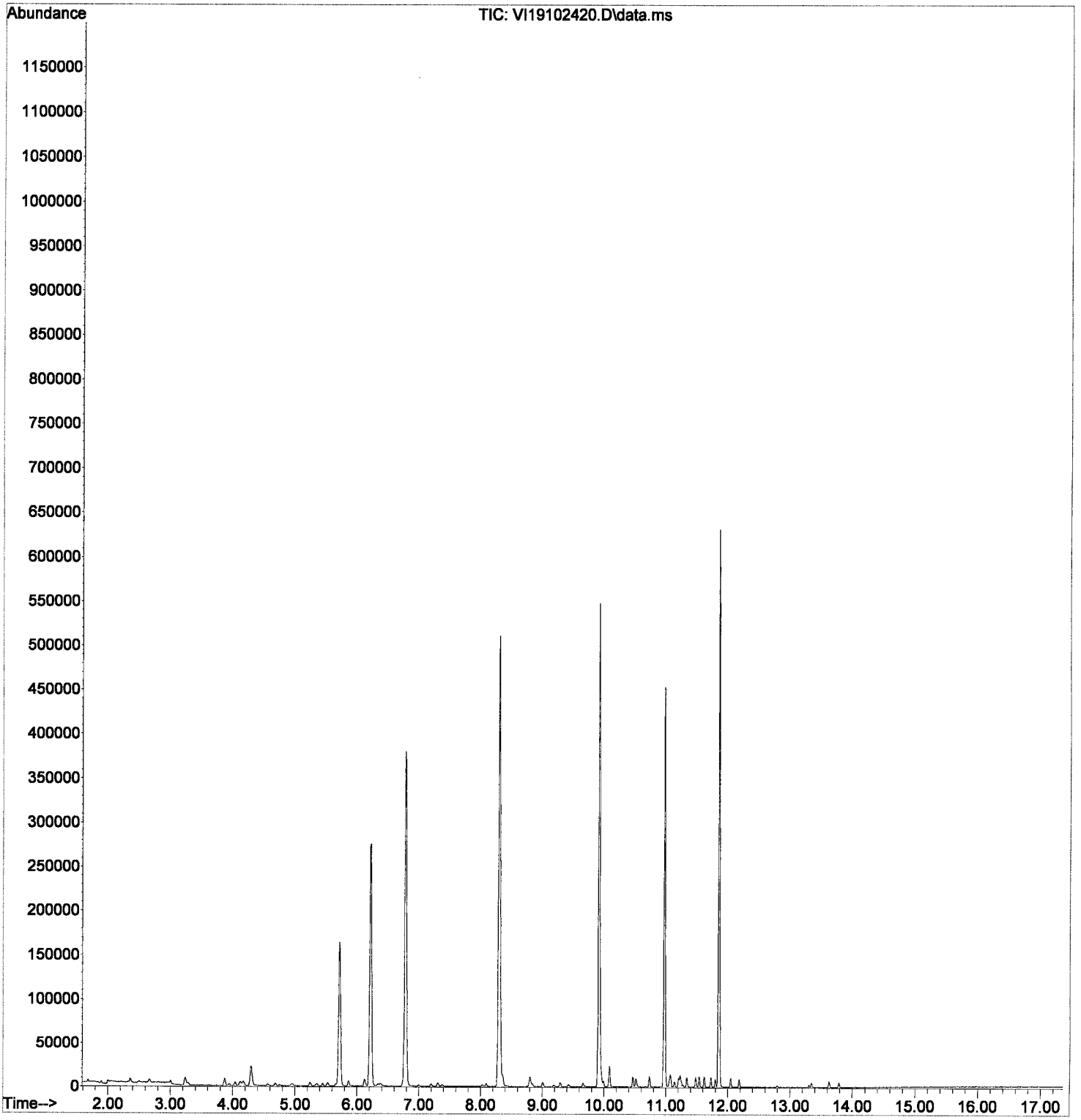
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	36.12
0.00	0.00	0.00
0.00	0.00	0.00

M 10/25/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102420.D
Acq On : 24 Oct 2019 5:15 pm
Operator : MM
Sample : 9J24043-CAL4
Misc : 1X 5mL 1/2PPB VOCR
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:23 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

MM 10/25/19

Quant Time: Oct 25 08:10:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	110790	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.916	117	297754	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	139582	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	108776	47.86	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	347212	54.71	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	395017	51.39	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	115163	51.29	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.691	85	3731	1.71	ug/L		97
3) Chloromethane	1.904	50	4743	1.85	ug/L		90
4) Vinyl Chloride	2.007	62	5030	2.20	ug/L		95
5) Bromomethane	2.372	96	3140	1.78	ug/L		93
6) Chloroethane	2.524	64	2540	2.19	ug/L		82
7) Trichlorofluoromethane	2.682	101	5667	1.55	ug/L		97
8) Ethanol	3.242	45	~~6984~~ 7129	157.83	ug/L		83
9) 1,1-Dichloroethene	3.242	61	5263	1.88	ug/L		96
10) Carbon Disulfide	3.260	76	9757	2.13	ug/L		99
11) Freon 113	3.297	101	3803	2.08	ug/L		95
12) Iodomethane	~~3.400~~	~~142~~	~~130~~	5.22	ug/L	#	47
13) Acrolein	3.625	56	927	2.34	ug/L		71
14) Methylene Chloride	3.881	84	6151	Below Cal			89
15) Acetone	3.948	43	4523	4.74	ug/L		93
16) t-1,2-Dichloroethene	4.051	61	5503	2.20	ug/L		91
17) n-Hexane	4.130	86	709	2.31	ug/L	#	84
18) Methyl-tert-butyl-ether	4.173	73	11957	2.16	ug/L		93
19) tert-Butanol (TBA)	4.301	59	58093	169.62	ug/L		94
20) Diisopropyl ether (DIPE)	4.568	45	3305	0.59	ug/L		95
21) 1,1-Dichloroethane	4.690	63	7227	2.05	ug/L		100
22) Acrylonitrile	4.763	53	1949	1.87	ug/L		96
23) Ethyl-tert-butyl ether...	4.939	59	3145	0.63	ug/L		96
24) Vinyl Acetate	4.964	43	7854	1.87	ug/L		99
25) c-1,2-Dichloroethene	5.250	61	5568	2.02	ug/L		93
26) 2,2-Dichloropropane	5.353	77	4776	1.94	ug/L		95
27) Bromochloromethane	5.456	130	2679	1.97	ug/L		99
28) Chloroform	5.536	83	7277	1.92	ug/L		99
29) Carbon Tetrachloride	5.663	117	4001	1.54	ug/L		98
30) Tetrahydrofuran	5.706	42	2045	2.23	ug/L		88
31) 1,1,1-Trichloroethane	5.736	97	5937	1.90	ug/L		97
33) 1,1-Dichloropropene	5.870	75	5724	2.28	ug/L		95
34) 2-Butanone (MEK)	5.870	43	6243	4.29	ug/L		98
35) Benzene	6.126	78	17935	2.38	ug/L		94
36) tert-Amyl methyl ether...	6.247	73	2996	0.60	ug/L		72
37) 1,2-Dichloroethane (EDC)	6.345	62	5726	1.86	ug/L		98
38) iso-Butyl Alcohol	6.381	43	7968	60.45	ug/L		93
40) Trichloroethene (TCE)	6.746	130	4576	2.38	ug/L		95
41) Tert-Amyl-Ethyl-Ether ...	7.002	59	2147	0.68	ug/L		90
42) Dibromomethane	7.202	93	2755	2.01	ug/L		88
43) 1,2-Dichloropropane	7.312	63	4373	2.13	ug/L		93
44) Bromodichloromethane	7.385	83	4681	1.70	ug/L		94
46) 2-Chloroethyl Vinyl Ether	8.030	63	2589	2.82	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	5578	1.98	ug/L		90

Qual

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

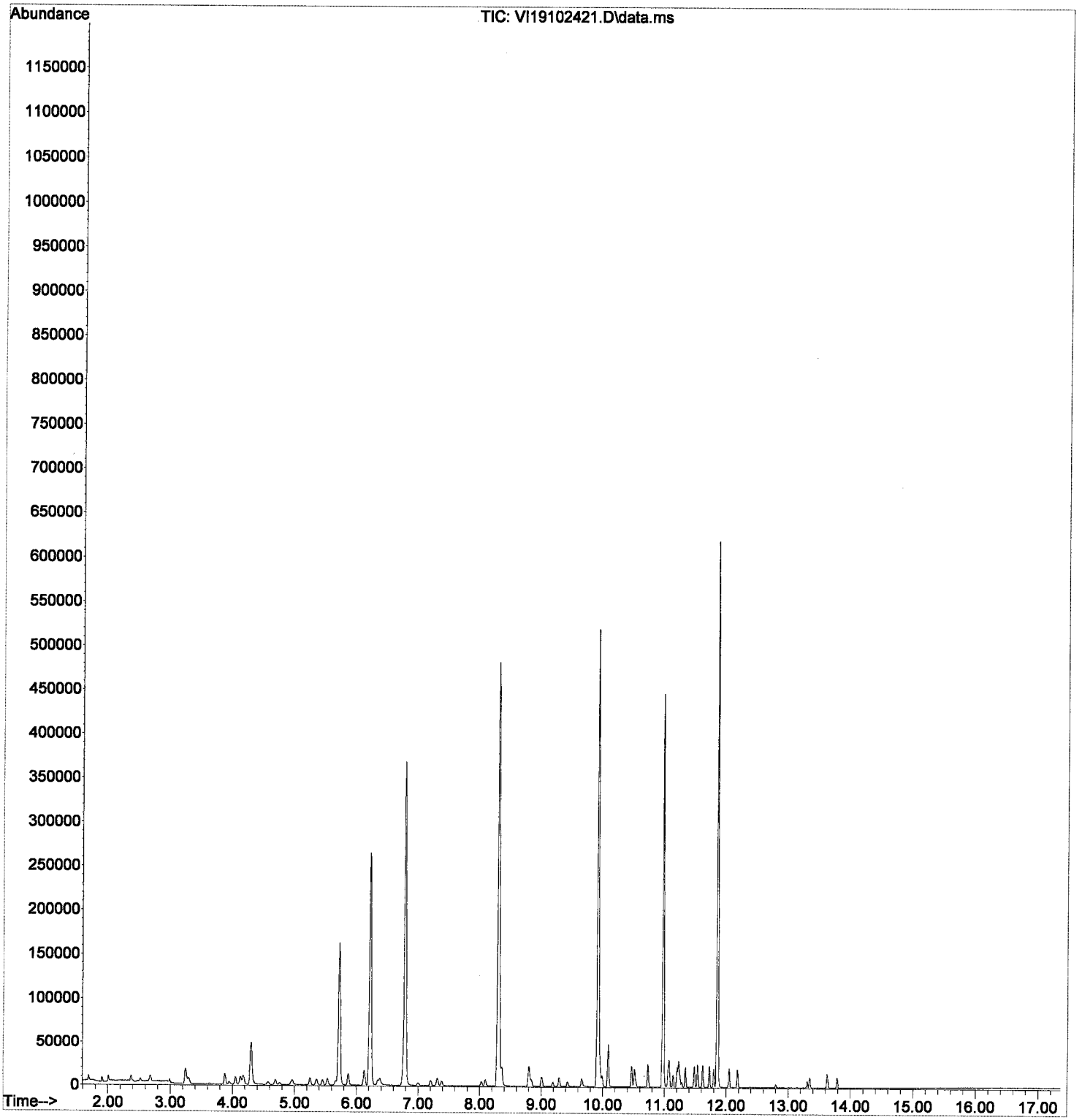
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	17851	2.14	ug/L		99
50) Tetrachloroethene (PCE)	8.796	166	4333	2.28	ug/L		92
51) 4-Methyl-2-Pentanone (...	8.809	43	11029	4.18	ug/L		98
52) t-1,3-Dichloropropene	8.839	75	4500	1.60	ug/L		95
53) 1,1,2-Trichloroethane	9.003	97	4134	2.06	ug/L		93
54) Dibromochloromethane	9.192	129	3038	1.44	ug/L		91
55) 1,3-Dichloropropane	9.289	76	6889	2.05	ug/L		90
56) 1,2-Dibromoethane (EDB)	9.429	107	4499	2.18	ug/L		100
57) 2-Hexanone	9.660	43	7610	3.99	ug/L		92
58) Chlorobenzene	9.928	112	11701	2.22	ug/L		98
59) Ethylbenzene	9.952	91	19157	2.20	ug/L		95
60) 1,1,1,2-Tetrachloroethane	9.989	131	2985	1.63	ug/L		94
61) m,p-Xylenes (2)	10.086	91	27092	4.47	ug/L		98
62) o-Xylene	10.469	91	13605	2.31	ug/L		96
63) Styrene	10.518	104	10363	2.35	ug/L		98
64) Bromoform	10.536	173	1771	1.19	ug/L		90
65) Isopropylbenzene	10.731	105	16325	2.39	ug/L		97
68) Bromobenzene	11.059	156	4634	2.30	ug/L		83
69) n-Propylbenzene	11.078	91	19292	2.21	ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.139	85	4008	2.20	ug/L		91
71) 2-Chlorotoluene	11.205	126	4172	2.40	ug/L		98
72) 1,3,5-Trimethylbenzene	11.230	105	13089	2.24	ug/L		97
73) 1,2,3-Trichloropropane	11.248	110	1935	2.17	ug/L		93
74) t-1,4-Dichloro-2-butene	11.278	53	1313	1.90	ug/L	#	50
75) 4-Chlorotoluene	11.339	91	11718	2.26	ug/L		99
76) tert-Butylbenzene	11.485	91	7395	2.30	ug/L		98
77) 1,2,4-Trimethylbenzene	11.534	105	12974	2.38	ug/L		98
78) sec-Butylbenzene	11.619	105	15756	2.25	ug/L		99
79) 4-Isopropyltoluene	11.729	119	12523	2.53	ug/L		97
80) 1,3-Dichlorobenzene	11.802	146	7718	2.18	ug/L		97
81) 1,4-Dichlorobenzene	11.862	146	8550	2.20	ug/L		91
82) n-Butylbenzene	12.045	91	10626	2.18	ug/L		98
83) 1,2-Dichlorobenzene	12.185	146	7854	2.32	ug/L		97
84) 1,2-Dibromo-3-Chloropr...	12.799	157	1006	1.90	ug/L		77
85) Hexachlorobutadiene	13.304	223	963	2.05	ug/L		87
86) 1,2,4-Trichlorobenzene	13.341	180	4043	2.51	ug/L		89
87) Naphthalene	13.627	128	12724	2.92	ug/L		97
88) 1,2,3-Trichlorobenzene	13.785	180	4073	2.58	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102421.D
Acq On : 24 Oct 2019 5:42 pm
Operator : MM
Sample : 9J24043-CAL5
Misc : 1X 5mL 2/4PPB VOCR
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:26 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102422.D
Acq On : 24 Oct 2019 6:09 pm
Operator : MM
Sample : 9J24043-CAL6
Misc : 1X 5mL 5/10PPB VOCR
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

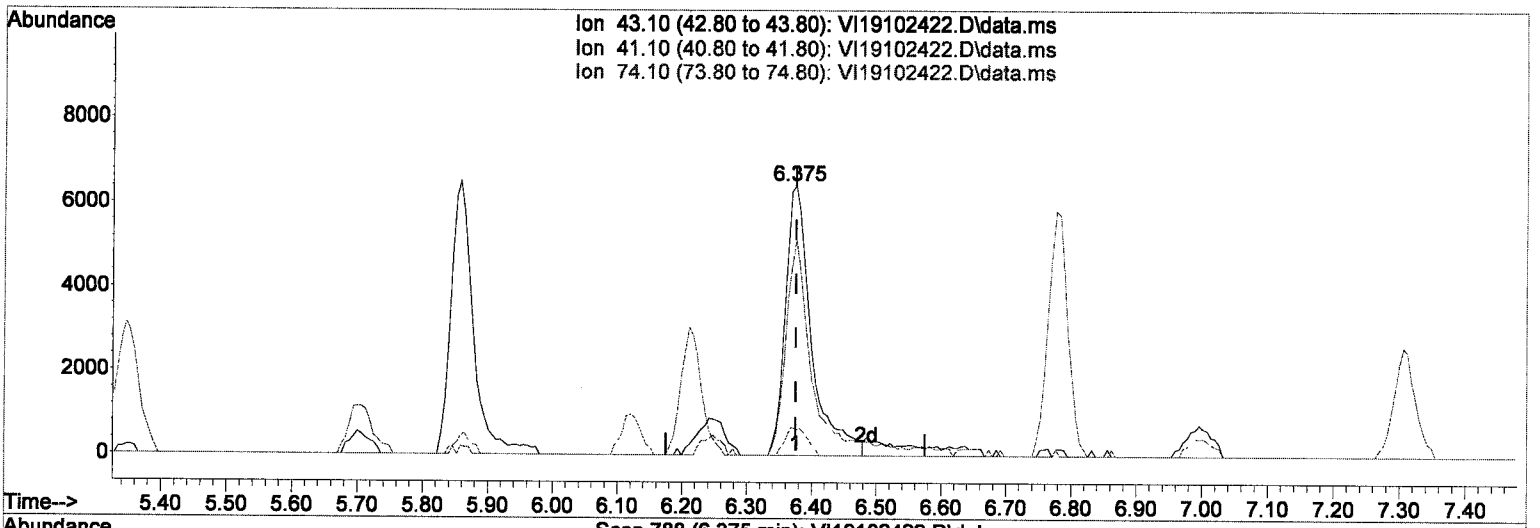
Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

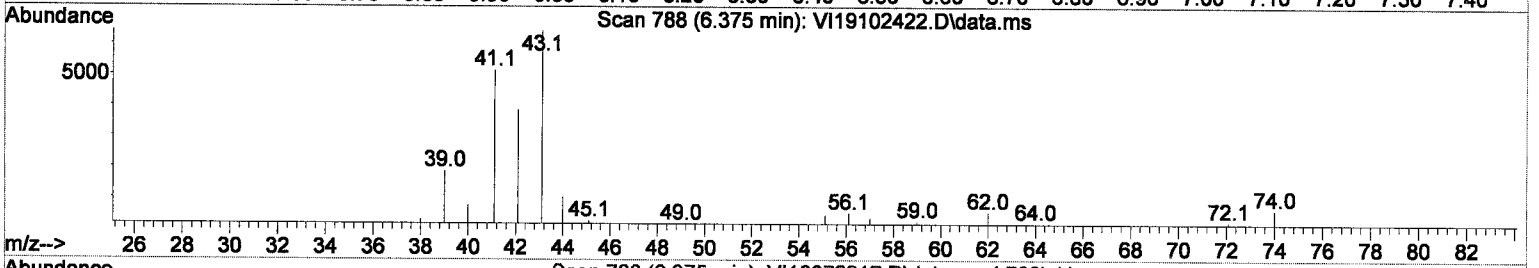
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	111010	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	300317	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	141843	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	109232	47.97	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.777	114	353918	55.65	ug/L		-0.01
48) Toluene-d8 (S)	8.297	98	397005	51.21	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	115652	50.69	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	9010	4.13	ug/L		98
3) Chloromethane	1.891	50	11370	4.42	ug/L		96
4) Vinyl Chloride	1.995	62	12653	5.52	ug/L		96
5) Bromomethane	2.360	96	7782	4.40	ug/L		97
6) Chloroethane	2.506	64	5899	5.07	ug/L		79
7) Trichlorofluoromethane	2.664	101	14236	3.89	ug/L		96
8) Ethanol	3.230	45	17243	388.90	ug/L		85
9) 1,1-Dichloroethene	3.230	61	13321	4.75	ug/L		93
10) Carbon Disulfide	3.248	76	24060	5.23	ug/L		98
11) Freon 113	3.291	101	9544	5.22	ug/L		91
12) Iodomethane	3.382	142	916	6.05	ug/L	#	79
13) Acrolein	3.619	56	2465	6.22	ug/L		88
14) Methylene Chloride	3.869	84	12549	2.62	ug/L		87
15) Acetone	3.942	43	10355	10.83	ug/L		98
16) t-1,2-Dichloroethene	4.039	61	13685	5.45	ug/L		96
17) n-Hexane	4.118	86	1836	5.97	ug/L		92
18) Methyl-tert-butyl-ether	4.167	73	29908	5.40	ug/L		93
19) tert-Butanol (TBA)	4.288	59	143817	419.08	ug/L		97
20) Diisopropyl ether (DIPE)	4.568	45	8576	1.52	ug/L		93
21) 1,1-Dichloroethane	4.684	63	18307	5.17	ug/L		95
22) Acrylonitrile	4.751	53	5426	5.19	ug/L		98
23) Ethyl-tert-butyl ether...	4.939	59	8071	1.61	ug/L		98
24) Vinyl Acetate	4.958	43	20467	4.86	ug/L		97
25) c-1,2-Dichloroethene	5.244	61	13959	5.05	ug/L		90
26) 2,2-Dichloropropane	5.353	77	11793	4.78	ug/L		98
27) Bromochloromethane	5.444	130	7172	5.26	ug/L		96
28) Chloroform	5.529	83	18186	4.79	ug/L		96
29) Carbon Tetrachloride	5.657	117	9957	3.83	ug/L		96
30) Tetrahydrofuran	5.706	42	5112	5.57	ug/L		83
31) 1,1,1-Trichloroethane	5.730	97	14957	4.77	ug/L		94
33) 1,1-Dichloropropene	5.864	75	14423	5.74	ug/L		94
34) 2-Butanone (MEK)	5.858	43	15638	10.72	ug/L		94
35) Benzene	6.120	78	43404	5.74	ug/L		97
36) tert-Amyl methyl ether...	6.247	73	7445	1.48	ug/L		89
37) 1,2-Dichloroethane (EDC)	6.339	62	14359	4.65	ug/L		90
38) iso-Butyl Alcohol	6.375	43	~~18074~~ 20710	136.86	ug/L		98
40) Trichloroethene (TCE)	6.740	130	11340	5.89	ug/L		97
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	5331	1.68	ug/L		83
42) Dibromomethane	7.196	93	7023	5.12	ug/L		97
43) 1,2-Dichloropropane	7.306	63	10897	5.31	ug/L		88
44) Bromodichloromethane	7.379	83	12021	4.36	ug/L		95
46) 2-Chloroethyl Vinyl Ether	8.024	63	7592	6.83	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	14229	5.00	ug/L		87

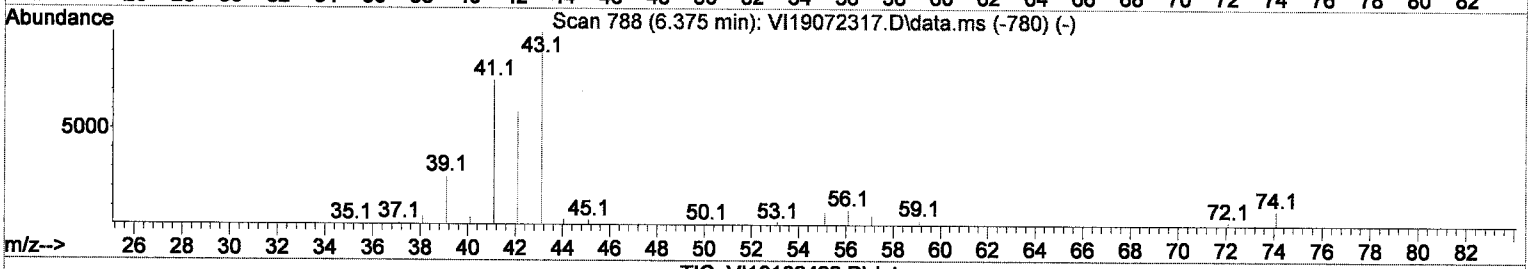
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102422.D
Acq On : 24 Oct 2019 6:09 pm
Operator : MM
Sample : 9J24043-CAL6
Misc : 1X 5mL 5/10PPB VOCR
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102422.D\data.ms

(38) iso-Butyl Alcohol

6.375min (+ 0.000) 136.86 ug/L

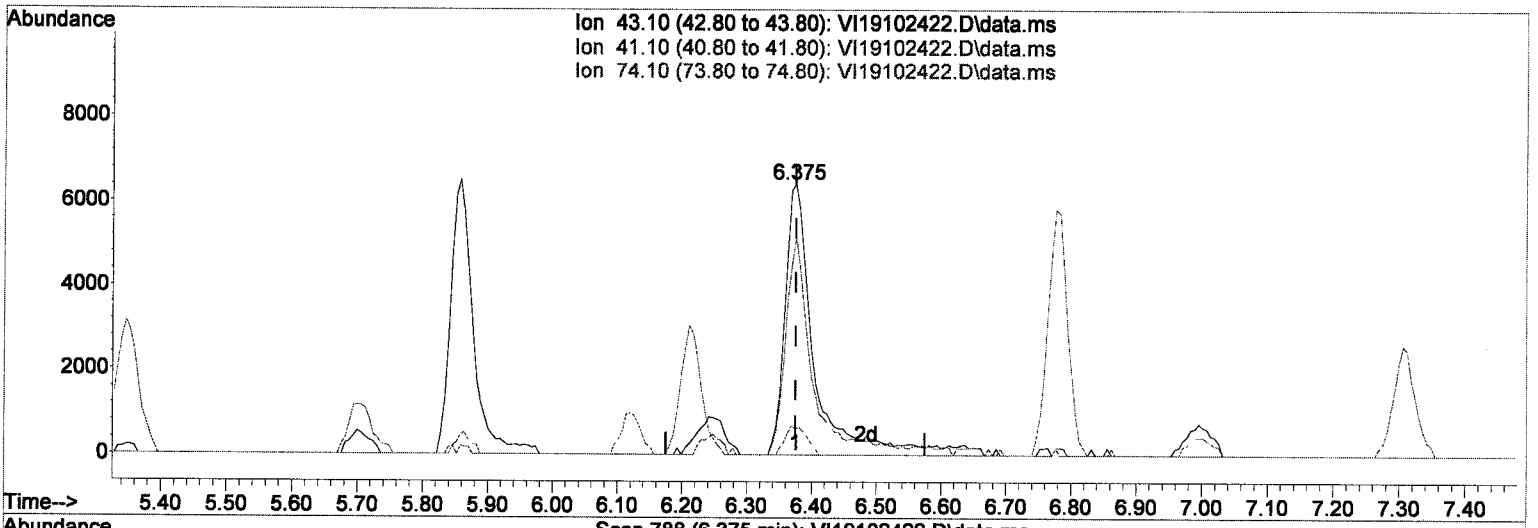
response 18074

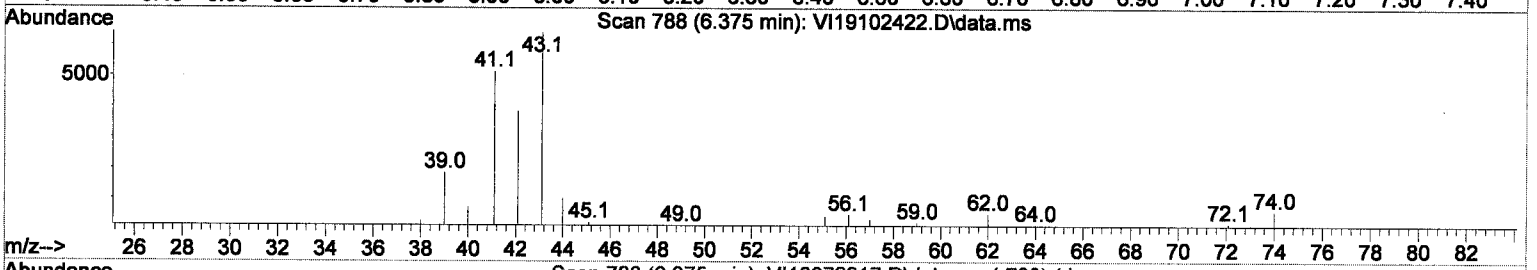
Ion	Exp%	Act%
43.10	100.00	100.00
41.10	78.60	80.03
74.10	11.20	9.63
0.00	0.00	0.00

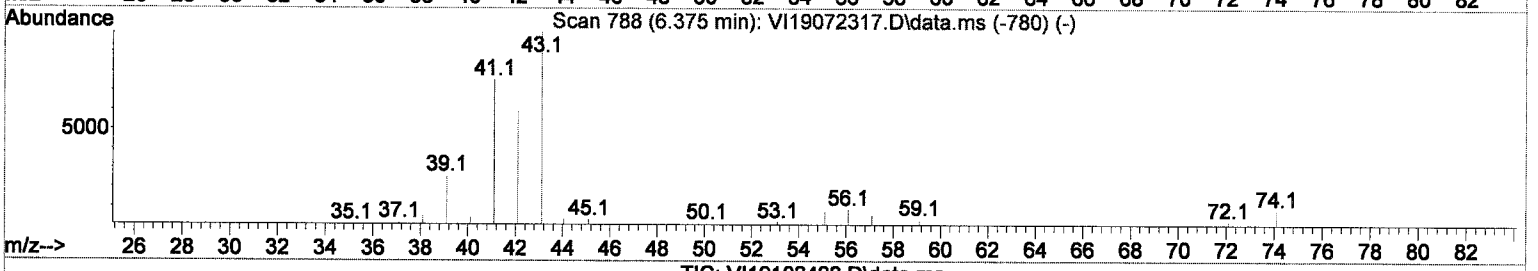
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102422.D
Acq On : 24 Oct 2019 6:09 pm
Operator : MM
Sample : 9J24043-CAL6
Misc : 1X 5mL 5/10PPB VOCR
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration







TIC: VI19102422.D\data.ms

(38) iso-Butyl Alcohol

6.375min (+ 0.000) 156.81 ug/L m

response 20710

Ion	Exp%	Act%
43.10	100.00	100.00
41.10	78.60	80.03
74.10	11.20	9.63
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102422.D
Acq On : 24 Oct 2019 6:09 pm
Operator : MM
Sample : 9J24043-CAL6
Misc : 1X 5mL 5/10PPB VOCR
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

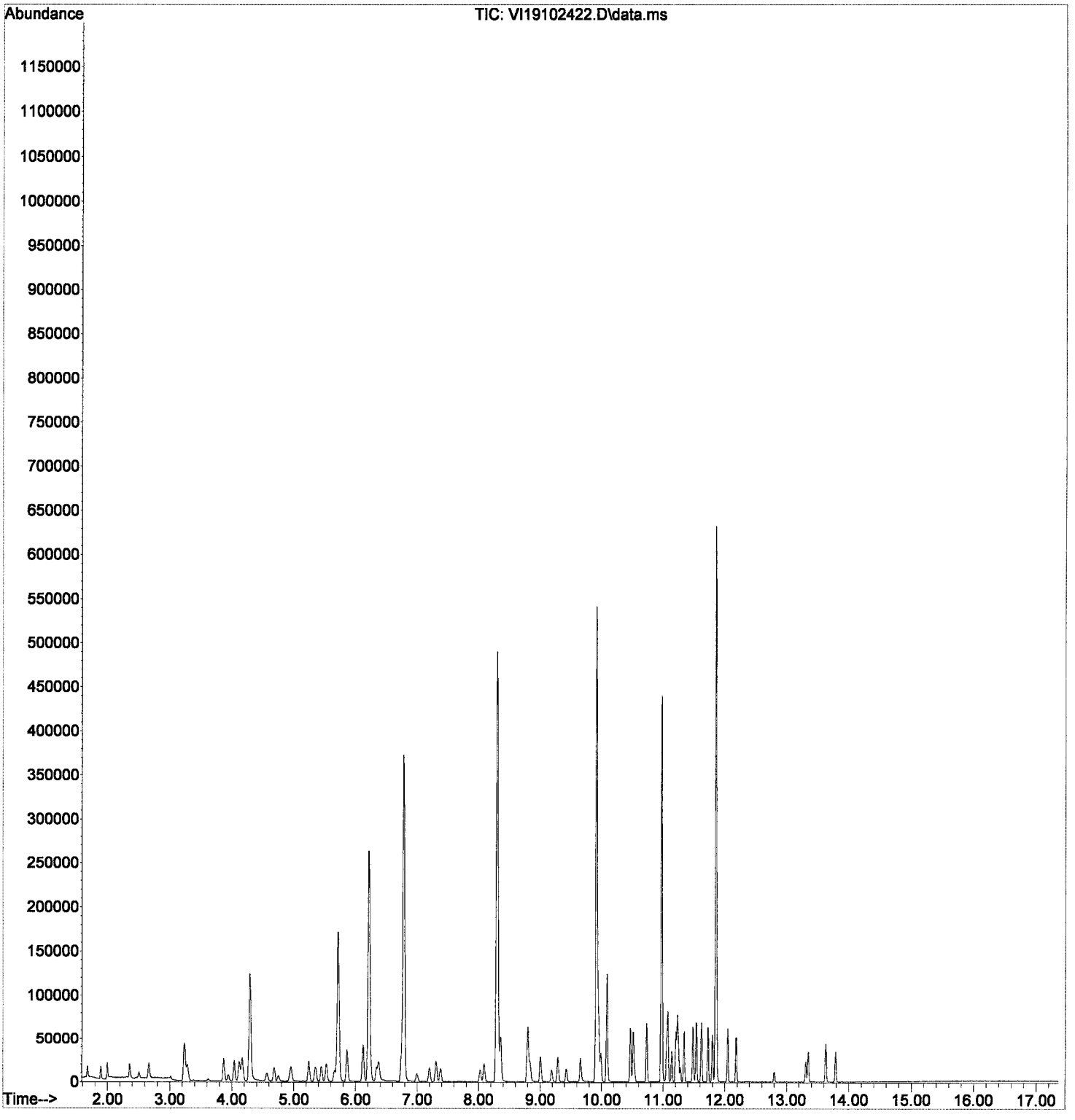
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	44272	5.27	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	10847	5.65	ug/L		90
51) 4-Methyl-2-Pentanone (...	8.796	43	28183	10.59	ug/L		97
52) t-1,3-Dichloropropene	8.839	75	12130	4.29	ug/L		98
53) 1,1,2-Trichloroethane	9.003	97	10336	5.11	ug/L		93
54) Dibromochloromethane	9.186	129	8016	3.77	ug/L		99
55) 1,3-Dichloropropane	9.289	76	17551	5.18	ug/L		88
56) 1,2-Dibromoethane (EDB)	9.423	107	11270	5.42	ug/L		98
57) 2-Hexanone	9.654	43	19724	10.24	ug/L		92
58) Chlorobenzene	9.928	112	29555	5.55	ug/L		97
59) Ethylbenzene	9.952	91	46860	5.34	ug/L		98
60) 1,1,1,2-Tetrachloroethane	9.989	131	7981	4.33	ug/L		94
61) m,p-Xylenes (2)	10.086	91	68847	11.15	ug/L		99
62) o-Xylene	10.463	91	34456	5.68	ug/L		99
63) Styrene	10.512	104	26739	5.76	ug/L		98
64) Bromoform	10.536	173	4690	3.11	ug/L		97
65) Isopropylbenzene	10.731	105	41801	5.88	ug/L		99
68) Bromobenzene	11.059	156	11623	5.69	ug/L		87
69) n-Propylbenzene	11.072	91	48000	5.40	ug/L		98
70) 1,1,2,2-Tetrachloroethane	11.139	85	9843	5.31	ug/L		96
71) 2-Chlorotoluene	11.205	126	10150	5.76	ug/L		90
72) 1,3,5-Trimethylbenzene	11.230	105	33314	5.62	ug/L		97
73) 1,2,3-Trichloropropane	11.248	110	4862	5.37	ug/L		96
74) t-1,4-Dichloro-2-butene	11.278	53	3293	4.68	ug/L	#	57
75) 4-Chlorotoluene	11.339	91	30239	5.73	ug/L		95
76) tert-Butylbenzene	11.479	91	18808	5.76	ug/L		94
77) 1,2,4-Trimethylbenzene	11.540	105	34216	6.04	ug/L		97
78) sec-Butylbenzene	11.619	105	40240	5.67	ug/L		98
79) 4-Isopropyltoluene	11.729	119	33176	6.39	ug/L		99
80) 1,3-Dichlorobenzene	11.796	146	19712	5.49	ug/L		98
81) 1,4-Dichlorobenzene	11.862	146	20421	5.17	ug/L		94
82) n-Butylbenzene	12.045	91	28526	5.77	ug/L		98
83) 1,2-Dichlorobenzene	12.185	146	19460	5.65	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	12.799	157	2728	5.06	ug/L		90
85) Hexachlorobutadiene	13.304	223	2715	5.67	ug/L		94
86) 1,2,4-Trichlorobenzene	13.347	180	11114	6.78	ug/L		93
87) Naphthalene	13.627	128	32892	6.76	ug/L		97
88) 1,2,3-Trichlorobenzene	13.785	180	10402	6.49	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102422.D
Acq On : 24 Oct 2019 6:09 pm
Operator : MM
Sample : 9J24043-CAL6
Misc : 1X 5mL 5/10PPB VOCR
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102423.D
Acq On : 24 Oct 2019 6:36 pm
Operator : MM
Sample : 9J24043-CAL7
Misc : 1X 5mL 10/20PPB VOCR
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:32 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	117608	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.909	117	312833	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	149215	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.712	111	113697	47.13	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.782	114	367409	54.53	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	415174	51.41	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	121121	50.47	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.678	85	18118	7.84	ug/L	99
3) Chloromethane	1.897	50	22449	8.25	ug/L	98
4) Vinyl Chloride	2.001	62	25149	10.35	ug/L	96
5) Bromomethane	2.360	96	14678	7.84	ug/L	99
6) Chloroethane	2.500	64	11813	9.58	ug/L	80
7) Trichlorofluoromethane	2.664	101	29038	7.49	ug/L	94
8) Ethanol	3.236	45	34617	736.96	ug/L	86
9) 1,1-Dichloroethene	3.230	61	27243	9.18	ug/L	93
10) Carbon Disulfide	3.248	76	49011	10.06	ug/L	98
11) Freon 113	3.284	101	19612	10.13	ug/L	99
12) Iodomethane	3.388	142	3125	8.20	ug/L	93
13) Acrolein	3.619	56	4855	11.57	ug/L	76
14) Methylene Chloride	3.868	84	22701	7.47	ug/L	90
15) Acetone	3.941	43	19796	19.53	ug/L	95
16) t-1,2-Dichloroethene	4.039	61	27372	10.29	ug/L	93
17) n-Hexane	4.124	86	4034	12.37	ug/L	92
18) Methyl-tert-butyl-ether	4.167	73	61557	10.49	ug/L	95
19) tert-Butanol (TBA)	4.294	59	292252	803.84	ug/L	99
20) Diisopropyl ether (DIPE)	4.568	45	17135	2.87	ug/L	96
21) 1,1-Dichloroethane	4.684	63	36999	9.87	ug/L	97
22) Acrylonitrile	4.744	53	11383	10.28	ug/L	91
23) Ethyl-tert-butyl ether...	4.939	59	16756	3.15	ug/L	98
24) Vinyl Acetate	4.957	43	42656	9.56	ug/L	97
25) c-1,2-Dichloroethene	5.243	61	28723	9.81	ug/L	90
26) 2,2-Dichloropropane	5.353	77	23663	9.05	ug/L	99
27) Bromochloromethane	5.450	130	14961	10.35	ug/L	91
28) Chloroform	5.529	83	37799	9.40	ug/L	97
29) Carbon Tetrachloride	5.657	117	20840	7.56	ug/L	94
30) Tetrahydrofuran	5.700	42	10375	10.67	ug/L	83
31) 1,1,1-Trichloroethane	5.736	97	30210	9.09	ug/L	97
33) 1,1-Dichloropropene	5.864	75	29295	11.00	ug/L	95
34) 2-Butanone (MEK)	5.858	43	31158	20.17	ug/L	96
35) Benzene	6.119	78	87359	10.91	ug/L	96
36) tert-Amyl methyl ether...	6.247	73	15349	2.88	ug/L	94
37) 1,2-Dichloroethane (EDC)	6.338	62	28935	8.85	ug/L	92
38) iso-Butyl Alcohol	6.375	43	39286	280.78	ug/L	94
40) Trichloroethene (TCE)	6.740	130	23449	11.49	ug/L	96
41) Tert-Amyl-Ethyl-Ether ...	7.001	59	11032	3.28	ug/L	85
42) Dibromomethane	7.196	93	14594	10.04	ug/L	95
43) 1,2-Dichloropropane	7.312	63	21915	10.08	ug/L	94
44) Bromodichloromethane	7.379	83	25055	8.58	ug/L	99
46) 2-Chloroethyl Vinyl Ether	8.023	63	15685	12.76	ug/L #	100
47) c-1,3-Dichloropropene	8.090	75	30482	10.29	ug/L	89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102423.D
Acq On : 24 Oct 2019 6:36 pm
Operator : MM
Sample : 9J24043-CAL7
Misc : 1X 5mL 10/20PPB VOCR
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:32 2019
Quant Method : C:\msdchem\1\methods\~~VI191025W.~~M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

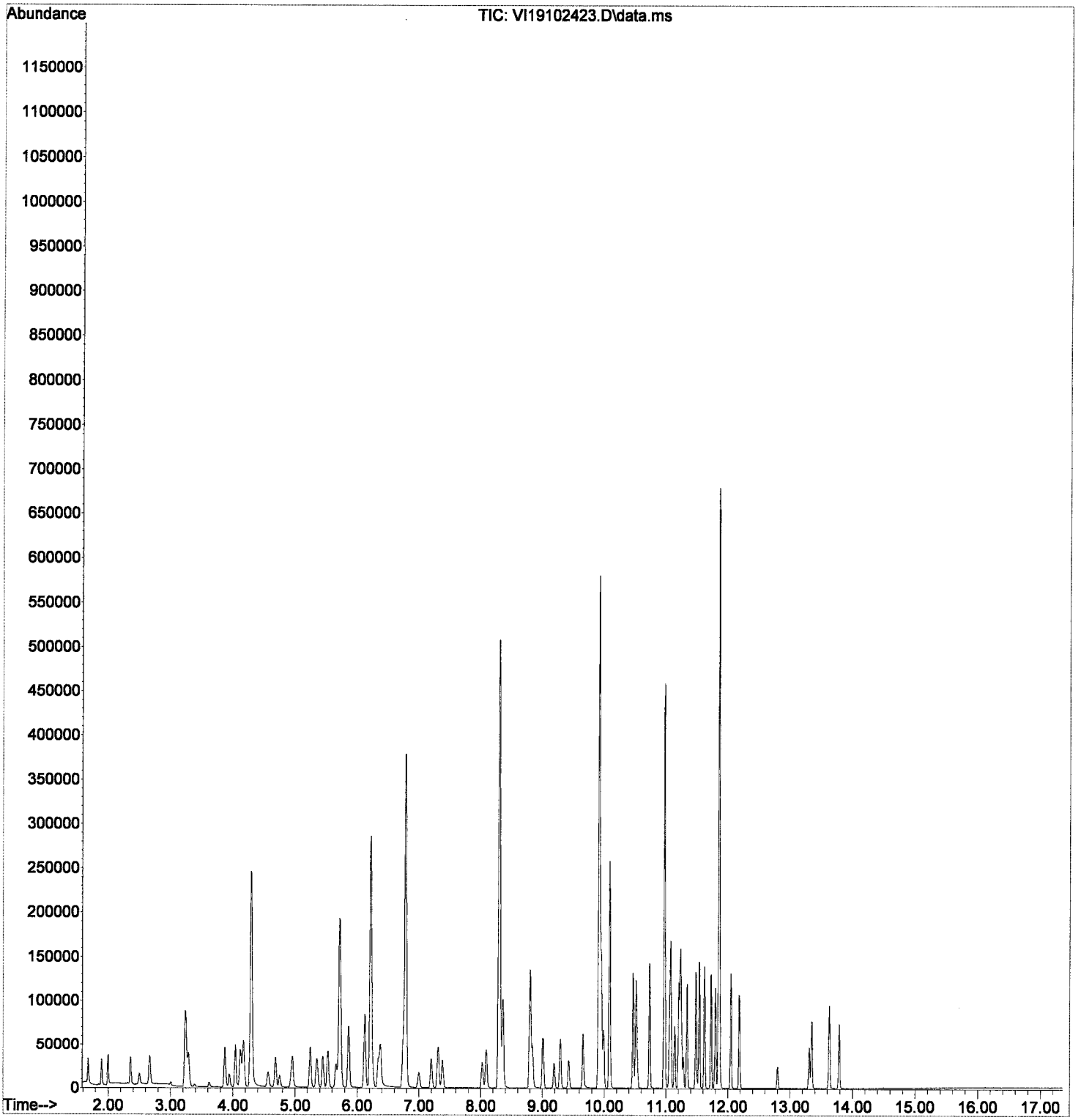
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	90400	10.33	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	22099	11.06	ug/L		92
51) 4-Methyl-2-Pentanone (...	8.802	43	58009	20.92	ug/L		92
52) t-1,3-Dichloropropene	8.839	75	26302	8.92	ug/L		96
53) 1,1,2-Trichloroethane	9.009	97	21402	10.15	ug/L		91
54) Dibromochloromethane	9.192	129	17208	7.78	ug/L		98
55) 1,3-Dichloropropane	9.289	76	36354	10.31	ug/L		92
56) 1,2-Dibromoethane (EDB)	9.423	107	22884	10.57	ug/L		92
57) 2-Hexanone	9.654	43	41881	20.88	ug/L		91
58) Chlorobenzene	9.928	112	60359	10.89	ug/L		98
59) Ethylbenzene	9.952	91	96018	10.49	ug/L		97
60) 1,1,1,2-Tetrachloroethane	9.988	131	16995	8.86	ug/L		94
61) m,p-Xylenes (2)	10.086	91	142004	21.90	ug/L		100
62) o-Xylene	10.463	91	71417	11.16	ug/L		99
63) Styrene	10.512	104	57022	11.55	ug/L		96
64) Bromoform	10.536	173	10701	6.82	ug/L		97
65) Isopropylbenzene	10.731	105	86673	11.50	ug/L		99
68) Bromobenzene	11.059	156	24222	11.27	ug/L		89
69) n-Propylbenzene	11.071	91	99009	10.59	ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.138	85	20098	10.31	ug/L		97
71) 2-Chlorotoluene	11.205	126	21625	11.66	ug/L		93
72) 1,3,5-Trimethylbenzene	11.230	105	69892	11.21	ug/L		98
73) 1,2,3-Trichloropropane	11.248	110	10162	10.68	ug/L		92
74) t-1,4-Dichloro-2-butene	11.278	53	6985	9.43	ug/L	#	66
75) 4-Chlorotoluene	11.339	91	61742	11.13	ug/L		98
76) tert-Butylbenzene	11.479	91	38411	11.19	ug/L		96
77) 1,2,4-Trimethylbenzene	11.534	105	70882	11.77	ug/L		98
78) sec-Butylbenzene	11.619	105	83977	11.24	ug/L		99
79) 4-Isopropyltoluene	11.728	119	68628	12.35	ug/L		98
80) 1,3-Dichlorobenzene	11.795	146	41299	10.93	ug/L		98
81) 1,4-Dichlorobenzene	11.862	146	42771	10.30	ug/L		96
82) n-Butylbenzene	12.045	91	59515	11.45	ug/L		98
83) 1,2-Dichlorobenzene	12.179	146	40125	11.07	ug/L		99
84) 1,2-Dibromo-3-Chloropr...	12.799	157	6234	10.99	ug/L		83
85) Hexachlorobutadiene	13.304	223	5468	10.86	ug/L		93
86) 1,2,4-Trichlorobenzene	13.347	180	23133	13.41	ug/L		99
87) Naphthalene	13.626	128	72324	13.49	ug/L		97
88) 1,2,3-Trichlorobenzene	13.785	180	22293	13.22	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102423.D
Acq On : 24 Oct 2019 6:36 pm
Operator : MM
Sample : 9J24043-CAL7
Misc : 1X 5mL 10/20PPB VOCR
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:32 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102424.D
Acq On : 24 Oct 2019 7:03 pm
Operator : MM
Sample : 9J24043-CAL8
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:35 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

MM 10/25/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.211	99	112406	50.00	ug/L	0.00
45) Chlorobenzene-d5 (I)	9.910	117	307093	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	151591	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.712	111	109549	47.51	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.777	114	354922	55.12	ug/L	-0.01
48) Toluene-d8 (S)	8.298	98	399810	50.43	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	120976	49.61	ug/L	0.00
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.673	85	35982	16.29	ug/L	98
3) Chloromethane	1.892	50	45062	17.32	ug/L	97
4) Vinyl Chloride	1.995	62	49916	21.50	ug/L	96
5) Bromomethane	2.354	96	27599	15.42	ug/L	98
6) Chloroethane	2.488	64	19851	16.84	ug/L	80
7) Trichlorofluoromethane	2.658	101	58162	15.70	ug/L	96
8) Ethanol	3.230	45	70360	1567.21	ug/L	87
9) 1,1-Dichloroethene	3.230	61	54074	19.06	ug/L	94
10) Carbon Disulfide	3.242	76	98898	21.25	ug/L	98
11) Freon 113	3.279	101	39711	21.45	ug/L	97
12) Iodomethane	3.382	142	11472	16.74	ug/L	96
13) Acrolein	3.613	56	10458	26.07	ug/L	77
14) Methylene Chloride	3.869	84	43598	19.20	ug/L	88
15) Acetone	3.936	43	39380	40.66	ug/L	94
16) t-1,2-Dichloroethene	4.033	61	56066	22.05	ug/L	94
17) n-Hexane	4.118	86	8308	26.66	ug/L	95
18) Methyl-tert-butyl-ether	4.167	73	123669	22.05	ug/L	95
19) tert-Butanol (TBA)	4.289	59	614954	1769.71	ug/L	97
20) Diisopropyl ether (DIPE)	4.562	45	34871	6.10	ug/L	94
21) 1,1-Dichloroethane	4.678	63	75120	20.96	ug/L	96
22) Acrylonitrile	4.745	53	22973	21.71	ug/L	97
23) Ethyl-tert-butyl ether...	4.939	59	33471	6.59	ug/L	98
24) Vinyl Acetate	4.952	43	90141	21.14	ug/L	97
25) c-1,2-Dichloroethene	5.238	61	58359	20.86	ug/L	92
26) 2,2-Dichloropropane	5.347	77	48254	19.30	ug/L	97
27) Bromochloromethane	5.444	130	30935	22.39	ug/L	93
28) Chloroform	5.523	83	76239	19.85	ug/L	97
29) Carbon Tetrachloride	5.657	117	43938	16.68	ug/L	92
30) Tetrahydrofuran	5.700	42	21330	22.95	ug/L	89
31) 1,1,1-Trichloroethane	5.730	97	62000	19.52	ug/L	96
33) 1,1-Dichloropropene	5.858	75	59019	23.19	ug/L	96
34) 2-Butanone (MEK)	5.852	43	64474	43.67	ug/L	98
35) Benzene	6.120	78	175817	22.96	ug/L	96
36) tert-Amyl methyl ether...	6.247	73	30296	5.94	ug/L	96
37) 1,2-Dichloroethane (EDC)	6.339	62	58731	18.79	ug/L	91
38) iso-Butyl Alcohol	6.369	43	83527	624.61	ug/L	94
40) Trichloroethene (TCE)	6.740	130	47359	24.28	ug/L	92
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	22696	7.05	ug/L	83
42) Dibromomethane	7.196	93	29514	21.24	ug/L	94
43) 1,2-Dichloropropane	7.306	63	44422	21.38	ug/L	92
44) Bromodichloromethane	7.379	83	51693	18.52	ug/L	94
46) 2-Chloroethyl Vinyl Ether	8.018	63	33274	26.29	ug/L #	100
47) c-1,3-Dichloropropene	8.091	75	64475	22.18	ug/L	87

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102424.D
Acq On : 24 Oct 2019 7:03 pm
Operator : MM
Sample : 9J24043-CAL8
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:35 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

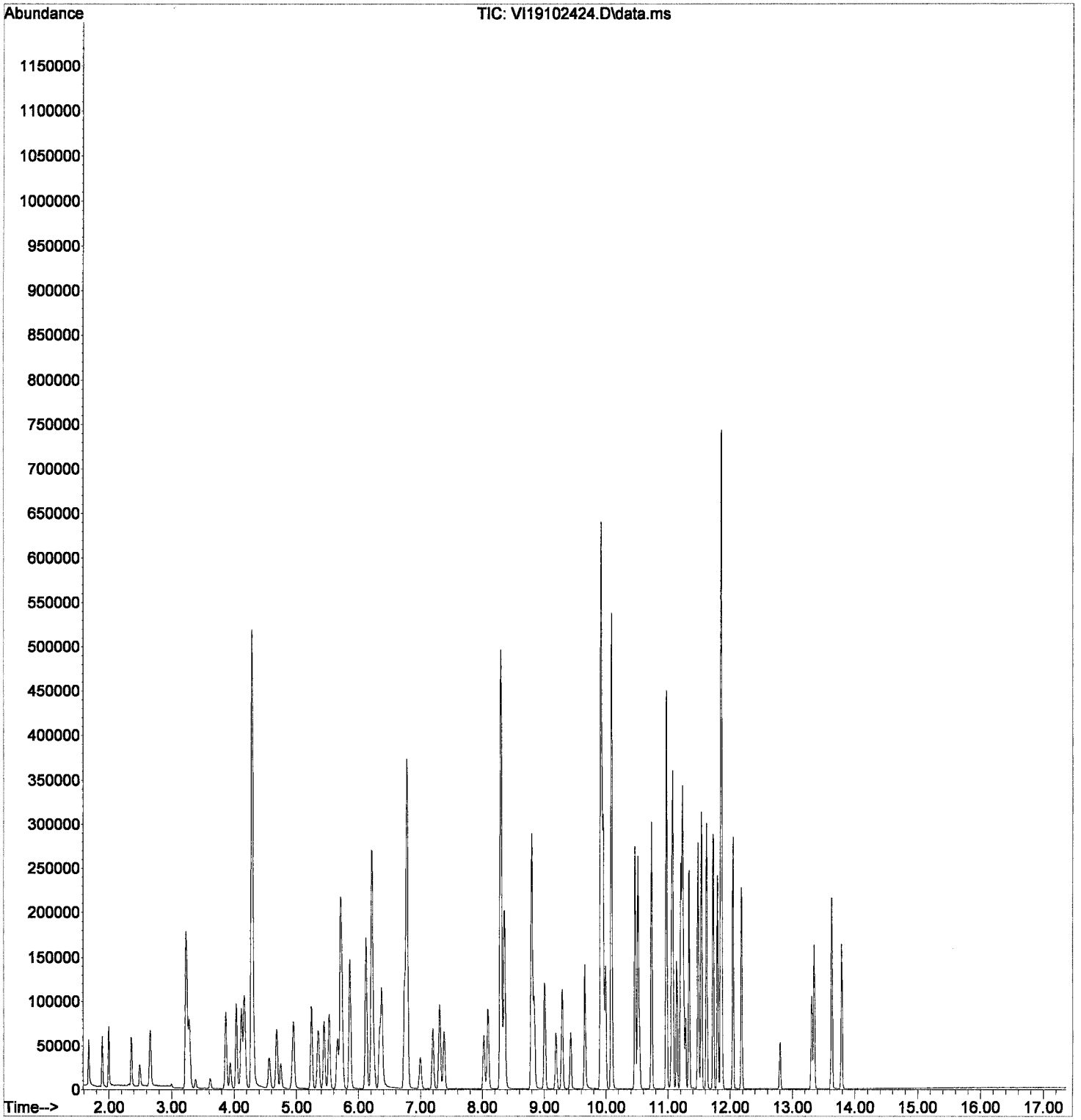
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	183309	21.33	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	45467	23.17	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.796	43	120524	44.27	ug/L		94
52) t-1,3-Dichloropropene	8.833	75	57085	19.72	ug/L		96
53) 1,1,2-Trichloroethane	9.003	97	43171	20.86	ug/L		95
54) Dibromochloromethane	9.186	129	36932	17.00	ug/L		99
55) 1,3-Dichloropropane	9.289	76	73700	21.29	ug/L		92
56) 1,2-Dibromoethane (EDB)	9.423	107	46797	22.02	ug/L		95
57) 2-Hexanone	9.654	43	87528	44.45	ug/L		92
58) Chlorobenzene	9.928	112	120984	22.23	ug/L		99
59) Ethylbenzene	9.952	91	195460	21.76	ug/L		96
60) 1,1,1,2-Tetrachloroethane	9.989	131	36336	19.29	ug/L		96
61) m,p-Xylenes (2)	10.086	91	297066	46.05	ug/L		100
62) o-Xylene	10.463	91	149422	23.36	ug/L		99
63) Styrene	10.512	104	120205	24.26	ug/L		98
64) Bromoform	10.536	173	23844	15.48	ug/L		97
65) Isopropylbenzene	10.731	105	182751	24.16	ug/L		100
68) Bromobenzene	11.060	156	50013	22.90	ug/L		89
69) n-Propylbenzene	11.072	91	210703	22.19	ug/L		100
70) 1,1,2,2-Tetrachloroethane	11.139	85	41819	21.12	ug/L		95
71) 2-Chlorotoluene	11.206	126	45664	24.23	ug/L		95
72) 1,3,5-Trimethylbenzene	11.230	105	148694	23.48	ug/L		98
73) 1,2,3-Trichloropropane	11.248	110	20199	20.89	ug/L		96
74) t-1,4-Dichloro-2-butene	11.279	53	14515	19.29	ug/L	#	73
75) 4-Chlorotoluene	11.339	91	129933	23.05	ug/L		99
76) tert-Butylbenzene	11.479	91	81742	23.44	ug/L		95
77) 1,2,4-Trimethylbenzene	11.534	105	151018	24.30	ug/L		97
78) sec-Butylbenzene	11.619	105	180894	23.84	ug/L		99
79) 4-Isopropyltoluene	11.729	119	151382	26.15	ug/L		97
80) 1,3-Dichlorobenzene	11.796	146	86247	22.48	ug/L		98
81) 1,4-Dichlorobenzene	11.863	146	89594	21.23	ug/L		97
82) n-Butylbenzene	12.045	91	130970	24.80	ug/L		97
83) 1,2-Dichlorobenzene	12.185	146	83871	22.77	ug/L		97
84) 1,2-Dibromo-3-Chloropr...	12.799	157	13740	23.83	ug/L		96
85) Hexachlorobutadiene	13.304	223	12054	23.57	ug/L		92
86) 1,2,4-Trichlorobenzene	13.347	180	50962	29.09	ug/L		98
87) Naphthalene	13.627	128	161860	28.24	ug/L		98
88) 1,2,3-Trichlorobenzene	13.785	180	48345	28.22	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102424.D
Acq On : 24 Oct 2019 7:03 pm
Operator : MM
Sample : 9J24043-CAL8
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:35 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102425.D
Acq On : 24 Oct 2019 7:30 pm
Operator : MM
Sample : 9J24043-CAL9
Misc : 1X 5mL 50/100PPB VOCR
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:38 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	115635	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	321159	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	158122	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	116809	49.24	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.777	114	370144	55.88	ug/L		-0.01
48) Toluene-d8 (S)	8.298	98	415062	50.06	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	125801	49.46	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	109425	48.15	ug/L		99
3) Chloromethane	1.892	50	118956	44.44	ug/L		96
4) Vinyl Chloride	1.995	62	133008	55.69	ug/L		97
5) Bromomethane	2.360	96	66917	36.34	ug/L		96
6) Chloroethane	2.494	64	51695	42.64	ug/L		82
7) Trichlorofluoromethane	2.664	101	145579	38.20	ug/L		95
8) Ethanol	3.230	45	131053	2837.58	ug/L		88
9) 1,1-Dichloroethene	3.230	61	137847	47.23	ug/L		91
10) Carbon Disulfide	3.248	76	254448	53.14	ug/L		98
11) Freon 113	3.285	101	97812	51.37	ug/L		94
12) Iodomethane	3.382	142	57651	55.87	ug/L		92
13) Acrolein	3.613	56	28604	69.32	ug/L		78
14) Methylene Chloride	3.869	84	102541	48.75	ug/L		89
15) Acetone	3.936	43	93945	94.28	ug/L		97
16) t-1,2-Dichloroethene	4.039	61	137318	52.49	ug/L		92
17) n-Hexane	4.118	86	21163	66.01	ug/L	#	91
18) Methyl-tert-butyl-ether	4.167	73	313020	54.26	ug/L		94
19) tert-Butanol (TBA)	4.288	59	1172838	3280.93	ug/L		94
20) Diisopropyl ether (DIPE)	4.562	45	63994	10.88	ug/L		93
21) 1,1-Dichloroethane	4.684	63	182910	49.62	ug/L		96
22) Acrylonitrile	4.745	53	58667	53.90	ug/L		96
23) Ethyl-tert-butyl ether...	4.939	59	63126	12.08	ug/L		96
24) Vinyl Acetate	4.952	43	246127	56.12	ug/L		96
25) c-1,2-Dichloroethene	5.238	61	143124	49.74	ug/L		92
26) 2,2-Dichloropropane	5.347	77	122658	47.70	ug/L		96
27) Bromochloromethane	5.444	130	77572	54.59	ug/L		95
28) Chloroform	5.523	83	186984	47.32	ug/L		97
29) Carbon Tetrachloride	5.657	117	114614	42.30	ug/L		94
30) Tetrahydrofuran	5.694	42	54072	56.56	ug/L		88
31) 1,1,1-Trichloroethane	5.730	97	156566	47.91	ug/L		96
33) 1,1-Dichloropropene	5.858	75	146998	56.14	ug/L		96
34) 2-Butanone (MEK)	5.852	43	162223	106.80	ug/L		96
35) Benzene	6.120	78	434612	55.18	ug/L		96
36) tert-Amyl methyl ether...	6.241	73	56793	10.83	ug/L		98
37) 1,2-Dichloroethane (EDC)	6.339	62	143950	44.78	ug/L		92
38) iso-Butyl Alcohol	6.369	43	224878	1634.66	ug/L		92
40) Trichloroethene (TCE)	6.740	130	118626	59.12	ug/L		95
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	42660	12.88	ug/L		84
42) Dibromomethane	7.196	93	74270	51.96	ug/L		96
43) 1,2-Dichloropropane	7.306	63	109124	51.04	ug/L		92
44) Bromodichloromethane	7.379	83	133532	46.50	ug/L		95
46) 2-Chloroethyl Vinyl Ether	8.018	63	88331	62.62	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	166893	54.89	ug/L		87

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102425.D
Acq On : 24 Oct 2019 7:30 pm
Operator : MM
Sample : 9J24043-CAL9
Misc : 1X 5mL 50/100PPB VOCR
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:38 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

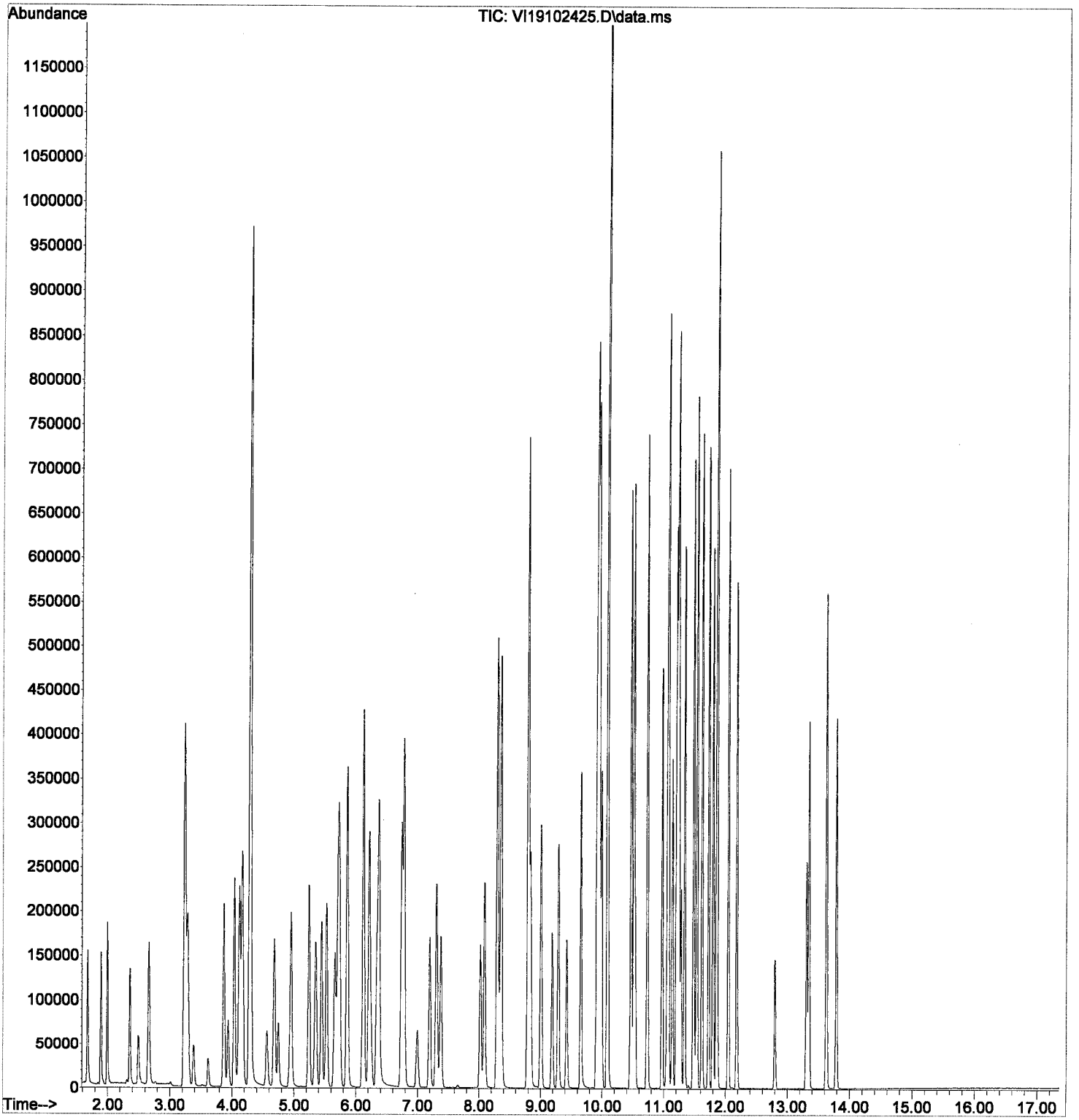
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	446611	49.69	ug/L	99
50) Tetrachloroethene (PCE)	8.796	166	113079	55.11	ug/L	92
51) 4-Methyl-2-Pentanone (...	8.796	43	304356	106.90	ug/L	94
52) t-1,3-Dichloropropene	8.833	75	151987	50.21	ug/L	97
53) 1,1,2-Trichloroethane	9.003	97	107594	49.71	ug/L	94
54) Dibromochloromethane	9.186	129	101291	44.59	ug/L	96
55) 1,3-Dichloropropane	9.289	76	183541	50.70	ug/L	91
56) 1,2-Dibromoethane (EDB)	9.423	107	117418	52.83	ug/L	95
57) 2-Hexanone	9.648	43	224495	109.02	ug/L	91
58) Chlorobenzene	9.928	112	301806	53.03	ug/L	98
59) Ethylbenzene	9.952	91	486890	51.84	ug/L	97
60) 1,1,1,2-Tetrachloroethane	9.989	131	95075	48.26	ug/L	97
61) m,p-Xylenes (2)	10.086	91	738497	106.14	ug/L	99
62) o-Xylene	10.463	91	371768	53.47	ug/L	99
63) Styrene	10.512	104	307044	56.78	ug/L	98
64) Bromoform	10.536	173	71080	44.14	ug/L	96
65) Isopropylbenzene	10.731	105	458349	55.46	ug/L	98
68) Bromobenzene	11.060	156	126180	55.39	ug/L	90
69) n-Propylbenzene	11.072	91	530991	53.60	ug/L	100
70) 1,1,2,2-Tetrachloroethane	11.139	85	106506	51.56	ug/L	94
71) 2-Chlorotoluene	11.206	126	113724	57.85	ug/L	93
72) 1,3,5-Trimethylbenzene	11.230	105	370702	56.11	ug/L	97
73) 1,2,3-Trichloropropane	11.248	110	51746	51.31	ug/L	92
74) t-1,4-Dichloro-2-butene	11.279	53	38431	48.98	ug/L	84
75) 4-Chlorotoluene	11.333	91	325043	55.29	ug/L	95
76) tert-Butylbenzene	11.479	91	202040	55.54	ug/L	97
77) 1,2,4-Trimethylbenzene	11.534	105	374779	56.03	ug/L	96
78) sec-Butylbenzene	11.619	105	451933	57.09	ug/L	98
79) 4-Isopropyltoluene	11.729	119	378247	59.61	ug/L	97
80) 1,3-Dichlorobenzene	11.796	146	218694	54.64	ug/L	99
81) 1,4-Dichlorobenzene	11.863	146	222386	50.52	ug/L	98
82) n-Butylbenzene	12.045	91	325681	59.11	ug/L	99
83) 1,2-Dichlorobenzene	12.179	146	211431	55.02	ug/L	98
84) 1,2-Dibromo-3-Chloropr...	12.799	157	38435	63.92	ug/L	93
85) Hexachlorobutadiene	13.304	223	29829	55.92	ug/L	96
86) 1,2,4-Trichlorobenzene	13.341	180	128379	70.24	ug/L	96
87) Naphthalene	13.627	128	425207	64.94	ug/L	98
88) 1,2,3-Trichlorobenzene	13.785	180	123175	68.94	ug/L	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102425.D
Acq On : 24 Oct 2019 7:30 pm
Operator : MM
Sample : 9J24043-CAL9
Misc : 1X 5mL 50/100PPB VOCR
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:38 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102426.D
Acq On : 24 Oct 2019 7:57 pm
Operator : MM
Sample : 9J24043-IBL2
Misc : 1X 5mL DI
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:40 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

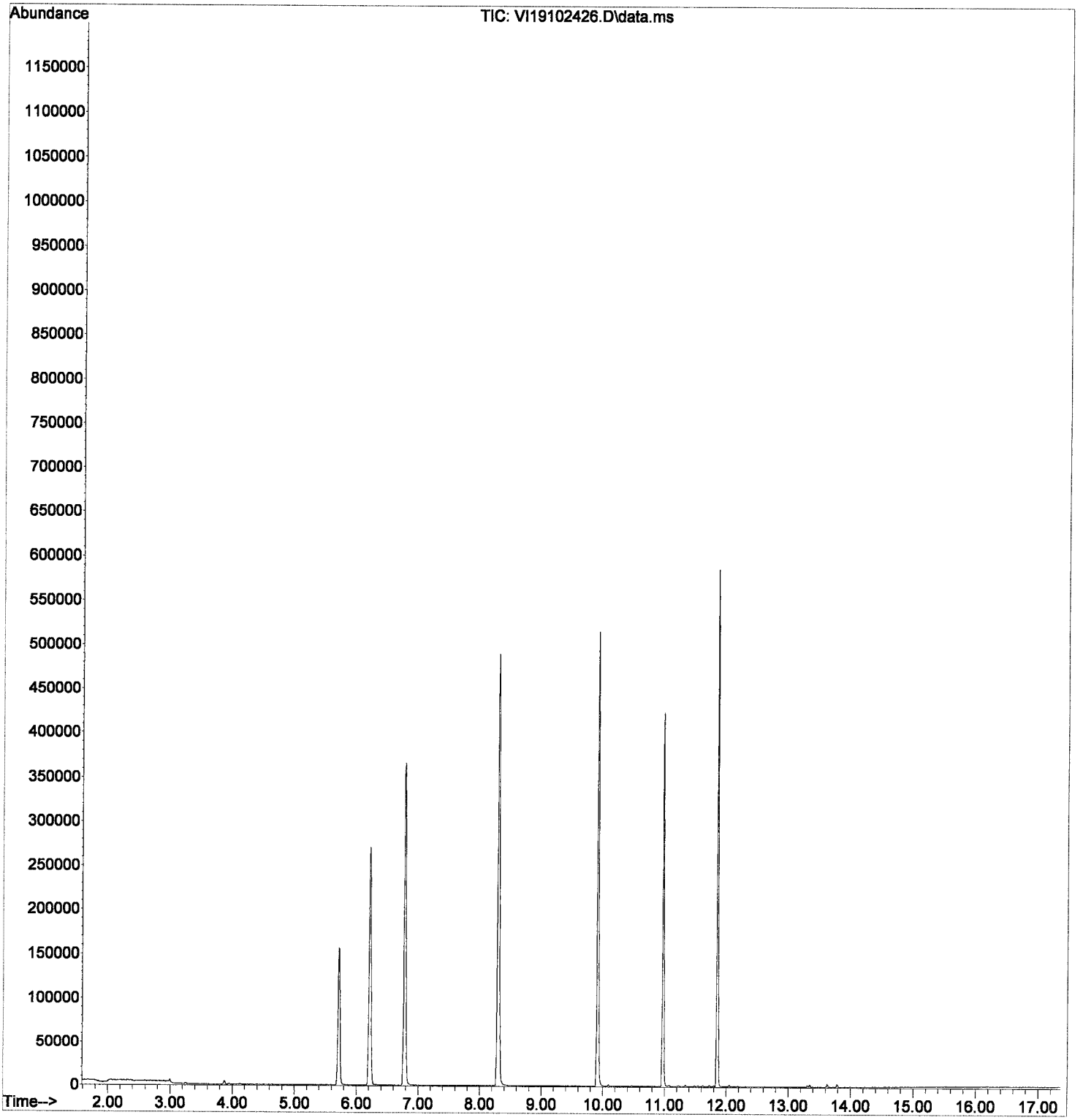
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	112457	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.910	117	299558	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	136435	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	110045	49.80	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	354886	49.95	ug/L		0.00
48) Toluene-d8 (S)	8.298	98	401381	51.05	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	112112	50.86	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	219	0.12	ug/L	#	49
3) Chloromethane	1.898	50	309	0.13	ug/L	#	47
5) Bromomethane	2.366	96	254	0.18	ug/L	#	43
6) Chloroethane	2.518	64	211	0.19	ug/L	#	36
10) Carbon Disulfide	3.248	76	1601	0.33	ug/L		78
15) Acetone	3.948	43	1040	1.06	ug/L		95
50) Tetrachloroethene (PCE)	8.803	166	260	0.13	ug/L	#	25
61) m,p-Xylenes (2)	10.092	91	1118	0.16	ug/L		95
69) n-Propylbenzene	11.072	91	1265	0.14	ug/L		91
72) 1,3,5-Trimethylbenzene	11.230	105	651	0.11	ug/L		81
75) 4-Chlorotoluene	11.339	91	738	0.13	ug/L		86
76) tert-Butylbenzene	11.485	91	323	0.09	ug/L	#	83
77) 1,2,4-Trimethylbenzene	11.540	105	743	0.12	ug/L		92
78) sec-Butylbenzene	11.625	105	1155	0.15	ug/L		94
79) 4-Isopropyltoluene	11.729	119	1010	0.17	ug/L		89
80) 1,3-Dichlorobenzene	11.802	146	590	0.16	ug/L		93
81) 1,4-Dichlorobenzene	11.863	146	797	0.21	ug/L	#	7
82) n-Butylbenzene	12.051	91	1166	0.23	ug/L		98
83) 1,2-Dichlorobenzene	12.185	146	421	0.12	ug/L	#	70
85) Hexachlorobutadiene	13.304	223	332	0.66	ug/L	#	72
86) 1,2,4-Trichlorobenzene	13.341	180	1230	0.60	ug/L		94
87) Naphthalene	13.627	128	3549	0.54	ug/L		93
88) 1,2,3-Trichlorobenzene	13.785	180	1510	0.77	ug/L		82

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102426.D
Acq On : 24 Oct 2019 7:57 pm
Operator : MM
Sample : 9J24043-IBL2
Misc : 1X 5mL DI
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:40 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102427.D
Acq On : 24 Oct 2019 8:24 pm
Operator : MM
Sample : 9J24043-CALA
Misc : 1X 5mL 100/200PPB VOCR
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:41 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	111989	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.909	117	318635	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	163243	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	113819	49.55	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	356857	55.62	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	405945	49.35	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	124392	47.37	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.684	85	212153	96.39	ug/L		98
3) Chloromethane	1.897	50	226754	87.47	ug/L		96
4) Vinyl Chloride	2.001	62	258510	111.76	ug/L		98
5) Bromomethane	2.366	96	125242	70.23	ug/L		98
6) Chloroethane	2.506	64	53786	45.81	ug/L		81
7) Trichlorofluoromethane	2.664	101	279991	75.86	ug/L		97
8) Ethanol	3.242	45	254643	5693.08	ug/L		88
9) 1,1-Dichloroethene	3.236	61	286478	101.36	ug/L		92
10) Carbon Disulfide	3.254	76	531736	114.66	ug/L		98
11) Freon 113	3.291	101	204168	110.71	ug/L		97
12) Iodomethane	3.388	142	153366	122.76	ug/L		92
13) Acrolein	3.625	56	60054	150.27	ug/L		72
14) Methylene Chloride	3.875	84	209114	104.97	ug/L		88
15) Acetone	3.942	43	188786	195.63	ug/L		96
16) t-1,2-Dichloroethene	4.039	61	285846	112.82	ug/L		95
17) n-Hexane	4.124	86	43920	141.46	ug/L		93
18) Methyl-tert-butyl-ether	4.167	73	646936	115.78	ug/L		92
19) tert-Butanol (TBA)	4.294	59	2295578	6630.79	ug/L		91
20) Diisopropyl ether (DIPE)	4.568	45	122827	21.57	ug/L		93
21) 1,1-Dichloroethane	4.684	63	379907	106.41	ug/L		96
22) Acrylonitrile	4.751	53	122564	116.27	ug/L		98
23) Ethyl-tert-butyl ether...	4.939	59	121788	24.06	ug/L		98
24) Vinyl Acetate	4.957	43	522592	123.03	ug/L		95
25) c-1,2-Dichloroethene	5.243	61	297452	106.74	ug/L		91
26) 2,2-Dichloropropane	5.353	77	252830	101.52	ug/L		95
27) Bromochloromethane	5.450	130	151653	110.19	ug/L		94
28) Chloroform	5.529	83	385051	100.61	ug/L		97
29) Carbon Tetrachloride	5.663	117	247648	94.37	ug/L		94
30) Tetrahydrofuran	5.700	42	111881	120.85	ug/L		86
31) 1,1,1-Trichloroethane	5.736	97	325398	102.81	ug/L		96
33) 1,1-Dichloropropene	5.864	75	308104	121.49	ug/L		95
34) 2-Butanone (MEK)	5.852	43	331914	225.64	ug/L		97
35) Benzene	6.119	78	900809	118.09	ug/L		96
36) tert-Amyl methyl ether...	6.247	73	111127	21.87	ug/L		99
37) 1,2-Dichloroethane (EDC)	6.338	62	294149	94.48	ug/L		92
38) iso-Butyl Alcohol	6.375	43	450055	3378.00	ug/L		92
40) Trichloroethene (TCE)	6.746	130	245311	126.23	ug/L		94
41) Tert-Amyl-Ethyl-Ether ...	6.995	59	83591	26.07	ug/L		86
42) Dibromomethane	7.196	93	155032	111.99	ug/L		94
43) 1,2-Dichloropropane	7.312	63	229327	110.76	ug/L		90
44) Bromodichloromethane	7.379	83	282119	101.45	ug/L		92
46) 2-Chloroethyl Vinyl Ether	8.024	63	185987	122.70	ug/L	#	100
47) c-1,3-Dichloropropene	8.090	75	356393	118.14	ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102427.D
Acq On : 24 Oct 2019 8:24 pm
Operator : MM
Sample : 9J24043-CALA
Misc : 1X 5mL 100/200PPB VOCR
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:41 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

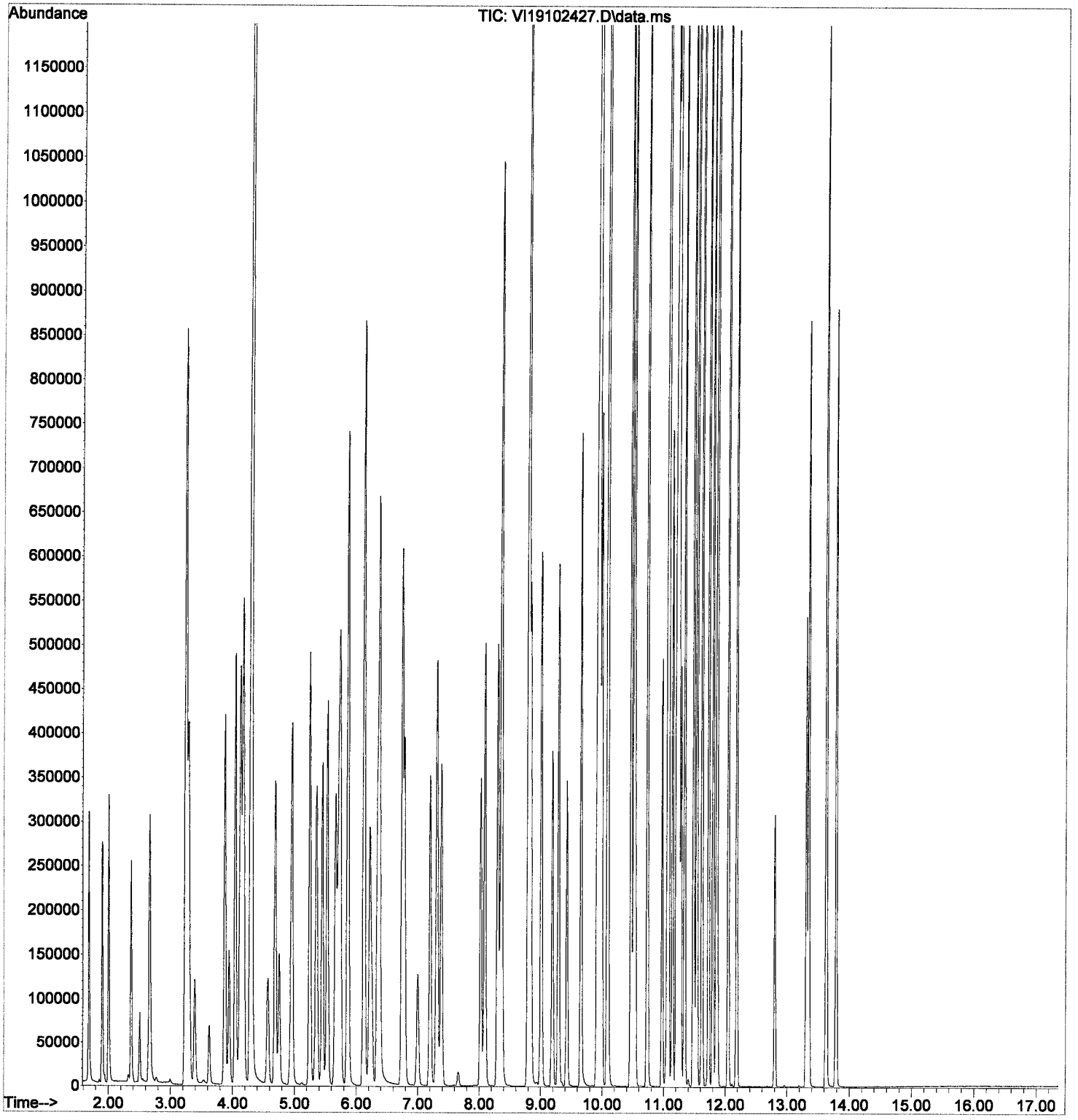
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	931584	104.48	ug/L	99
50) Tetrachloroethene (PCE)	8.796	166	236880	116.36	ug/L	92
51) 4-Methyl-2-Pentanone (...	8.796	43	616767	218.34	ug/L	92
52) t-1,3-Dichloropropene	8.839	75	327146	108.93	ug/L	98
53) 1,1,2-Trichloroethane	9.009	97	221018	102.93	ug/L	92
54) Dibromochloromethane	9.186	129	222919	98.91	ug/L	98
55) 1,3-Dichloropropane	9.289	76	379039	105.53	ug/L	90
56) 1,2-Dibromoethane (EDB)	9.423	107	243688	110.52	ug/L	94
57) 2-Hexanone	9.654	43	456833	223.60	ug/L	90
58) Chlorobenzene	9.928	112	624905	110.67	ug/L	98
59) Ethylbenzene	9.952	91	1015747	109.00	ug/L	97
60) 1,1,1,2-Tetrachloroethane	9.989	131	206263	105.52	ug/L	96
61) m,p-Xylenes (2)	10.086	91	1568164	215.46	ug/L	98
62) o-Xylene	10.463	91	785588	106.87	ug/L	100
63) Styrene	10.512	104	653902	114.07	ug/L	98
64) Bromoform	10.536	173	162527	101.72	ug/L	98
65) Isopropylbenzene	10.731	105	973691	110.72	ug/L	98
68) Bromobenzene	11.059	156	265287	112.81	ug/L	91
69) n-Propylbenzene	11.071	91	1142995	111.76	ug/L	100
70) 1,1,2,2-Tetrachloroethane	11.138	85	212550	99.67	ug/L	94
71) 2-Chlorotoluene	11.205	126	238214	117.38	ug/L	96
72) 1,3,5-Trimethylbenzene	11.230	105	783721	114.91	ug/L	97
73) 1,2,3-Trichloropropane	11.248	110	103994	99.89	ug/L	91
74) t-1,4-Dichloro-2-butene	11.278	53	76466	94.39	ug/L	93
75) 4-Chlorotoluene	11.339	91	688819	113.48	ug/L	98
76) tert-Butylbenzene	11.479	91	431117	114.79	ug/L	98
77) 1,2,4-Trimethylbenzene	11.534	105	798406	110.07	ug/L	97
78) sec-Butylbenzene	11.619	105	969880	118.68	ug/L	98
79) 4-Isopropyltoluene	11.728	119	812481	115.11	ug/L	97
80) 1,3-Dichlorobenzene	11.795	146	461068	111.58	ug/L	98
81) 1,4-Dichlorobenzene	11.862	146	468883	103.17	ug/L	97
82) n-Butylbenzene	12.045	91	694929	122.18	ug/L	99
83) 1,2-Dichlorobenzene	12.185	146	439251	110.73	ug/L	98
84) 1,2-Dibromo-3-Chloropr...	12.799	157	81625	131.48	ug/L	92
85) Hexachlorobutadiene	13.304	223	62008	112.60	ug/L	96
86) 1,2,4-Trichlorobenzene	13.347	180	268764	142.44	ug/L	98
87) Naphthalene	13.627	128	899370	118.81	ug/L	98
88) 1,2,3-Trichlorobenzene	13.785	180	260549	141.24	ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102427.D
Acq On : 24 Oct 2019 8:24 pm
Operator : MM
Sample : 9J24043-CALA
Misc : 1X 5mL 100/200PPB VOCR
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:41 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102428.D
Acq On : 24 Oct 2019 8:51 pm
Operator : MM
Sample : 9J24043-IBL3
Misc : 1X 5mL DI
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:44 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	111004	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.916	117	296306	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	134814	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	109567	50.24	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	354190	50.51	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	395820	50.89	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	112213	51.51	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	460	0.25	ug/L	#	49
3) Chloromethane	1.904	50	377	0.16	ug/L	#	47
4) Vinyl Chloride	2.007	62	243	0.10	ug/L	#	50
5) Bromomethane	2.378	96	380	0.27	ug/L	#	63
6) Chloroethane	2.475	64	250	0.23	ug/L	#	36
7) Trichlorofluoromethane	2.676	101	332	0.12	ug/L	#	27
9) 1,1-Dichloroethene	3.242	61	244	0.09	ug/L	#	66
10) Carbon Disulfide	3.260	76	3074	0.63	ug/L		91
11) Freon 113	3.303	101	464	0.25	ug/L	#	64
12) Iodomethane	3.394	142	124	6.13	ug/L	#	47
14) Methylene Chloride	3.881	84	3969	1.09	ug/L	#	77
15) Acetone	3.948	43	1229	1.26	ug/L		100
16) t-1,2-Dichloroethene	4.045	61	638	0.25	ug/L		95
19) tert-Butanol (TBA)	4.307	59	387	0.90	ug/L		46
33) 1,1-Dichloropropene	5.870	75	460	0.16	ug/L	#	43
40) Trichloroethene (TCE)	6.752	130	288	0.13	ug/L	#	77
49) Toluene	8.352	91	913	0.10	ug/L		85
50) Tetrachloroethene (PCE)	8.796	166	577	0.28	ug/L	#	68
58) Chlorobenzene	9.928	112	773	0.14	ug/L	#	1
59) Ethylbenzene	9.958	91	1209	0.13	ug/L		91
61) m,p-Xylenes (2)	10.092	91	2162	0.32	ug/L		89
62) o-Xylene	10.469	91	668	0.10	ug/L		82
63) Styrene	10.524	104	495	0.09	ug/L	#	42
65) Isopropylbenzene	10.731	105	1275	0.16	ug/L		97
68) Bromobenzene	11.059	156	288	0.14	ug/L		83
69) n-Propylbenzene	11.078	91	2421	0.27	ug/L		95
71) 2-Chlorotoluene	11.211	126	168	0.09	ug/L	#	78
72) 1,3,5-Trimethylbenzene	11.230	105	1309	0.21	ug/L		93
75) 4-Chlorotoluene	11.345	91	1369	0.25	ug/L		91
76) tert-Butylbenzene	11.485	91	751	0.22	ug/L		89
77) 1,2,4-Trimethylbenzene	11.540	105	1395	0.23	ug/L		94
78) sec-Butylbenzene	11.619	105	2367	0.31	ug/L		93
79) 4-Isopropyltoluene	11.729	119	2004	0.34	ug/L		95
80) 1,3-Dichlorobenzene	11.795	146	1269	0.35	ug/L		90
81) 1,4-Dichlorobenzene	11.862	146	1515	0.40	ug/L	#	64
82) n-Butylbenzene	12.045	91	2454	0.48	ug/L		99
83) 1,2-Dichlorobenzene	12.185	146	829	0.23	ug/L		91
85) Hexachlorobutadiene	13.304	223	765	1.55	ug/L		89
86) 1,2,4-Trichlorobenzene	13.341	180	2446	1.20	ug/L		96
87) Naphthalene	13.627	128	6843	1.06	ug/L		97
88) 1,2,3-Trichlorobenzene	13.785	180	2978	1.54	ug/L		95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102428.D
Acq On : 24 Oct 2019 8:51 pm
Operator : MM
Sample : 9J24043-IBL3
Misc : 1X 5mL DI
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:44 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

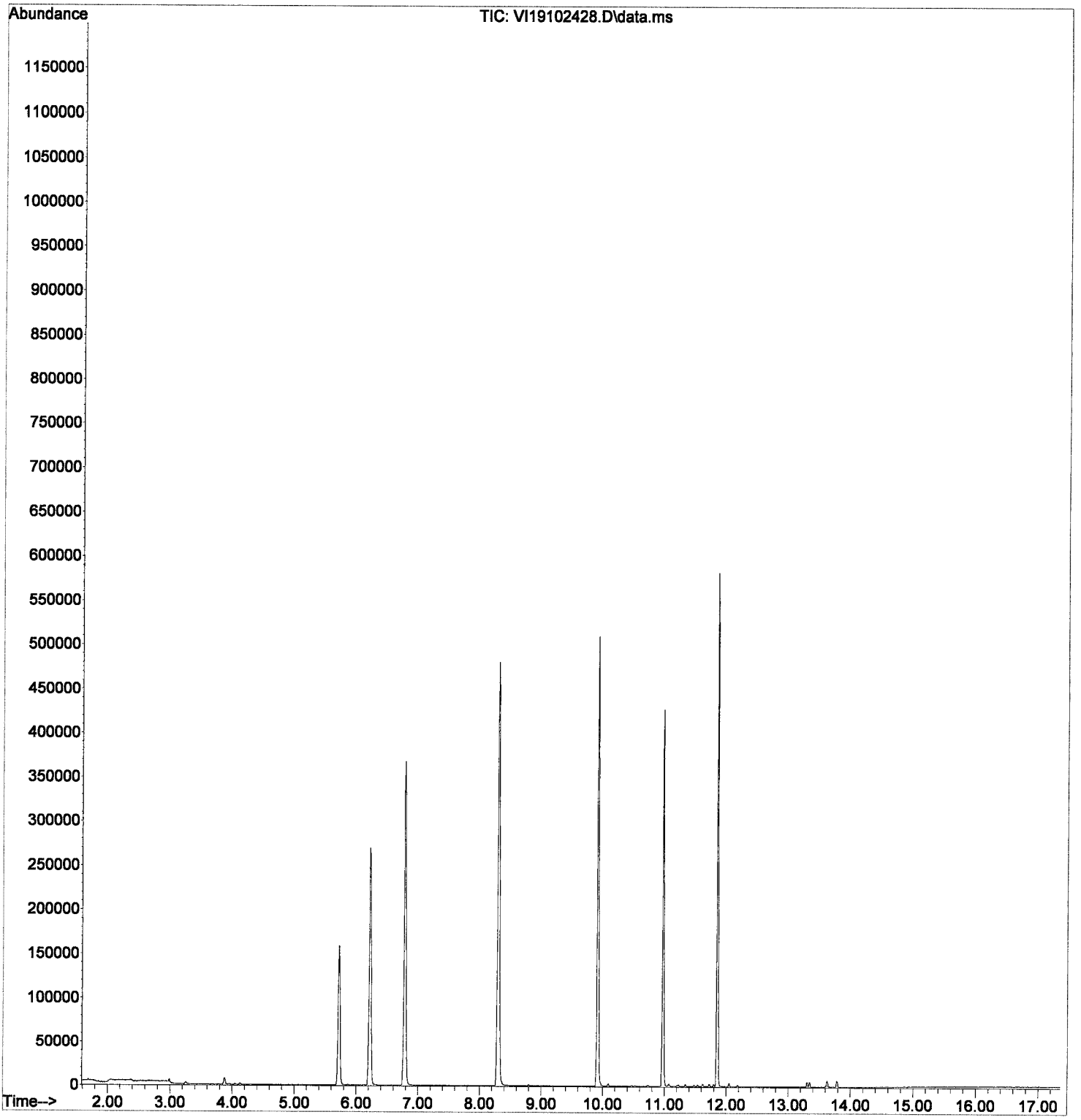
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102428.D
Acq On : 24 Oct 2019 8:51 pm
Operator : MM
Sample : 9J24043-IBL3
Misc : 1X 5mL DI
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:44 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102429.D
Acq On : 24 Oct 2019 9:17 pm
Operator : MM
Sample : 9J24043-CALB
Misc : 1X 5mL 200/400PPB VOCR
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:44 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	116034	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.916	117	330915	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	169365	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	118677	49.86	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	369003	55.51	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	420947	49.28	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	127221	46.70	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	431143	189.06	ug/L		99
3) Chloromethane	1.897	50	456703	170.02	ug/L		96
4) Vinyl Chloride	2.001	62	521368	217.54	ug/L		97
5) Bromomethane	2.366	96	267468	144.76	ug/L		99
6) Chloroethane	2.494	64	53331	43.84	ug/L		86
7) Trichlorofluoromethane	2.658	101	556445	145.51	ug/L		96
8) ~~Ethanol~~	~~3.248~~	~~45~~	~~3815~~	~~82.32~~	~~ug/L~~	~~#~~	~~1~~
9) 1,1-Dichloroethene	3.230	61	567371	193.74	ug/L		92
10) Carbon Disulfide	3.248	76	1067583	222.18	ug/L		98
11) Freon 113	3.285	101	411156	215.18	ug/L		96
12) Iodomethane	3.388	142	348091	216.50	ug/L		94
13) Acrolein	3.619	56	116360	281.01	ug/L		72
14) Methylene Chloride	3.875	84	419637	199.87	ug/L		87
15) Acetone	3.942	43	375022	375.07	ug/L		94
16) t-1,2-Dichloroethene	4.039	61	579277	220.67	ug/L		91
17) n-Hexane	4.124	86	92077	286.23	ug/L		96
18) Methyl-tert-butyl-ether	4.167	73	1318751	227.79	ug/L		93
19) ~~tert-Butanol (TBA)~~	~~4.294~~	~~59~~	~~1885~~	~~5.26~~	~~ug/L~~	~~#~~	~~34~~
20) ~~Diisopropyl ether (DIPE)~~	~~4.568~~	~~45~~	~~1263~~	~~0.21~~	~~ug/L~~		~~96~~
21) 1,1-Dichloroethane	4.684	63	761535	205.86	ug/L		97
22) Acrylonitrile	4.751	53	243406	222.86	ug/L		99
23) ~~Ethyl-tert-butyl ether...~~	~~4.939~~	~~59~~	~~984~~	~~0.19~~	~~ug/L~~	~~#~~	~~1~~
24) Vinyl Acetate	4.957	43	980632	222.81	ug/L		94
25) c-1,2-Dichloroethene	5.243	61	597836	207.05	ug/L		89
26) 2,2-Dichloropropane	5.353	77	512393	198.56	ug/L		92
27) Bromochloromethane	5.450	130	288672	202.44	ug/L		91
28) Chloroform	5.529	83	776466	195.81	ug/L		96
29) Carbon Tetrachloride	5.663	117	525973	193.45	ug/L		95
30) Tetrahydrofuran	5.694	42	221252	230.66	ug/L		85
31) 1,1,1-Trichloroethane	5.736	97	663507	202.33	ug/L		95
33) 1,1-Dichloropropene	5.864	75	622283	236.82	ug/L		94
34) 2-Butanone (MEK)	5.852	43	651518	427.47	ug/L		95
35) Benzene	6.119	78	1815119	229.66	ug/L		96
36) ~~tert-Amyl methyl ether...~~	~~6.253~~	~~73~~	~~804~~	~~0.15~~	~~ug/L~~	~~#~~	~~44~~
37) 1,2-Dichloroethane (EDC)	6.338	62	583025	180.73	ug/L		92
38) iso-Butyl Alcohol	6.375	43	863259	6253.53	ug/L		90
40) Trichloroethene (TCE)	6.740	130	498651	247.64	ug/L		95
41) ~~Tert-Amyl-Ethyl-Ether ...~~	~~7.002~~	~~59~~	~~794~~	~~0.24~~	~~ug/L~~		~~83~~
42) Dibromomethane	7.196	93	314382	219.17	ug/L		96
43) 1,2-Dichloropropane	7.312	63	461364	215.06	ug/L		91
44) Bromodichloromethane	7.379	83	582259	202.08	ug/L		93
46) 2-Chloroethyl Vinyl Ether	8.024	63	361318	207.89	ug/L	#	100
47) c-1,3-Dichloropropene	8.091	75	736312	235.01	ug/L		86

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102429.D
Acq On : 24 Oct 2019 9:17 pm
Operator : MM
Sample : 9J24043-CALB
Misc : 1X 5mL 200/400PPB VOCR
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:44 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

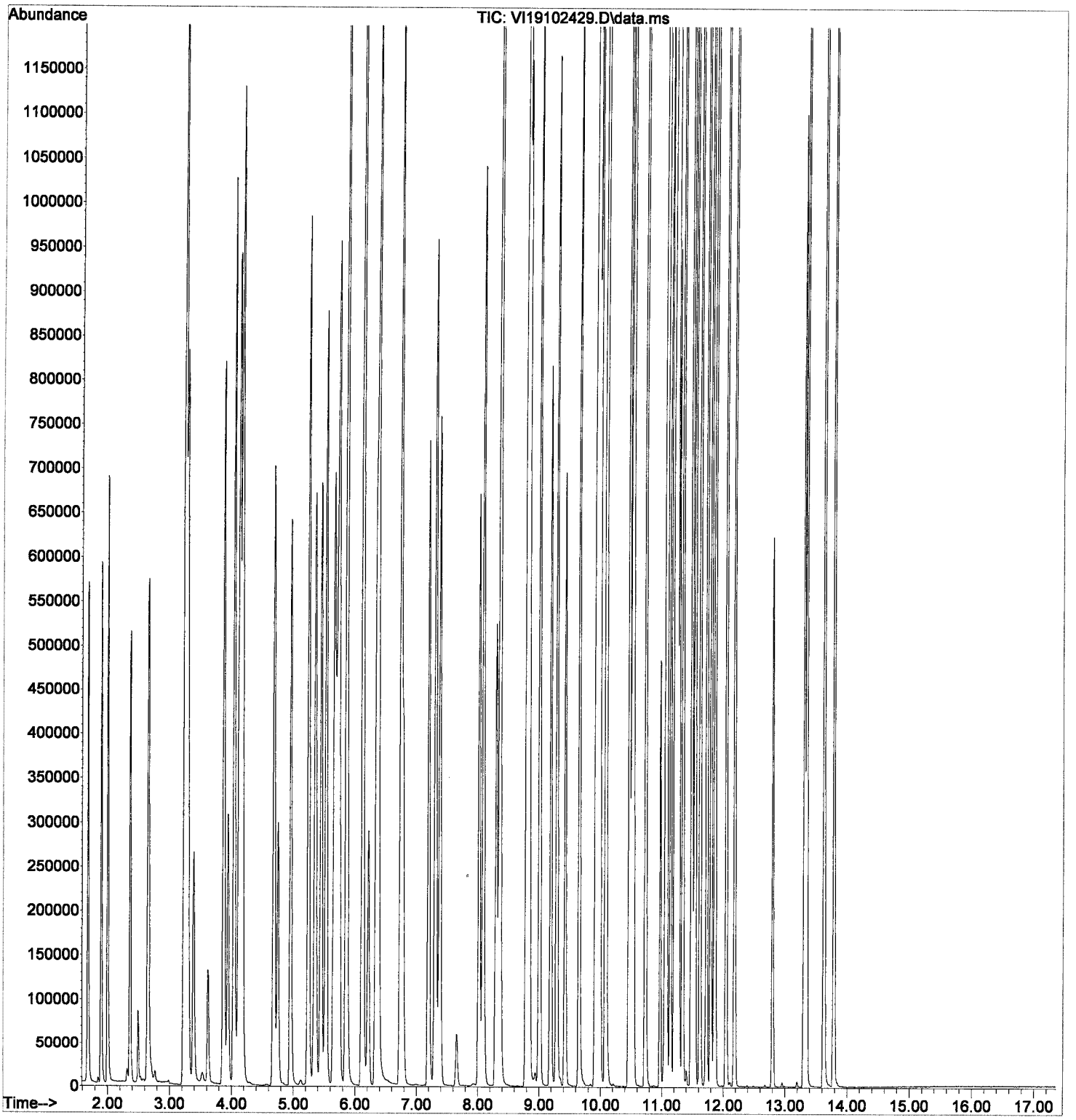
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	1905088	205.73	ug/L	100
50) Tetrachloroethene (PCE)	8.796	166	496433	234.81	ug/L	93
51) 4-Methyl-2-Pentanone (...	8.796	43	1166981	397.79	ug/L	90
52) t-1,3-Dichloropropene	8.839	75	678927	217.67	ug/L	98
53) 1,1,2-Trichloroethane	9.009	97	447395	200.62	ug/L	91
54) Dibromochloromethane	9.186	129	473598	202.33	ug/L	98
55) 1,3-Dichloropropane	9.289	76	755862	202.63	ug/L	88
56) 1,2-Dibromoethane (EDB)	9.423	107	496207	216.69	ug/L	95
57) 2-Hexanone	9.654	43	866990	408.61	ug/L	89
58) Chlorobenzene	9.928	112	1285529	219.22	ug/L	98
59) Ethylbenzene	9.952	91	2091382	216.09	ug/L	96
60) 1,1,1,2-Tetrachloroethane	9.989	131	427244	210.45	ug/L	97
61) m,p-Xylenes (2)	10.086	91	3227914	393.99	ug/L	97
62) o-Xylene	10.463	91	1606355	191.75	ug/L	99
63) Styrene	10.512	104	1353743	206.36	ug/L	98
64) Bromoform	10.536	173	351162	211.63	ug/L	97
65) Isopropylbenzene	10.731	105	1980670	196.46	ug/L	98
68) Bromobenzene	11.059	156	542011	222.15	ug/L	92
69) n-Propylbenzene	11.071	91	2308779	217.60	ug/L	99
70) 1,1,2,2-Tetrachloroethane	11.138	85	408430	184.60	ug/L	94
71) 2-Chlorotoluene	11.205	126	490093	232.77	ug/L	92
72) 1,3,5-Trimethylbenzene	11.230	105	1618836	228.77	ug/L	97
73) 1,2,3-Trichloropropane	11.248	110	199656	184.85	ug/L	91
74) t-1,4-Dichloro-2-butene	11.278	53	148266	176.41	ug/L	93
75) 4-Chlorotoluene	11.339	91	1379272	219.02	ug/L	99
76) tert-Butylbenzene	11.479	91	872573	223.94	ug/L	99
77) 1,2,4-Trimethylbenzene	11.534	105	1629601	200.54	ug/L	97
78) sec-Butylbenzene	11.619	105	1977513	233.24	ug/L	98
79) 4-Isopropyltoluene	11.729	119	1677679	205.31	ug/L	96
80) 1,3-Dichlorobenzene	11.795	146	936572	218.47	ug/L	99
81) 1,4-Dichlorobenzene	11.862	146	949679	201.41	ug/L	97
82) n-Butylbenzene	12.045	91	1435776	243.31	ug/L	100
83) 1,2-Dichlorobenzene	12.185	146	884385	214.88	ug/L	98
84) 1,2-Dibromo-3-Chloropr...	12.799	157	169849	263.70	ug/L	91
85) Hexachlorobutadiene	13.304	223	126838	221.99	ug/L	96
86) 1,2,4-Trichlorobenzene	13.347	180	564943	288.60	ug/L	97
87) Naphthalene	13.627	128	1872418	204.22	ug/L	98
88) 1,2,3-Trichlorobenzene	13.785	180	552458	288.66	ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102429.D
Acq On : 24 Oct 2019 9:17 pm
Operator : MM
Sample : 9J24043-CALB
Misc : 1X 5mL 200/400PPB VOCR
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:10:44 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102430.D
Acq On : 24 Oct 2019 9:44 pm
Operator : MM
Sample : 9J24043-IBL4
Misc : 1X 5mL DI
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:47 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	114565	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.916	117	310520	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	145083	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.718	111	112455	49.96	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	365140	50.45	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	412521	50.61	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	119053	50.79	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.685	85	901	0.48	ug/L		86
3) Chloromethane	1.904	50	702	0.28	ug/L		91
4) Vinyl Chloride	2.007	62	555	0.22	ug/L		76
5) Bromomethane	2.366	96	620	0.42	ug/L	#	66
6) Chloroethane	2.475	64	119	0.10	ug/L	#	36
7) Trichlorofluoromethane	2.682	101	785	0.28	ug/L		75
9) 1,1-Dichloroethene	3.242	61	667	0.25	ug/L	#	68
10) Carbon Disulfide	3.254	76	6515	1.30	ug/L		94
11) Freon 113	3.291	101	931	0.48	ug/L		95
12) Iodomethane	3.394	142	137	6.13	ug/L	#	47
14) Methylene Chloride	3.875	84	7612	2.78	ug/L		89
15) Acetone	3.954	43	1615	1.61	ug/L		99
16) t-1,2-Dichloroethene	4.045	61	1218	0.46	ug/L		78
17) n-Hexane	4.136	86	112	0.28	ug/L	#	32
25) c-1,2-Dichloroethene	5.250	61	460	0.16	ug/L		83
33) 1,1-Dichloropropene	5.870	75	1080	0.37	ug/L		91
35) Benzene	6.132	78	1050	0.12	ug/L		55
40) Trichloroethene (TCE)	6.746	130	726	0.32	ug/L		83
49) Toluene	8.364	91	1892	0.21	ug/L		82
50) Tetrachloroethene (PCE)	8.802	166	1170	0.55	ug/L		97
52) t-1,3-Dichloropropene	8.851	75	248	0.09	ug/L	#	45
58) Chlorobenzene	9.928	112	1487	0.26	ug/L	#	41
59) Ethylbenzene	9.952	91	2481	0.26	ug/L		98
61) m,p-Xylenes (2)	10.086	91	3988	0.57	ug/L		87
62) o-Xylene	10.469	91	1347	0.19	ug/L		91
63) Styrene	10.518	104	1067	0.19	ug/L		84
65) Isopropylbenzene	10.731	105	2410	0.28	ug/L		98
68) Bromobenzene	11.059	156	607	0.27	ug/L	#	77
69) n-Propylbenzene	11.078	91	4614	0.48	ug/L		96
71) 2-Chlorotoluene	11.205	126	614	0.30	ug/L		91
72) 1,3,5-Trimethylbenzene	11.230	105	2535	0.38	ug/L		94
75) 4-Chlorotoluene	11.339	91	2932	0.49	ug/L		94
76) tert-Butylbenzene	11.479	91	1522	0.41	ug/L	#	74
77) 1,2,4-Trimethylbenzene	11.540	105	2816	0.42	ug/L		95
78) sec-Butylbenzene	11.619	105	4551	0.56	ug/L		94
79) 4-Isopropyltoluene	11.729	119	3934	0.61	ug/L		99
80) 1,3-Dichlorobenzene	11.802	146	2380	0.61	ug/L		96
81) 1,4-Dichlorobenzene	11.862	146	2728	0.67	ug/L	#	77
82) n-Butylbenzene	12.045	91	4783	0.88	ug/L		94
83) 1,2-Dichlorobenzene	12.185	146	1646	0.43	ug/L		95
85) Hexachlorobutadiene	13.304	223	1948	3.66	ug/L		90
86) 1,2,4-Trichlorobenzene	13.347	180	4827	2.20	ug/L		92
87) Naphthalene	13.627	128	13602	1.95	ug/L		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102430.D
Acq On : 24 Oct 2019 9:44 pm
Operator : MM
Sample : 9J24043-IBL4
Misc : 1X 5mL DI
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:47 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

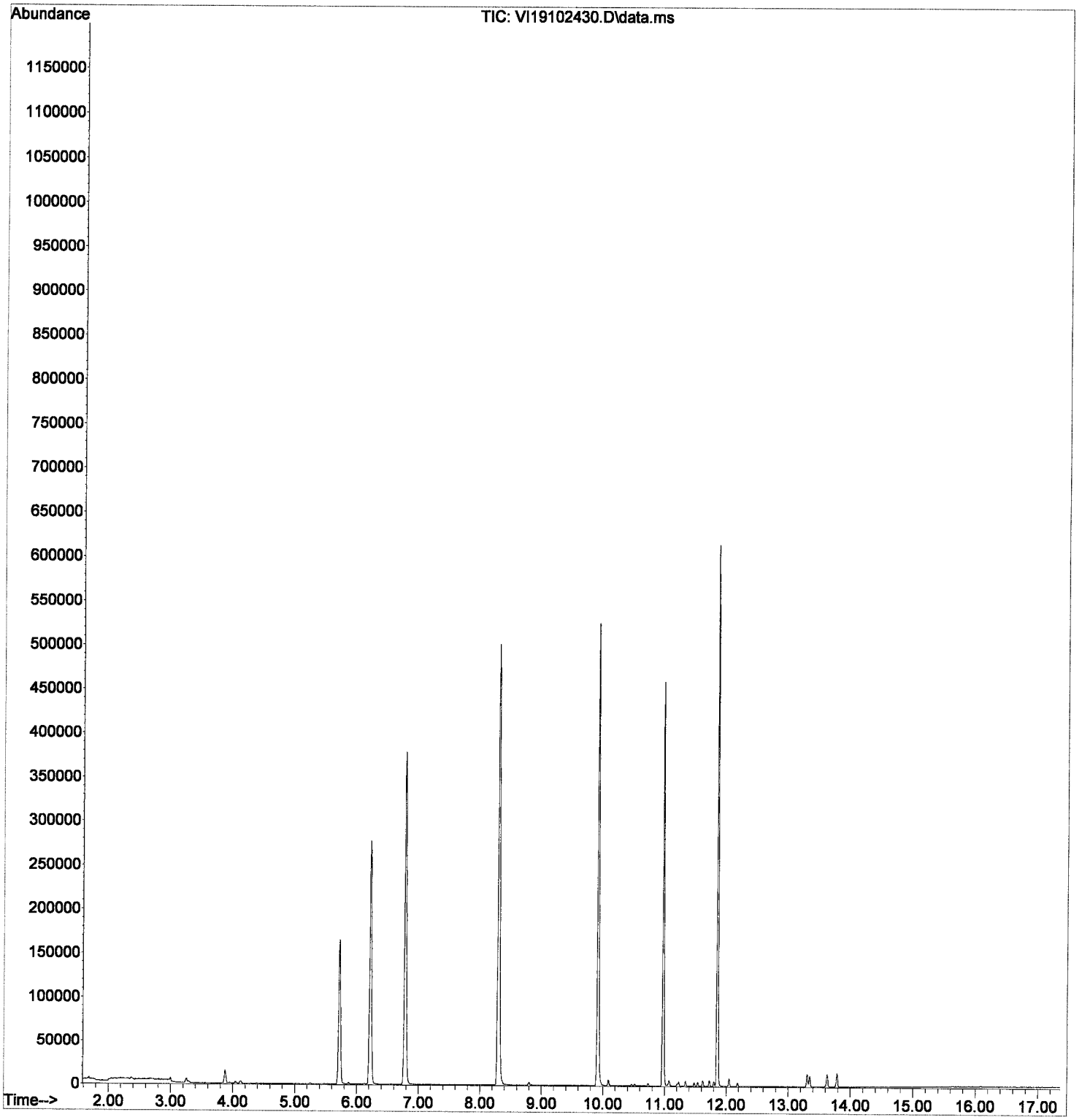
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
88) 1,2,3-Trichlorobenzene	13.785	180	5992	2.88	ug/L	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102430.D
Acq On : 24 Oct 2019 9:44 pm
Operator : MM
Sample : 9J24043-IBL4
Misc : 1X 5mL DI
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:47 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102431.D
Acq On : 24 Oct 2019 10:11 pm
Operator : MM
Sample : 9J24043-IBL5
Misc : 1X 5mL DI
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:50 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

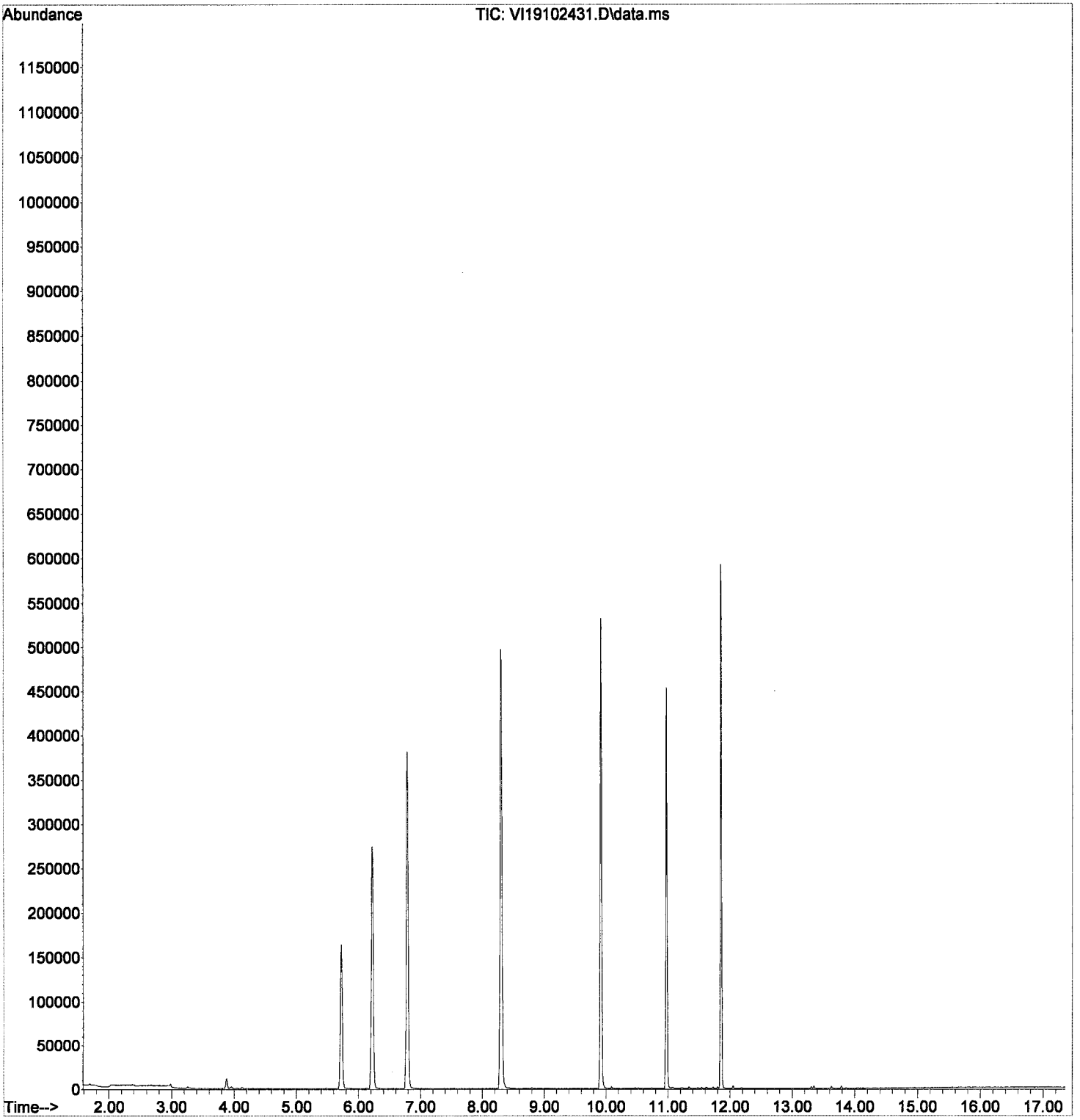
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	114296	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	308297	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	139384	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.718	111	112321	50.01 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	364393	50.46 ug/L	0.00
48) Toluene-d8 (S)	8.297	98	406006	50.17 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	117384	52.12 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.691	85	321	0.17 ug/L #	49
3) Chloromethane	1.904	50	302	0.12 ug/L #	47
5) Bromomethane	2.378	96	484	0.33 ug/L #	56
6) Chloroethane	2.500	64	259	0.23 ug/L #	36
10) Carbon Disulfide	3.260	76	2655	0.53 ug/L	89
11) Freon 113	3.291	101	416	0.21 ug/L #	74
14) Methylene Chloride	3.881	84	5891	1.96 ug/L	86
15) Acetone	3.954	43	3138	3.13 ug/L	97
16) t-1,2-Dichloroethene	4.039	61	402	0.15 ug/L #	70
33) 1,1-Dichloropropene	5.870	75	357	0.12 ug/L #	43
49) Toluene	8.358	91	884	0.10 ug/L	92
50) Tetrachloroethene (PCE)	8.802	166	422	0.20 ug/L #	70
58) Chlorobenzene	9.928	112	577	0.10 ug/L #	5
59) Ethylbenzene	9.952	91	980	0.10 ug/L	83
61) m,p-Xylenes (2)	10.086	91	1705	0.24 ug/L	86
65) Isopropylbenzene	10.737	105	735	0.09 ug/L	54
69) n-Propylbenzene	11.072	91	1706	0.18 ug/L	90
72) 1,3,5-Trimethylbenzene	11.230	105	901	0.14 ug/L	86
75) 4-Chlorotoluene	11.339	91	1026	0.18 ug/L	91
76) tert-Butylbenzene	11.479	91	379	0.11 ug/L #	75
77) 1,2,4-Trimethylbenzene	11.540	105	984	0.15 ug/L	90
78) sec-Butylbenzene	11.625	105	1431	0.18 ug/L	80
79) 4-Isopropyltoluene	11.729	119	1483	0.24 ug/L	96
80) 1,3-Dichlorobenzene	11.802	146	846	0.22 ug/L	96
81) 1,4-Dichlorobenzene	11.862	146	1023	0.26 ug/L #	40
82) n-Butylbenzene	12.051	91	1702	0.32 ug/L	91
83) 1,2-Dichlorobenzene	12.191	146	544	0.15 ug/L #	66
85) Hexachlorobutadiene	13.304	223	353	0.69 ug/L	94
86) 1,2,4-Trichlorobenzene	13.347	180	1099	0.52 ug/L	84
87) Naphthalene	13.627	128	2260	0.34 ug/L	81
88) 1,2,3-Trichlorobenzene	13.785	180	993	0.50 ug/L	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102431.D
Acq On : 24 Oct 2019 10:11 pm
Operator : MM
Sample : 9J24043-IBL5
Misc : 1X 5mL DI
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:50 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102432.D
Acq On : 24 Oct 2019 10:38 pm
Operator : MM
Sample : 9J24043-ICV1
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

JV 10/25/19

Quant Time: Oct 25 08:52:53 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	115739	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.909	117	319865	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	157880	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	114369	50.29	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.782	114	368262	50.36	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	413951	49.31	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	126483	49.58	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.678	85	47743	25.24	ug/L		99
3) Chloromethane	1.891	50	52000	20.73	ug/L		96
4) Vinyl Chloride	1.995	62	55595	22.12	ug/L		97
5) Bromomethane	2.360	96	33560	22.65	ug/L		98
6) Chloroethane	2.494	64	20238	17.52	ug/L		79
7) Trichlorofluoromethane	2.658	101	58875	20.69	ug/L		97
8) Ethanol	3.236	45	2066	37.15	ug/L		95
9) 1,1-Dichloroethene	3.230	61	54108	19.72	ug/L		91
10) Carbon Disulfide	3.248	76	92901	18.35	ug/L		98
11) Freon 113	3.278	101	37659	19.09	ug/L		97
12) Iodomethane	3.382	142	13440	16.51	ug/L		90
13) Acrolein	3.619	56	10766	20.47	ug/L		64
14) Methylene Chloride	3.868	84	43934	19.96	ug/L		87
15) Acetone	3.935	43	38135	37.60	ug/L		96
16) t-1,2-Dichloroethene	4.039	61	56343	20.98	ug/L		89
17) n-Hexane	4.124	86	7879	19.27	ug/L	#	88
18) Methyl-tert-butyl-ether	4.167	73	122260	19.59	ug/L		93
19) tert-Butanol (TBA)	4.294	59	12609	28.14	ug/L		83
20) Diisopropyl ether (DIPE)	4.562	45	1214	0.18	ug/L		74
21) 1,1-Dichloroethane	4.684	63	76555	20.53	ug/L		97
22) Acrylonitrile	4.744	53	21989	19.59	ug/L		99
23) Ethyl-tert-butyl ether...	4.945	59	1021	0.16	ug/L		69
24) Vinyl Acetate	4.957	43	89589	19.89	ug/L		95
25) c-1,2-Dichloroethene	5.243	61	57695	20.04	ug/L		92
26) 2,2-Dichloropropane	5.347	77	43127	17.72	ug/L		97
27) Bromochloromethane	5.444	130	31156	22.05	ug/L		93
28) Chloroform	5.523	83	76051	20.86	ug/L		96
29) Carbon Tetrachloride	5.657	117	45898	20.70	ug/L		97
30) Tetrahydrofuran	5.700	42	20305	19.03	ug/L		86
31) 1,1,1-Trichloroethane	5.730	97	61359	19.94	ug/L		97
33) 1,1-Dichloropropene	5.858	75	57945	19.60	ug/L		96
34) 2-Butanone (MEK)	5.852	43	60911	37.88	ug/L		97
35) Benzene	6.119	78	173963	19.67	ug/L		97
36) tert-Amyl methyl ether...	6.259	73	1053	0.18	ug/L		74
37) 1,2-Dichloroethane (EDC)	6.338	62	58405	20.16	ug/L		94
38) iso-Butyl Alcohol	6.375	43	83622	519.10	ug/L		92
40) Trichloroethene (TCE)	6.740	130	48413	21.24	ug/L		94
41) Tert-Amyl-Ethyl-Ether ...	6.995	59	625	0.14	ug/L	#	64
42) Dibromomethane	7.196	93	29991	21.13	ug/L		96
43) 1,2-Dichloropropane	7.306	63	44751	20.29	ug/L		93
44) Bromodichloromethane	7.379	83	52780	20.75	ug/L		94
46) 2-Chloroethyl Vinyl Ether	8.023	63	32992	20.09	ug/L	#	100
47) c-1,3-Dichloropropene	8.090	75	62899	19.89	ug/L		88

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102432.D
Acq On : 24 Oct 2019 10:38 pm
Operator : MM
Sample : 9J24043-ICV1
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:53 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

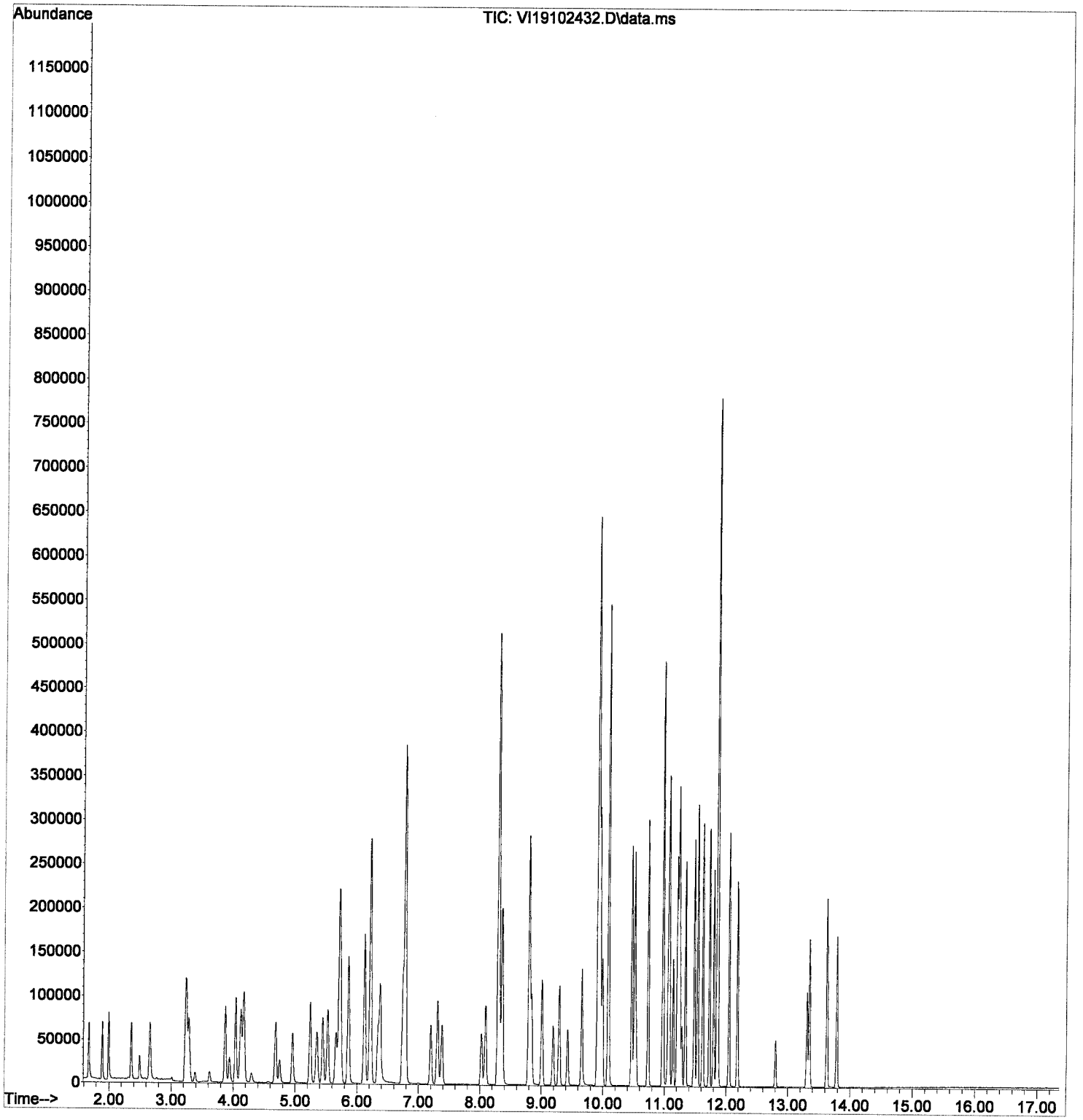
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	182339	19.39	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	45736	20.89	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.796	43	117185	41.04	ug/L		94
52) t-1,3-Dichloropropene	8.839	75	58067	20.70	ug/L		99
53) 1,1,2-Trichloroethane	9.003	97	44277	21.23	ug/L		94
54) Dibromochloromethane	9.185	129	40034	23.75	ug/L		97
55) 1,3-Dichloropropane	9.289	76	73648	20.48	ug/L		92
56) 1,2-Dibromoethane (EDB)	9.423	107	46898	20.66	ug/L		94
57) 2-Hexanone	9.654	43	84867	40.56	ug/L		91
58) Chlorobenzene	9.928	112	123672	20.60	ug/L		98
59) Ethylbenzene	9.952	91	198723	20.15	ug/L		97
60) 1,1,1,2-Tetrachloroethane	9.988	131	38126	21.77	ug/L		95
61) m,p-Xylenes (2)	10.086	91	297332	40.93	ug/L		99
62) o-Xylene	10.463	91	151148	20.99	ug/L		99
63) Styrene	10.512	104	120728	20.86	ug/L		97
64) Bromoform	10.536	173	26445	21.37	ug/L		97
65) Isopropylbenzene	10.731	105	183894	20.93	ug/L		99
68) Bromobenzene	11.059	156	51357	20.99	ug/L		88
69) n-Propylbenzene	11.071	91	210884	20.10	ug/L		100
70) 1,1,2,2-Tetrachloroethane	11.138	85	42026	20.34	ug/L		94
71) 2-Chlorotoluene	11.205	126	45073	19.94	ug/L		95
72) 1,3,5-Trimethylbenzene	11.230	105	148155	20.66	ug/L		98
73) 1,2,3-Trichloropropane	11.248	110	20758	20.66	ug/L		90
74) t-1,4-Dichloro-2-butene	11.278	53	12607	17.54	ug/L	#	74
75) 4-Chlorotoluene	11.339	91	132799	20.56	ug/L		98
76) tert-Butylbenzene	11.479	91	81539	20.37	ug/L		95
77) 1,2,4-Trimethylbenzene	11.534	105	149487	20.72	ug/L		97
78) sec-Butylbenzene	11.619	105	180737	20.46	ug/L		99
79) 4-Isopropyltoluene	11.728	119	151416	21.66	ug/L		97
80) 1,3-Dichlorobenzene	11.795	146	88840	20.84	ug/L		98
81) 1,4-Dichlorobenzene	11.862	146	91025	20.48	ug/L		97
82) n-Butylbenzene	12.045	91	132273	22.27	ug/L		99
83) 1,2-Dichlorobenzene	12.179	146	86186	20.82	ug/L		98
84) 1,2-Dibromo-3-Chloropr...	12.799	157	14025	20.04	ug/L		92
85) Hexachlorobutadiene	13.304	223	12640	21.85	ug/L		95
86) 1,2,4-Trichlorobenzene	13.347	180	53108	22.26	ug/L		97
87) Naphthalene	13.626	128	166250	21.92	ug/L		98
88) 1,2,3-Trichlorobenzene	13.785	180	51210	22.61	ug/L		97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102432.D
Acq On : 24 Oct 2019 10:38 pm
Operator : MM
Sample : 9J24043-ICV1
Misc : 1X 5mL 20/40PPB VOCR
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:53 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102433.D
Acq On : 24 Oct 2019 11:05 pm
Operator : MM
Sample : 9J24043-ICV2
Misc : 1X 5mL 5/1250PPB OXY
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:56 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	111178	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.910	117	298625	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	138840	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	108440	49.64	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.783	114	354392	50.46	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	396767	50.62	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	114172	50.89	ug/L		0.00
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.679	85	258	0.14	ug/L	#	49
3) Chloromethane	1.898	50	1019	0.42	ug/L		80
4) Vinyl Chloride	2.001	62	483	0.20	ug/L		73
5) Bromomethane	2.360	96	1054	0.74	ug/L		79
6) Chloroethane	2.512	64	817	0.74	ug/L	#	63
8) Ethanol	3.230	45	56590	1059.19	ug/L		85
9) 1,1-Dichloroethene	3.230	61	425	0.16	ug/L	#	74
10) Carbon Disulfide	3.254	76	2404	0.49	ug/L		78
12) Iodomethane	3.388	142	297	6.27	ug/L	#	47
14) Methylene Chloride	3.875	84	2571	0.40	ug/L		89
15) Acetone	3.948	43	992	1.02	ug/L		93
16) t-1,2-Dichloroethene	4.039	61	778	0.30	ug/L		95
18) Methyl-tert-butyl-ether	4.173	73	509	0.08	ug/L		63
19) tert-Butanol (TBA)	4.288	59	507827	1179.79	ug/L		99
20) Diisopropyl ether (DIPE)	4.562	45	28434	4.41	ug/L		96
21) 1,1-Dichloroethane	4.684	63	910	0.25	ug/L		91
23) Ethyl-tert-butyl ether...	4.939	59	27297	4.40	ug/L		98
24) Vinyl Acetate	4.933	43	2981	0.69	ug/L		63
25) c-1,2-Dichloroethene	5.244	61	653	0.24	ug/L		94
28) Chloroform	5.529	83	782	0.22	ug/L		86
31) 1,1,1-Trichloroethane	5.730	97	279	0.09	ug/L	#	25
33) 1,1-Dichloropropene	5.858	75	642	0.23	ug/L	#	43
35) Benzene	6.120	78	2264	0.27	ug/L		96
36) tert-Amyl methyl ether...	6.247	73	24122	4.18	ug/L		94
40) Trichloroethene (TCE)	6.752	130	563	0.26	ug/L		81
41) Tert-Amyl-Ethyl-Ether ...	6.996	59	17806	4.28	ug/L		82
43) 1,2-Dichloropropane	7.312	63	375	0.18	ug/L	#	35
44) Bromodichloromethane	7.379	83	264	0.11	ug/L		89
47) c-1,3-Dichloropropene	8.097	75	423	0.14	ug/L	#	31
49) Toluene	8.358	91	2481	0.28	ug/L		90
50) Tetrachloroethene (PCE)	8.796	166	682	0.33	ug/L		77
55) 1,3-Dichloropropane	9.289	76	299	0.09	ug/L	#	62
58) Chlorobenzene	9.928	112	1665	0.30	ug/L	#	53
59) Ethylbenzene	9.952	91	2525	0.27	ug/L		93
60) 1,1,1,2-Tetrachloroethane	9.989	131	250	0.15	ug/L	#	56
61) m,p-Xylenes (2)	10.086	91	3597	0.53	ug/L		99
62) o-Xylene	10.469	91	1736	0.26	ug/L		95
63) Styrene	10.518	104	1266	0.23	ug/L		98
65) Isopropylbenzene	10.731	105	1839	0.22	ug/L		96
68) Bromobenzene	11.066	156	575	0.27	ug/L	#	73
69) n-Propylbenzene	11.078	91	2840	0.31	ug/L		98
71) 2-Chlorotoluene	11.212	126	519	0.26	ug/L	#	70
72) 1,3,5-Trimethylbenzene	11.230	105	1758	0.28	ug/L		93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102433.D
Acq On : 24 Oct 2019 11:05 pm
Operator : MM
Sample : 9J24043-ICV2
Misc : 1X 5mL 5/1250PPB OXY
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:56 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

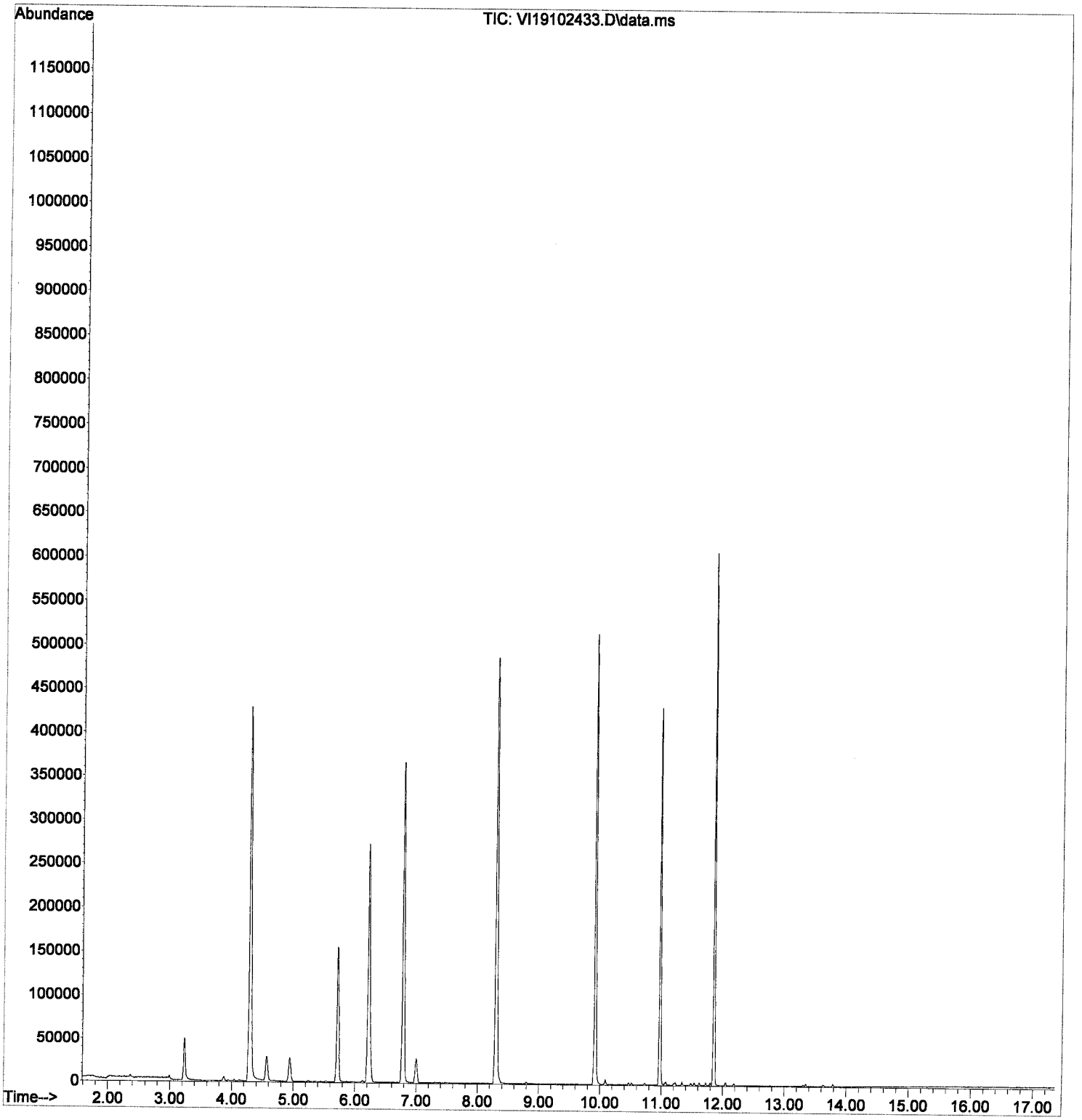
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
75) 4-Chlorotoluene	11.339	91	2029	0.36	ug/L		92
76) tert-Butylbenzene	11.479	91	857	0.24	ug/L		90
77) 1,2,4-Trimethylbenzene	11.540	105	1902	0.30	ug/L		99
78) sec-Butylbenzene	11.619	105	2140	0.28	ug/L		96
79) 4-Isopropyltoluene	11.729	119	1814	0.30	ug/L		89
80) 1,3-Dichlorobenzene	11.802	146	1391	0.37	ug/L		91
81) 1,4-Dichlorobenzene	11.862	146	1580	0.40	ug/L	#	77
82) n-Butylbenzene	12.051	91	2081	0.40	ug/L		97
83) 1,2-Dichlorobenzene	12.179	146	992	0.27	ug/L		94
85) Hexachlorobutadiene	13.304	223	253	0.50	ug/L		90
86) 1,2,4-Trichlorobenzene	13.347	180	1195	0.57	ug/L		98
87) Naphthalene	13.627	128	2373	0.36	ug/L		81
88) 1,2,3-Trichlorobenzene	13.785	180	1136	0.57	ug/L		98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102433.D
Acq On : 24 Oct 2019 11:05 pm
Operator : MM
Sample : 9J24043-ICV2
Misc : 1X 5mL 5/1250PPB OXY
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:56 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102434.D
Acq On : 24 Oct 2019 11:32 pm
Operator : MM
Sample : 9J24043-IBL6
Misc : 1X 5mL DI
ALS Vial : 21 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:59 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

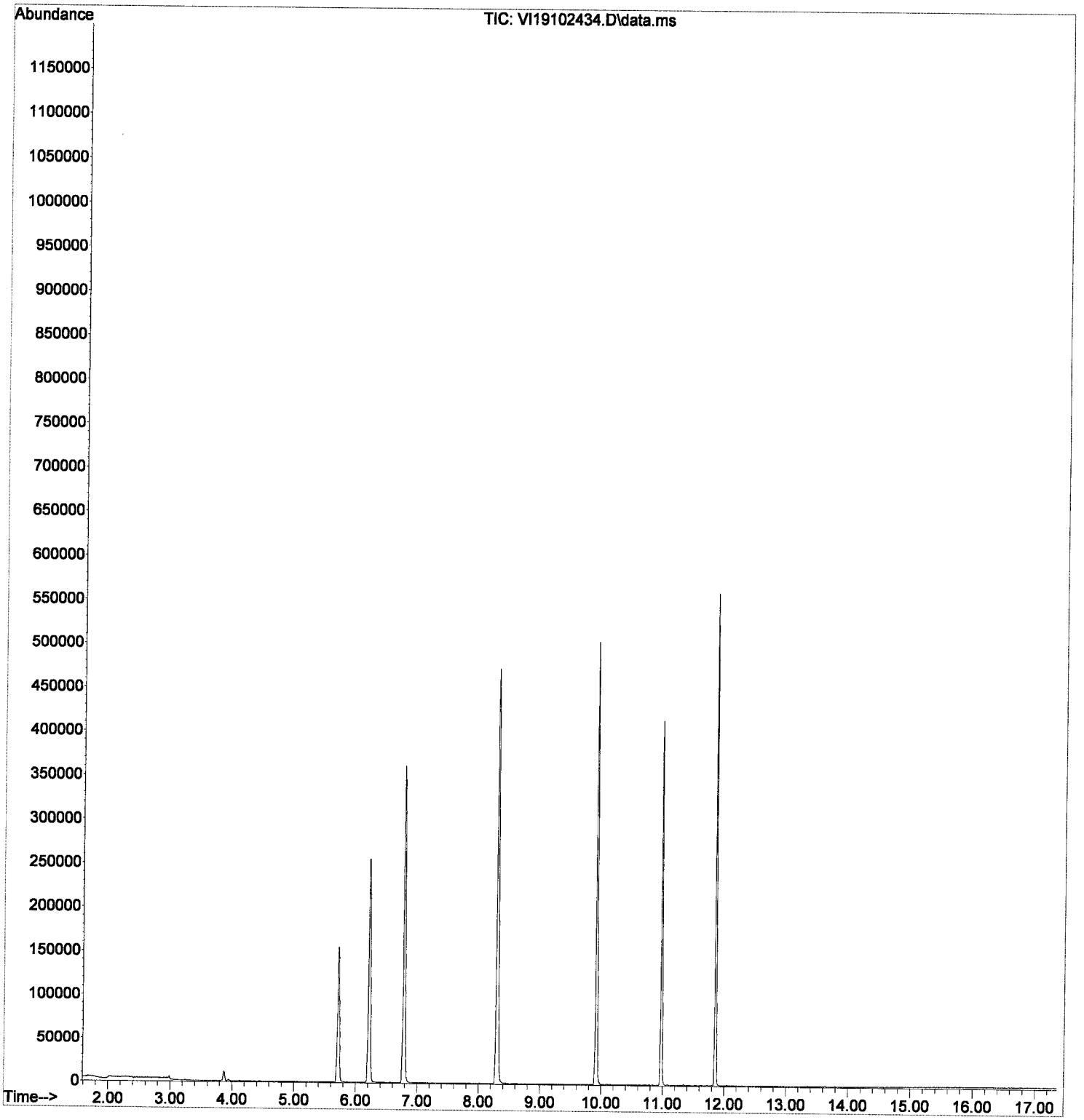
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	109647	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	290801	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	129266	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (S)	5.712	111	106868	49.60	ug/L		0.00
39) 1,4-Difluorobenzene (S)	6.777	114	348077	50.25	ug/L		0.00
48) Toluene-d8 (S)	8.297	98	390388	51.15	ug/L		0.00
67) 4-Bromofluorobenzene (S)	10.974	174	109398	52.38	ug/L		0.00
Target Compounds							Qvalue
3) Chloromethane	1.891	50	233	0.10	ug/L	#	47
5) Bromomethane	2.360	96	288	0.21	ug/L	#	32
6) Chloroethane	2.500	64	219	0.20	ug/L	#	62
10) Carbon Disulfide	3.242	76	797	0.17	ug/L		78
14) Methylene Chloride	3.869	84	5477	1.87	ug/L		91
15) Acetone	3.942	43	1939	2.02	ug/L		95
19) tert-Butanol (TBA)	4.301	59	193	0.45	ug/L		46
61) m,p-Xylenes (2)	10.086	91	722	0.11	ug/L		86
79) 4-Isopropyltoluene	11.723	119	462	0.08	ug/L		51
81) 1,4-Dichlorobenzene	11.862	146	377	0.10	ug/L	#	1
82) n-Butylbenzene	12.045	91	599	0.12	ug/L		81
86) 1,2,4-Trichlorobenzene	13.341	180	337	0.17	ug/L		69
87) Naphthalene	13.633	128	630	0.10	ug/L		81
88) 1,2,3-Trichlorobenzene	13.785	180	159	0.09	ug/L		87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102434.D
Acq On : 24 Oct 2019 11:32 pm
Operator : MM
Sample : 9J24043-IBL6
Misc : 1X 5mL DI
ALS Vial : 21 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:52:59 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Fri Oct 25 08:32:21 2019
Response via : Initial Calibration

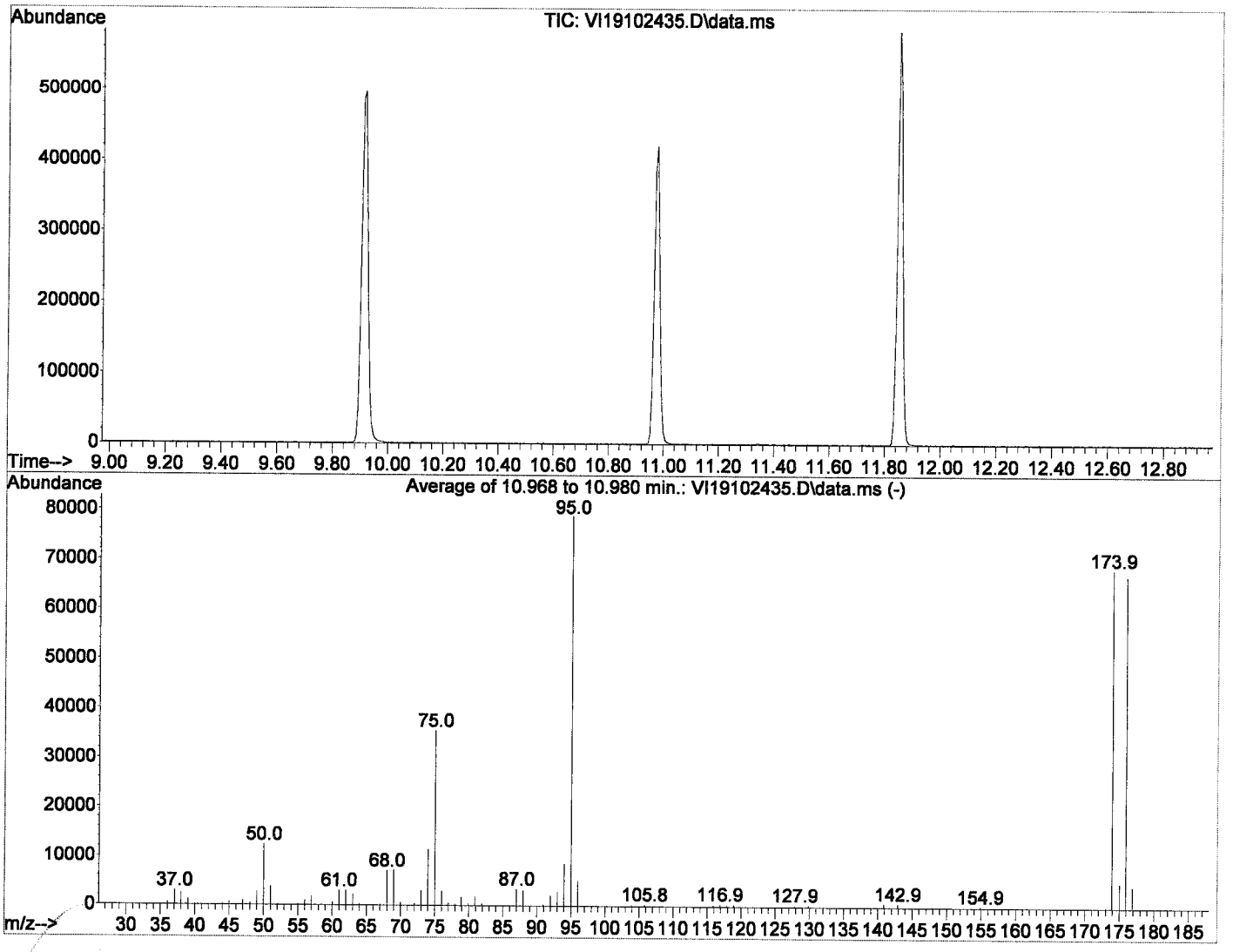


BFB

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102435.D
Acq On : 24 Oct 2019 11:59 pm
Operator : MM
Sample : 9J24043-TUN2
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 22 Sample Multiplier: 1

Integration File: APEXG.P

Method : C:\msdchem\1\methods\VI191025G.M
Title : NWTPH-Gx by GC/MS
Last Update : Fri Oct 25 10:31:05 2019



AutoFind: Scans 1543, 1544, 1545; Background Corrected with Scan 1536

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	115.5	78893	PASS
96	95	5	9	6.6	5193	PASS
173	174	0.00	2	0.2	146	PASS
174	95	50	200	86.6	68315	PASS
175	174	5	9	7.2	4950	PASS
176	174	95	105	98.1	67045	PASS
177	176	5	10	6.4	4322	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102435.D
Acq On : 24 Oct 2019 11:59 pm
Operator : MM
Sample : 9J24043-TUN2
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 22 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:47 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

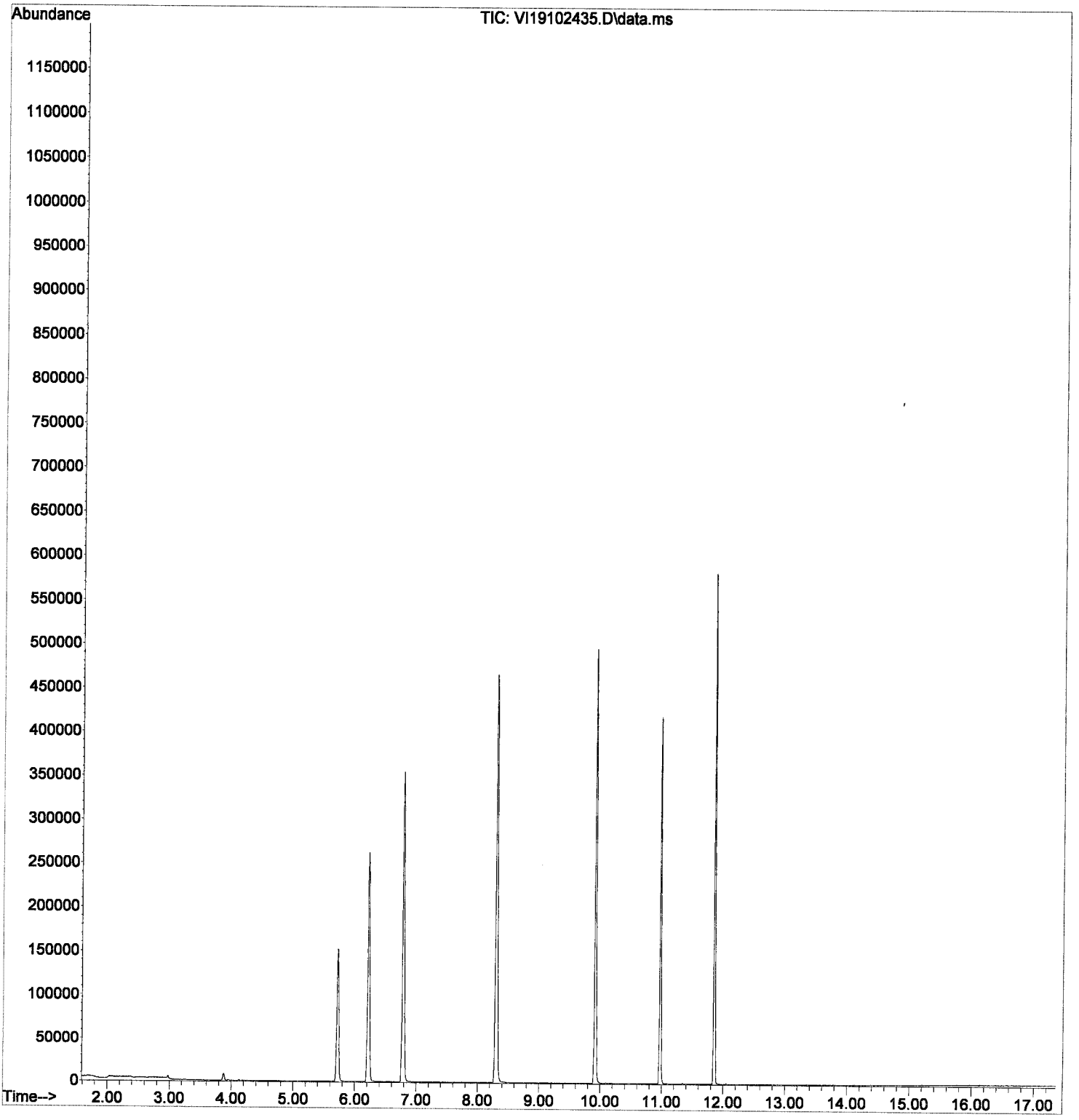
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210406	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342441	50.05	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	110054	48.18	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	383585	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	289628	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	210356	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	-629m	24.54	ug/L	
5) TPHg (C5-C9)	9.890	TIC	350597m	17.37	ug/L	
6) TPHg (C6-C10)	9.890	TIC	318995m	18.26	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	354669m	21.15	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102435.D
Acq On : 24 Oct 2019 11:59 pm
Operator : MM
Sample : 9J24043-TUN2
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 22 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

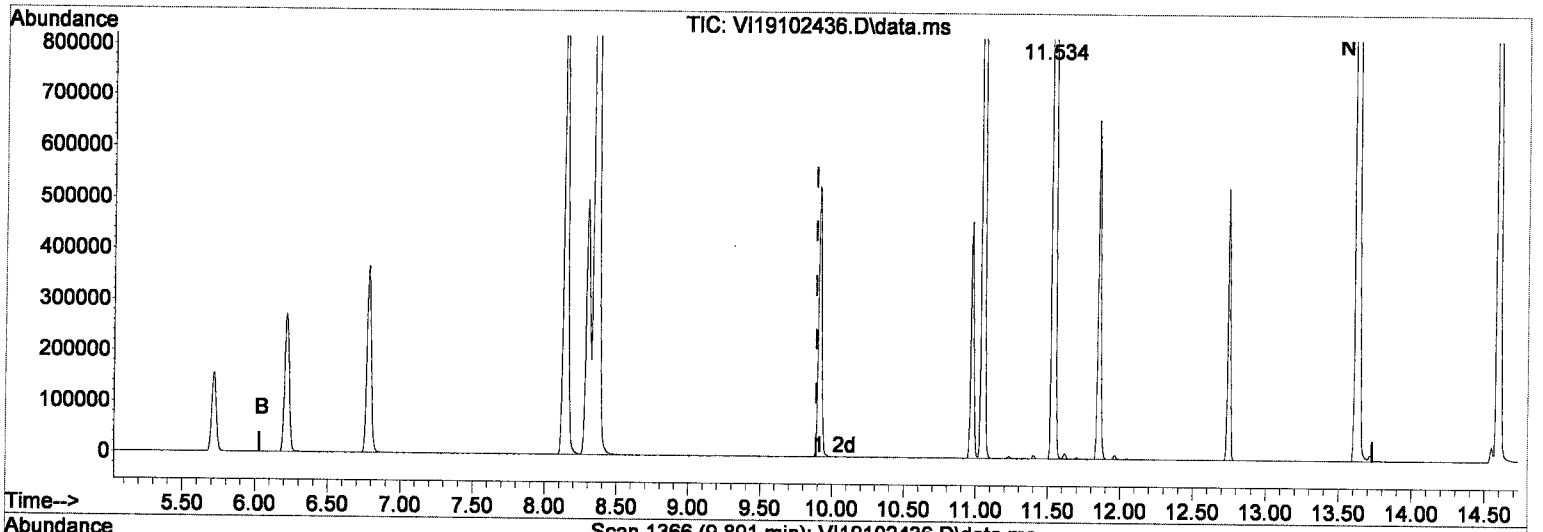
Quant Time: Oct 25 10:34:47 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

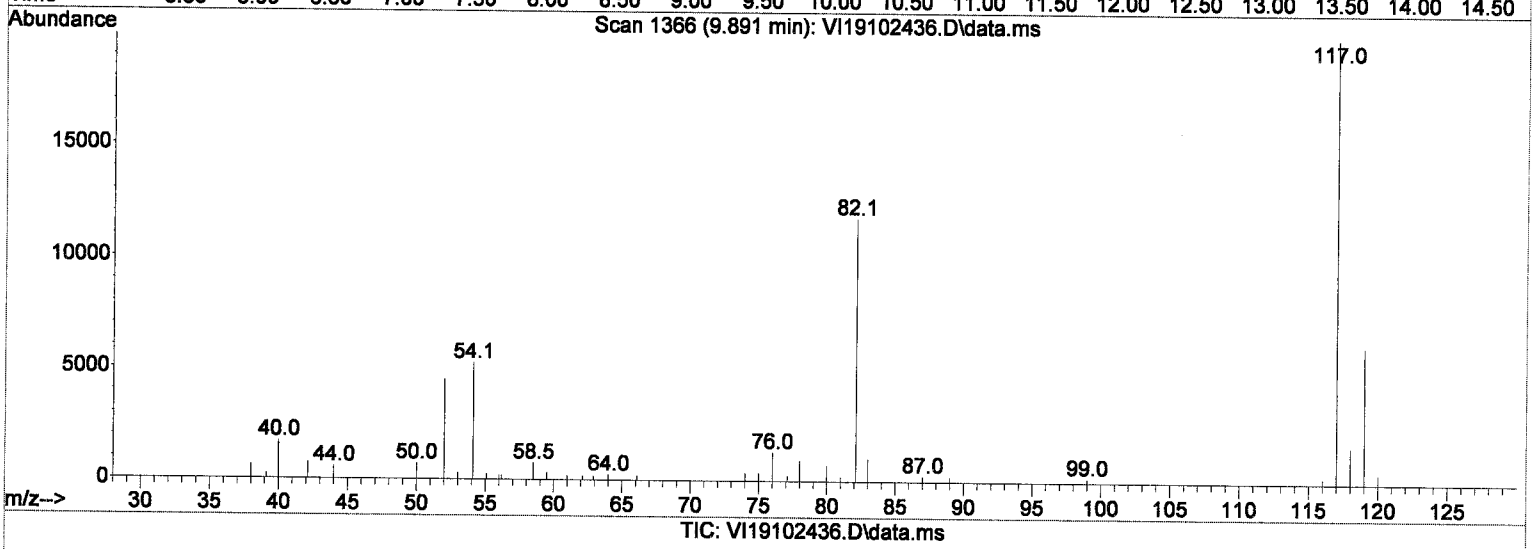


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19102436.D\data.ms

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

9.890min (0.000) 2930.43 ug/L m

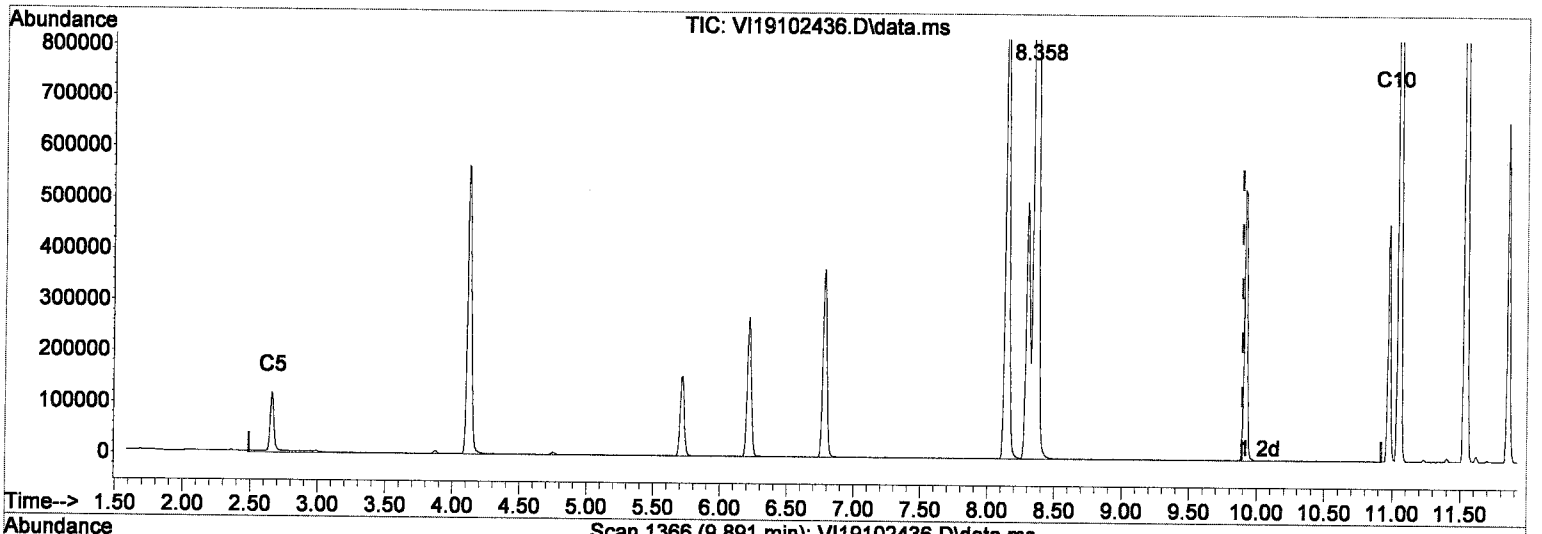
response 19501721

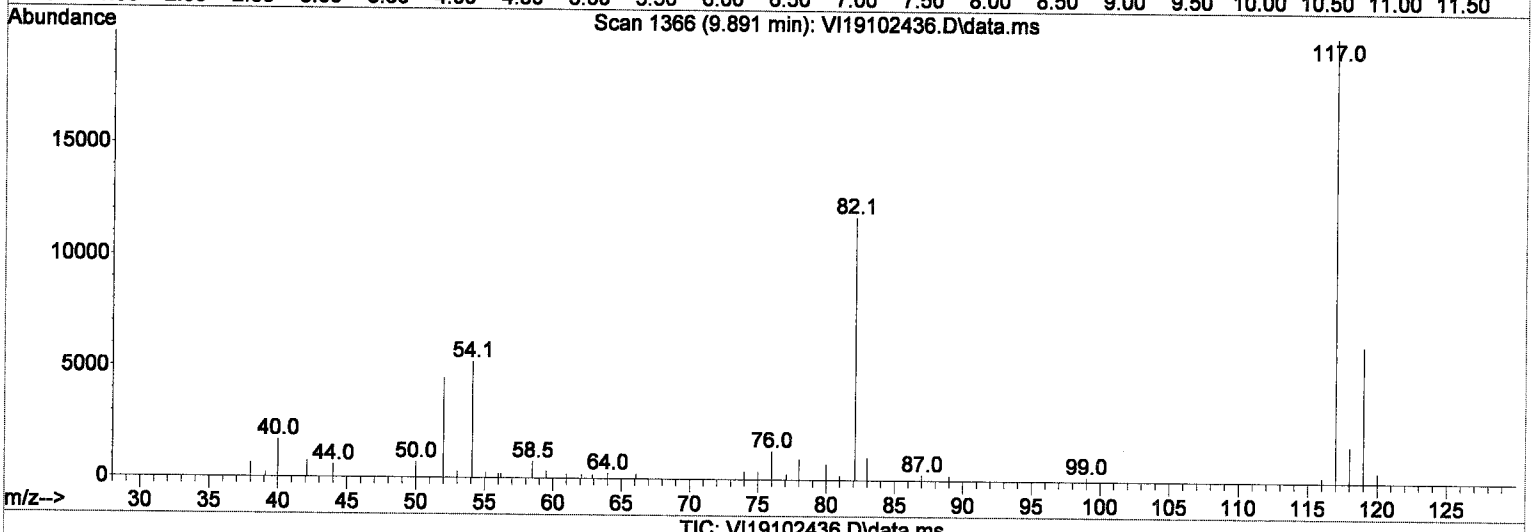
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.04#
0.00	0.00	0.76#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19102436.D\data.ms

(5) TPHg (C5-C9) (H)

9.890min (0.000) 973.75 ug/L m

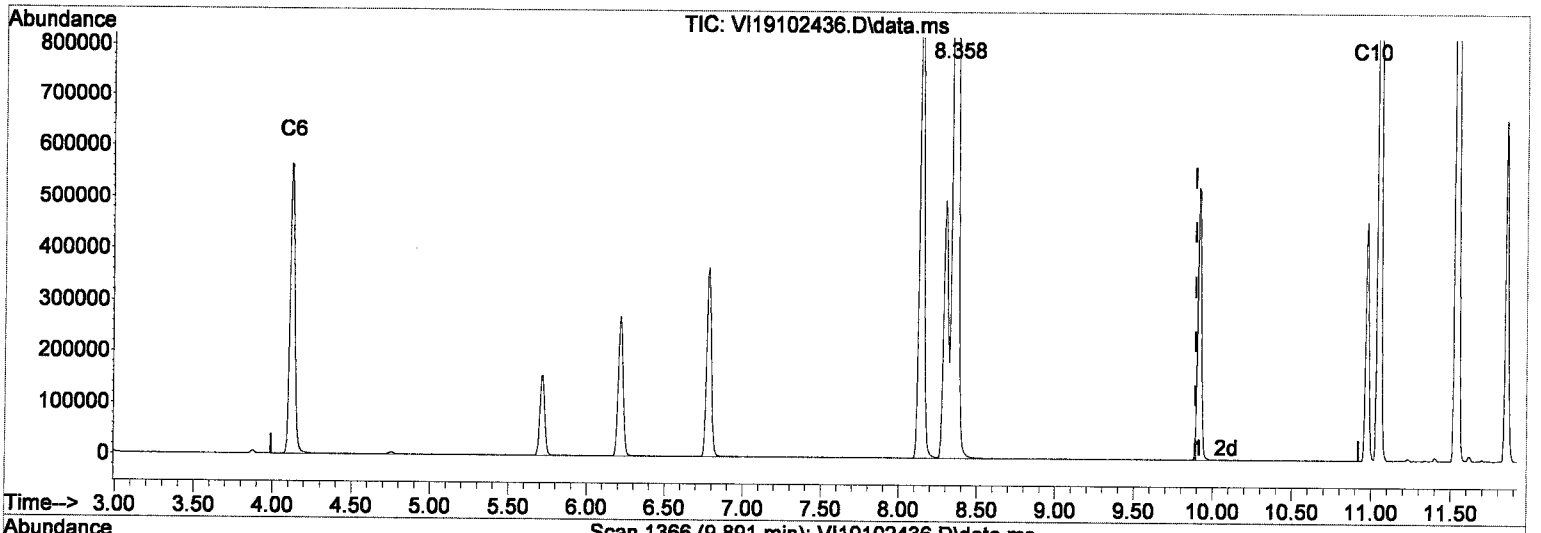
response 8083029

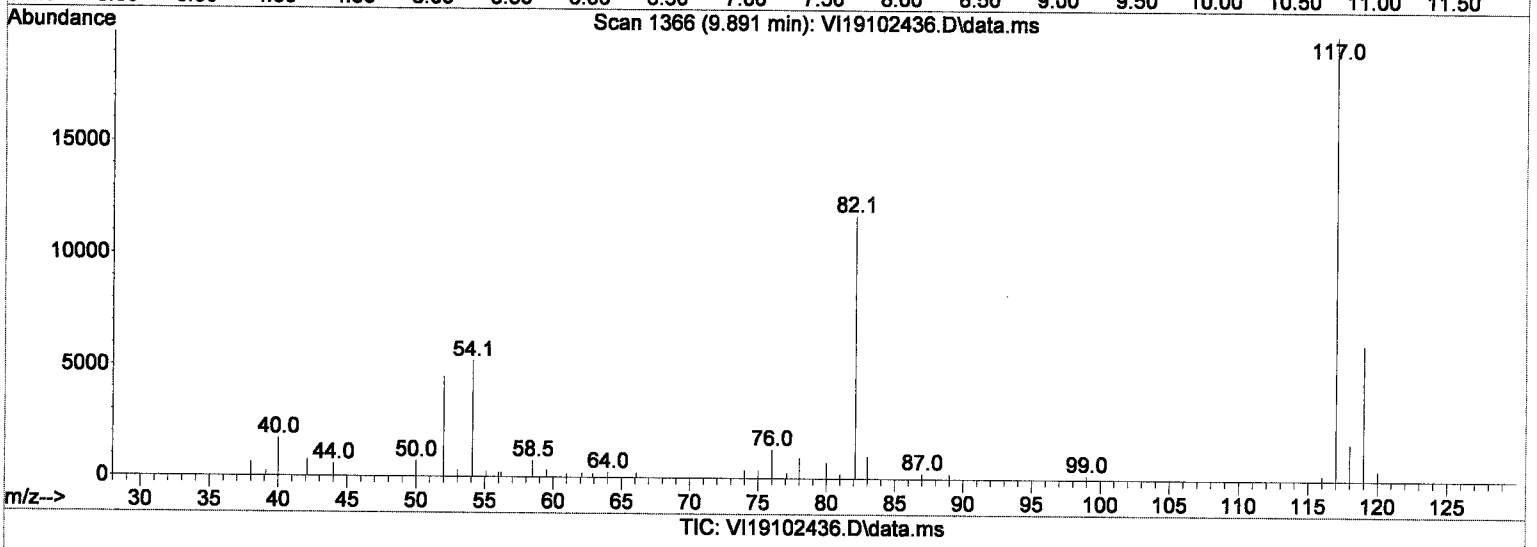
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.52#
0.00	0.00	1.83#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19102436.D\data.ms

(6) TPHg (C6-C10) (H)

9.890min (0.000) 1119.88 ug/L m

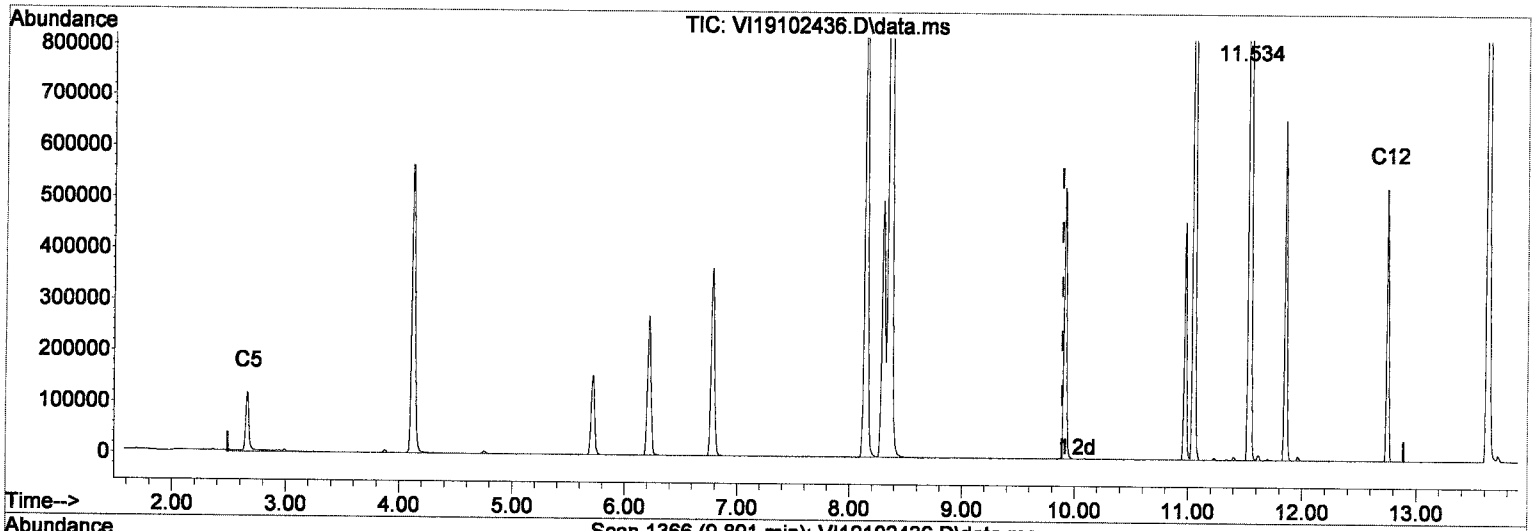
response 7845020

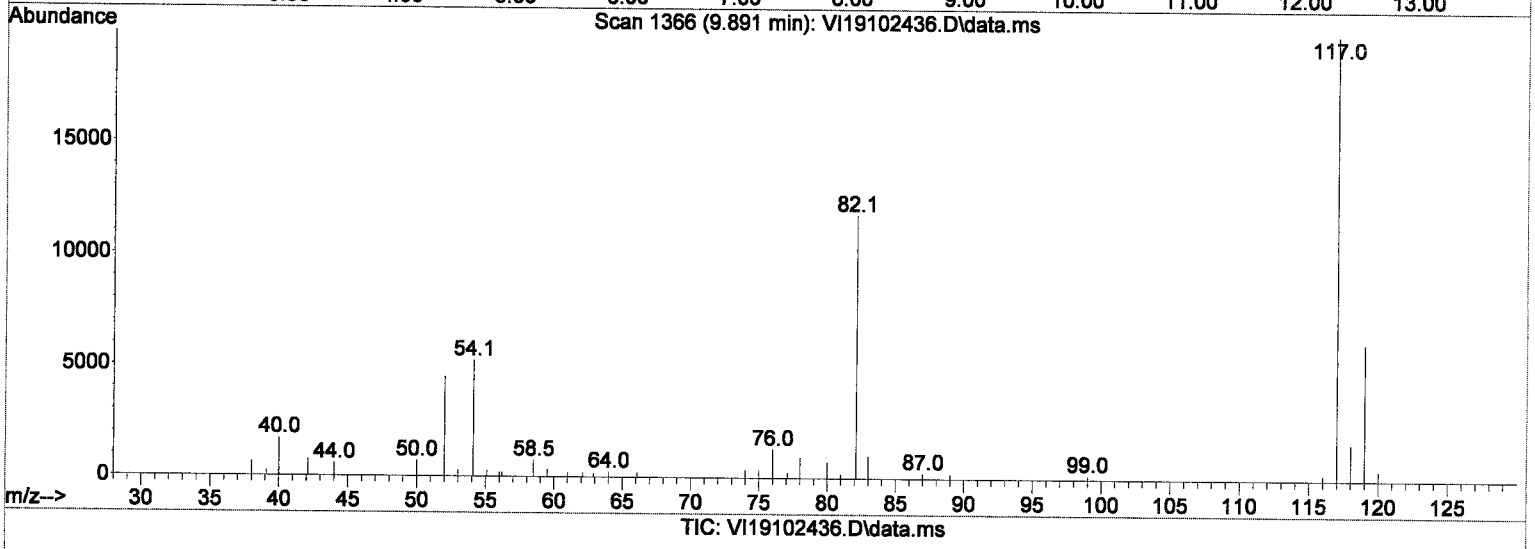
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.60#
0.00	0.00	1.88#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





(7) CA-LUFT (C5-C12) (H)

9.890min (0.000) 1651.42 ug/L m

response 16435844

Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.24#
0.00	0.00	0.90#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

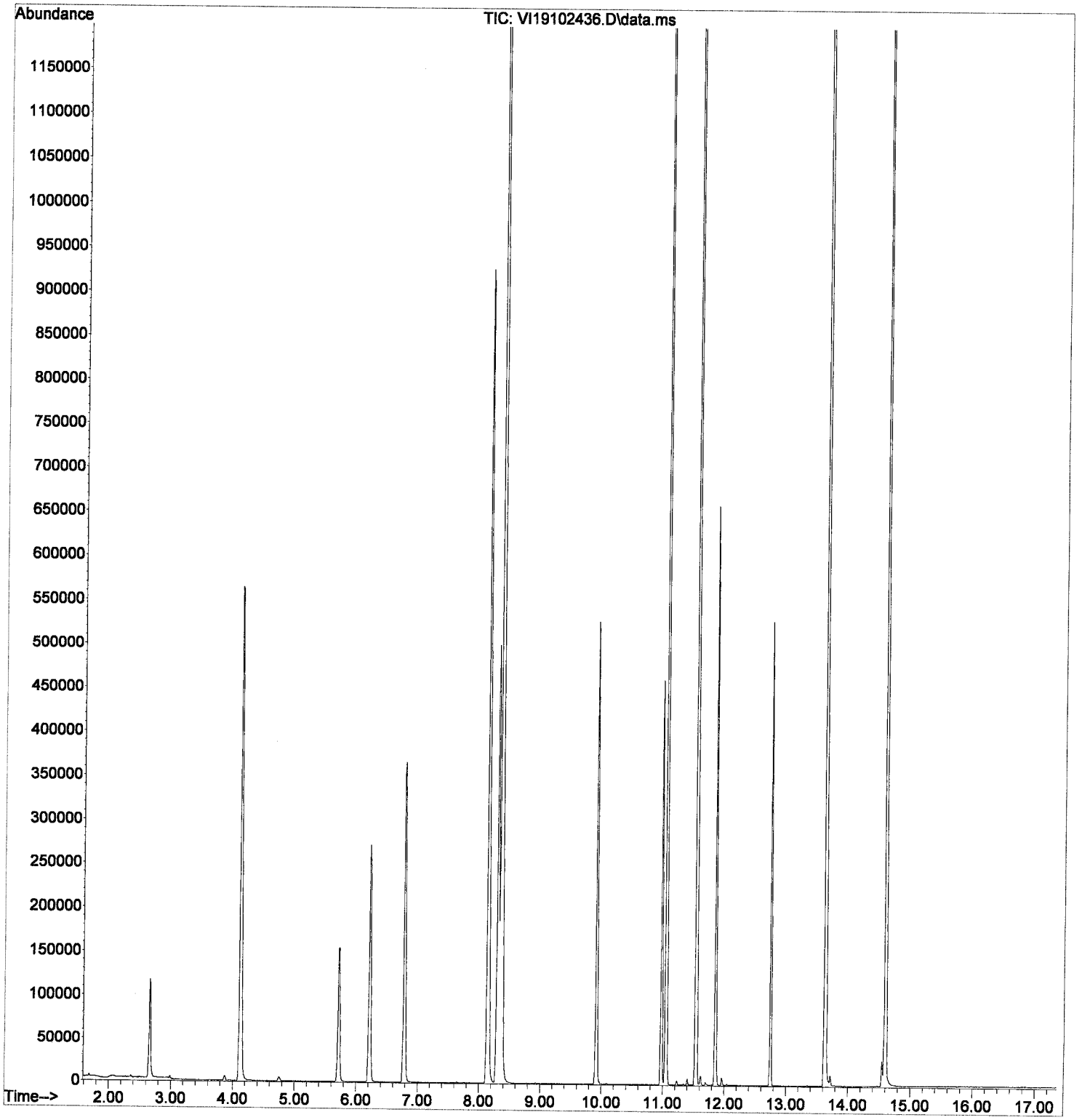
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	218196	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	354554	49.97	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	120603	50.92	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	405063	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	307990	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	238057	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	19501721m	2930.43	ug/L	
5) TPHg (C5-C9)	9.890	TIC	8083029m	973.75	ug/L	
6) TPHg (C6-C10)	9.890	TIC	7845020m	1119.88	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	16435844m	1651.42	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102436.D
Acq On : 25 Oct 2019 12:26 am
Operator : MM
Sample : 9J24043-RT1
Misc : A18A167 VPH RT STD
ALS Vial : 23 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:34:58 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102437.D
Acq On : 25 Oct 2019 12:52 am
Operator : MM
Sample : 9J24043-IBL7
Misc : 1X 5mL DI
ALS Vial : 24 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:35:59 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

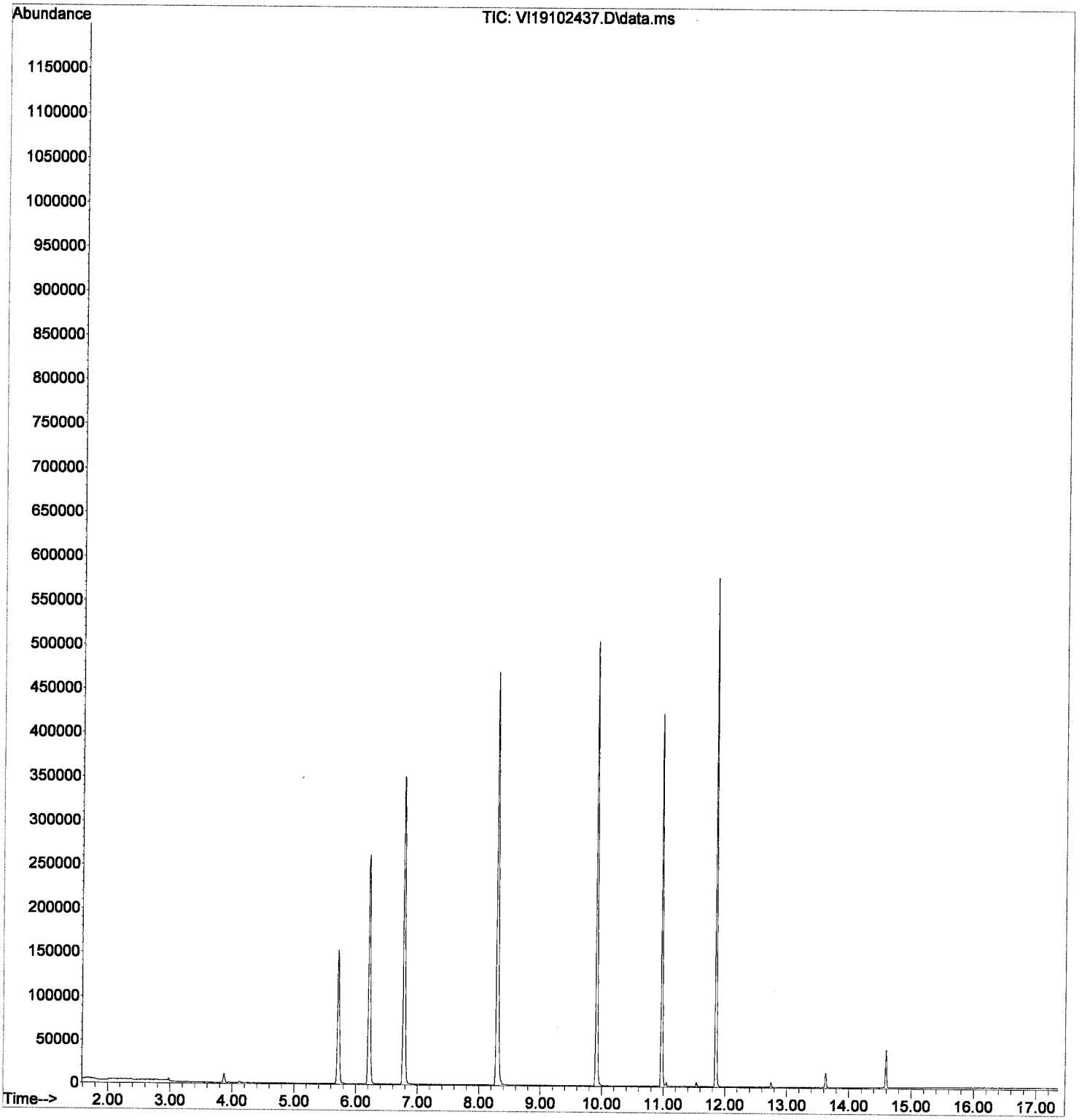
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210247	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	345936	50.60	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	111405	48.81	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	383628	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.910	117	292283	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	209732	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	24413m	28.59	ug/L	
5) TPHg (C5-C9)	9.890	TIC	344892m	16.66	ug/L	
6) TPHg (C6-C10)	9.890	TIC	312692m	17.33	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	358119m	21.55	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102437.D
Acq On : 25 Oct 2019 12:52 am
Operator : MM
Sample : 9J24043-IBL7
Misc : 1X 5mL DI
ALS Vial : 24 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:35:59 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102438.D
Acq On : 25 Oct 2019 1:19 am
Operator : MM
Sample : 9J24043-ICB2
Misc : 1X 5mL DI
ALS Vial : 25 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

M 10/25/19

Quant Time: Oct 25 10:36:04 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

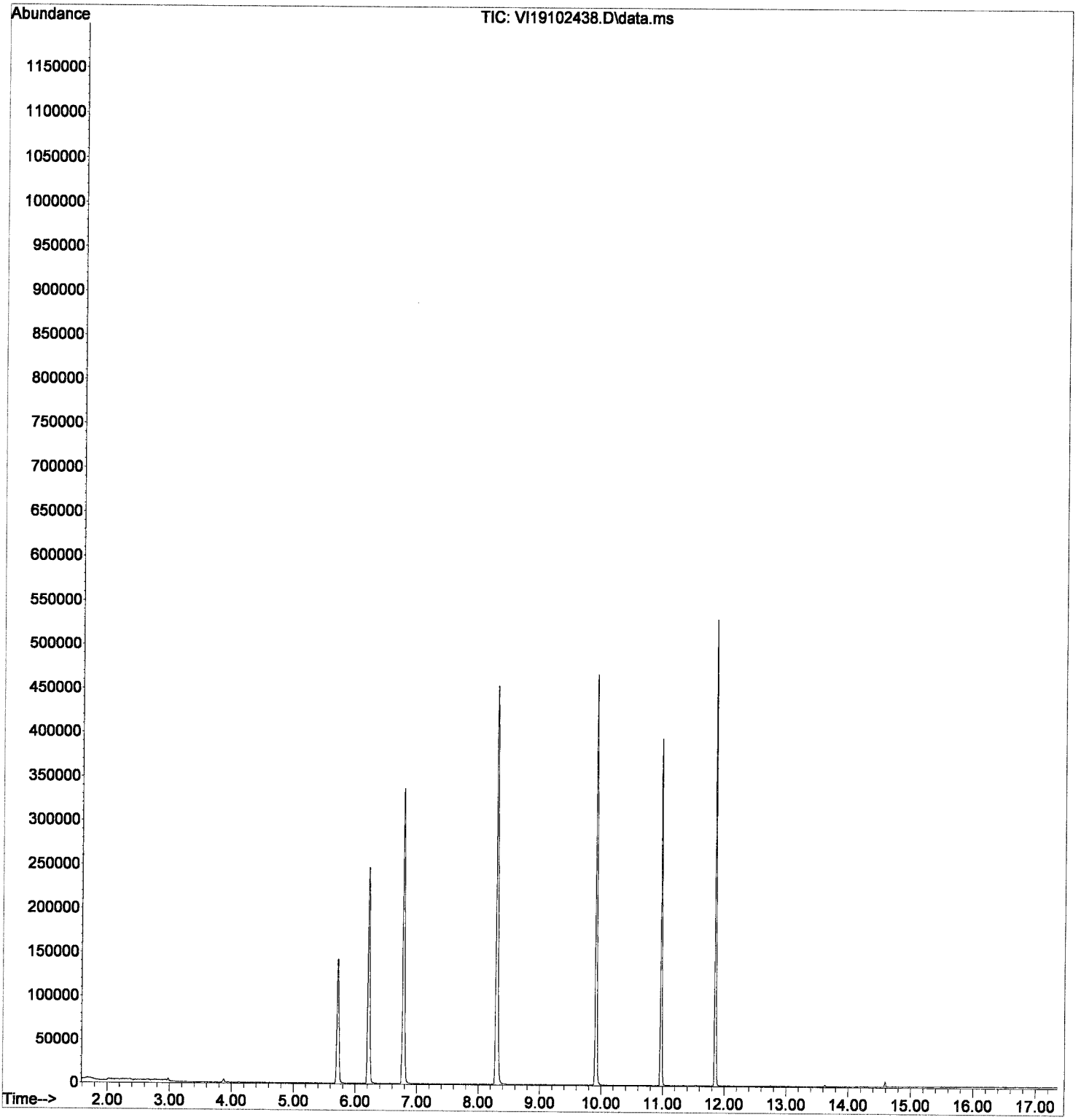
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	197519	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	324404	50.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	100113	46.69	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	365451	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	272946	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	191005	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	3183m	25.18	ug/L	
5) TPHg (C5-C9)	9.890	TIC	344149m	19.44	ug/L	
6) TPHg (C6-C10)	9.890	TIC	310754m	20.11	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	344897m	22.51	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102438.D
Acq On : 25 Oct 2019 1:19 am
Operator : MM
Sample : 9J24043-ICB2
Misc : 1X 5mL DI
ALS Vial : 25 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:04 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

M 10/25/19

Quant Time: Oct 25 08:55:14 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

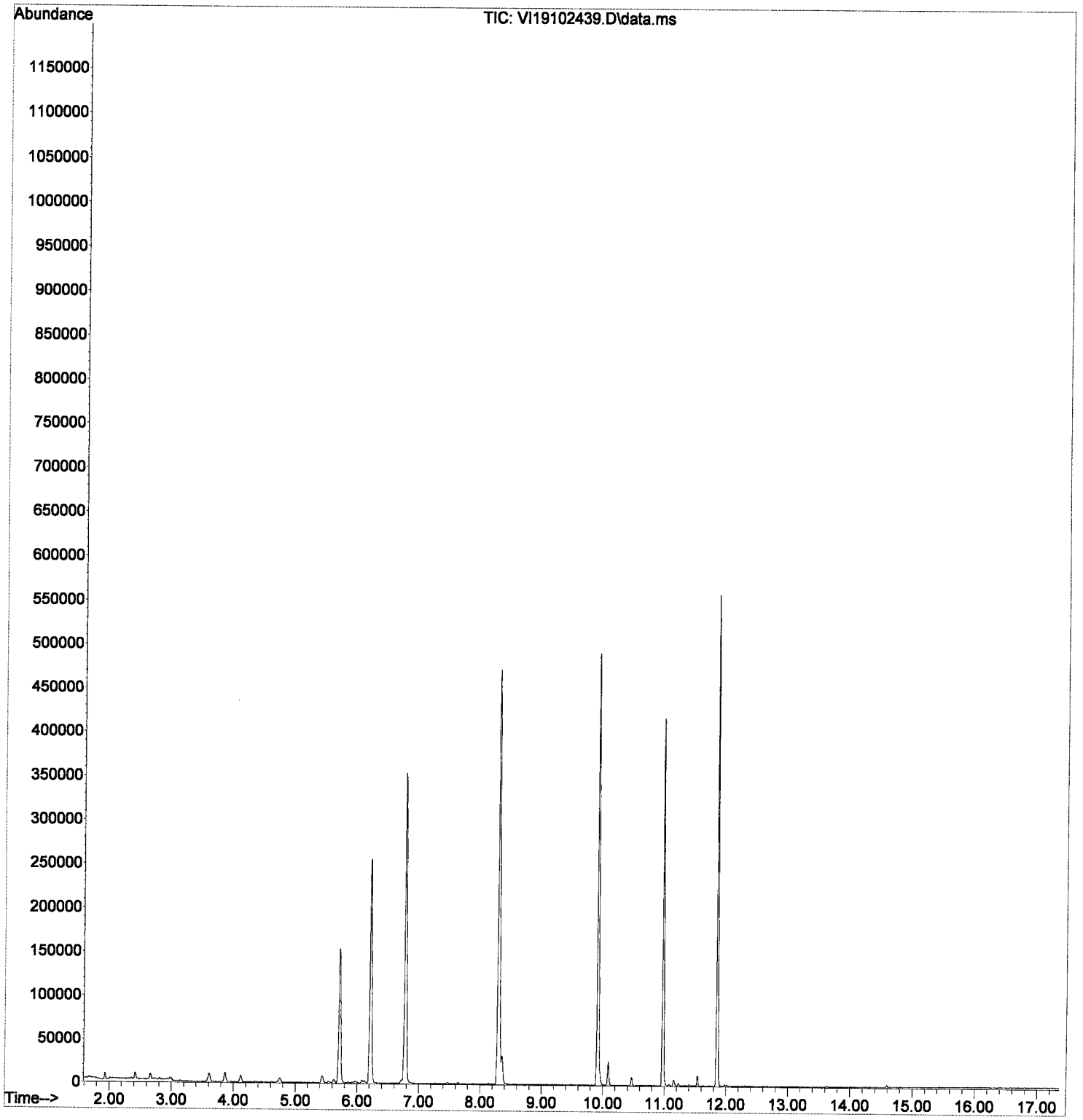
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	209290	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.777	114	341977	48.13	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.974	174	109139	43.97	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	385632	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	289080	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	203847	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	193702m	55.98	ug/L	
5) TPHg (C5-C9)	9.890	TIC	646954m	48.30	ug/L	
6) TPHg (C6-C10)	9.890	TIC	557886m	49.25	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	681991m	46.79	ug/L	
8) Benzene (NR)	6.120	78	3046	No Calib		
10) Toluene (NR)	8.358	91	26962	No Calib		
13) Naphthalene (NR)	13.633	128	1492	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102439.D
Acq On : 25 Oct 2019 1:46 am
Operator : MM
Sample : 9J24043-CALC
Misc : 1X 5mL 50PPB GX
ALS Vial : 26 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:14 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102440.D
Acq On : 25 Oct 2019 2:13 am
Operator : MM
Sample : 9J24043-CALD
Misc : 1X 5mL 100PPB GX
ALS Vial : 27 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

W 10/25/19

Quant Time: Oct 25 08:55:16 2019
Quant Method : C:\msdchem\1\methods\VI~~191025G.M~~
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

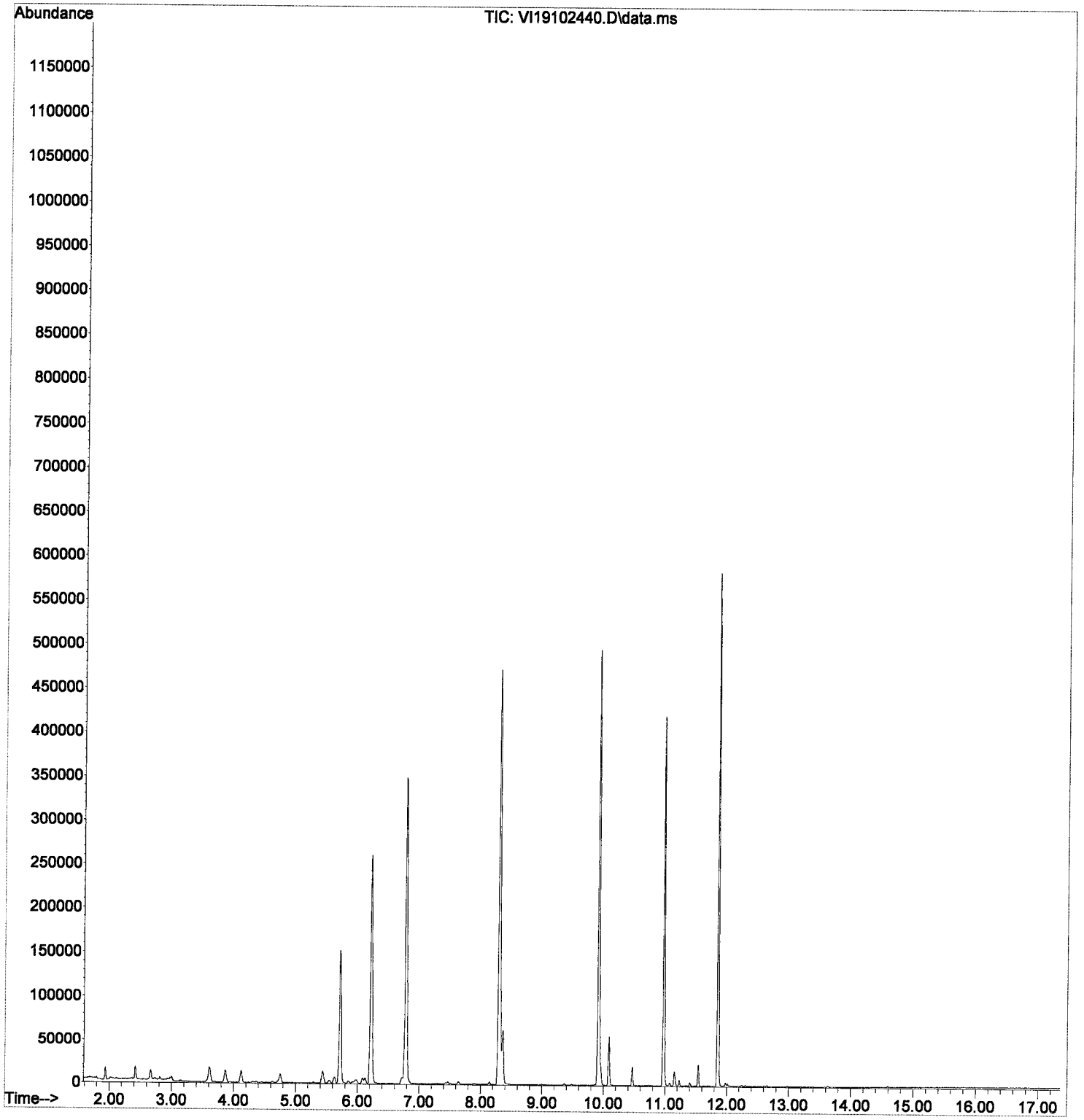
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	209478	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342473	48.16	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	110020	44.29	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	383736	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	289519	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	212572	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	430822m	90.27	ug/L	
5) TPHg (C5-C9)	9.890	TIC	918071m	78.43	ug/L	
6) TPHg (C6-C10)	9.890	TIC	799328m	81.58	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	1014687m	77.57	ug/L	
8) Benzene (NR)	6.126	78	5908	No Calib		
10) Toluene (NR)	8.358	91	53262	No Calib		
13) Naphthalene (NR)	13.627	128	1678	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102440.D
Acq On : 25 Oct 2019 2:13 am
Operator : MM
Sample : 9J24043-CALD
Misc : 1X 5mL 100PPB GX
ALS Vial : 27 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:16 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102441.D
Acq On : 25 Oct 2019 2:40 am
Operator : MM
Sample : 9J24043-CALE
Misc : 1X 5mL 250PPB GX
ALS Vial : 28 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:19 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

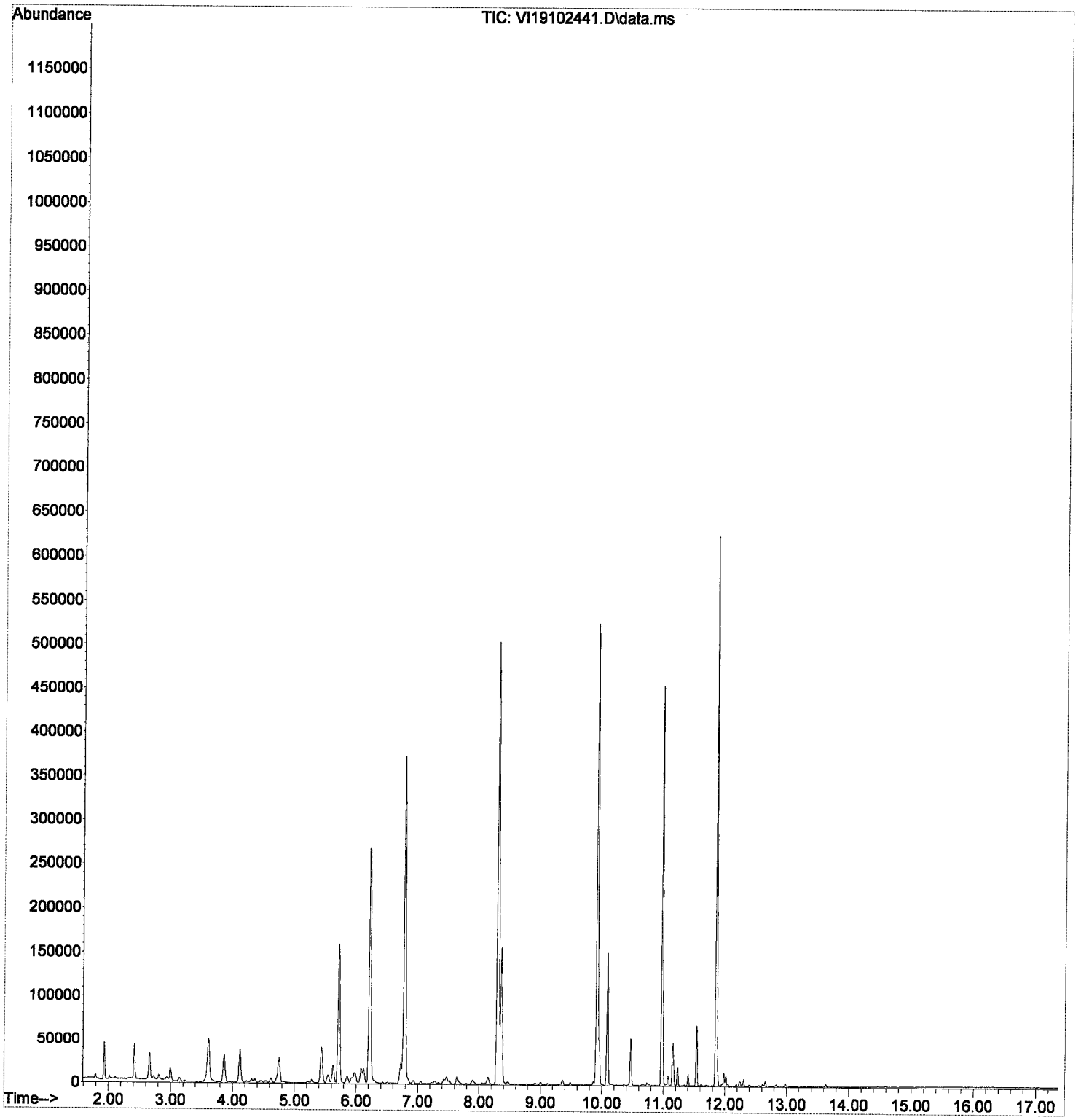
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220921	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.777	114	357958	47.73	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.974	174	116770	44.57	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	404018	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	307058	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	223658	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	1374008m	216.41	ug/L	
5) TPHg (C5-C9)	9.890	TIC	2153713m	203.72	ug/L	
6) TPHg (C6-C10)	9.890	TIC	1839524m	208.44	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	2493143m	202.69	ug/L	
8) Benzene (NR)	6.120	78	15473	No Calib		
10) Toluene (NR)	8.358	91	140638	No Calib		
13) Naphthalene (NR)	13.627	128	3143	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102441.D
Acq On : 25 Oct 2019 2:40 am
Operator : MM
Sample : 9J24043-CALE
Misc : 1X 5mL 250PPB GX
ALS Vial : 28 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:19 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102442.D
Acq On : 25 Oct 2019 3:07 am
Operator : MM
Sample : 9J24043-CALF
Misc : 1X 5mL 500PPB GX
ALS Vial : 29 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:22 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

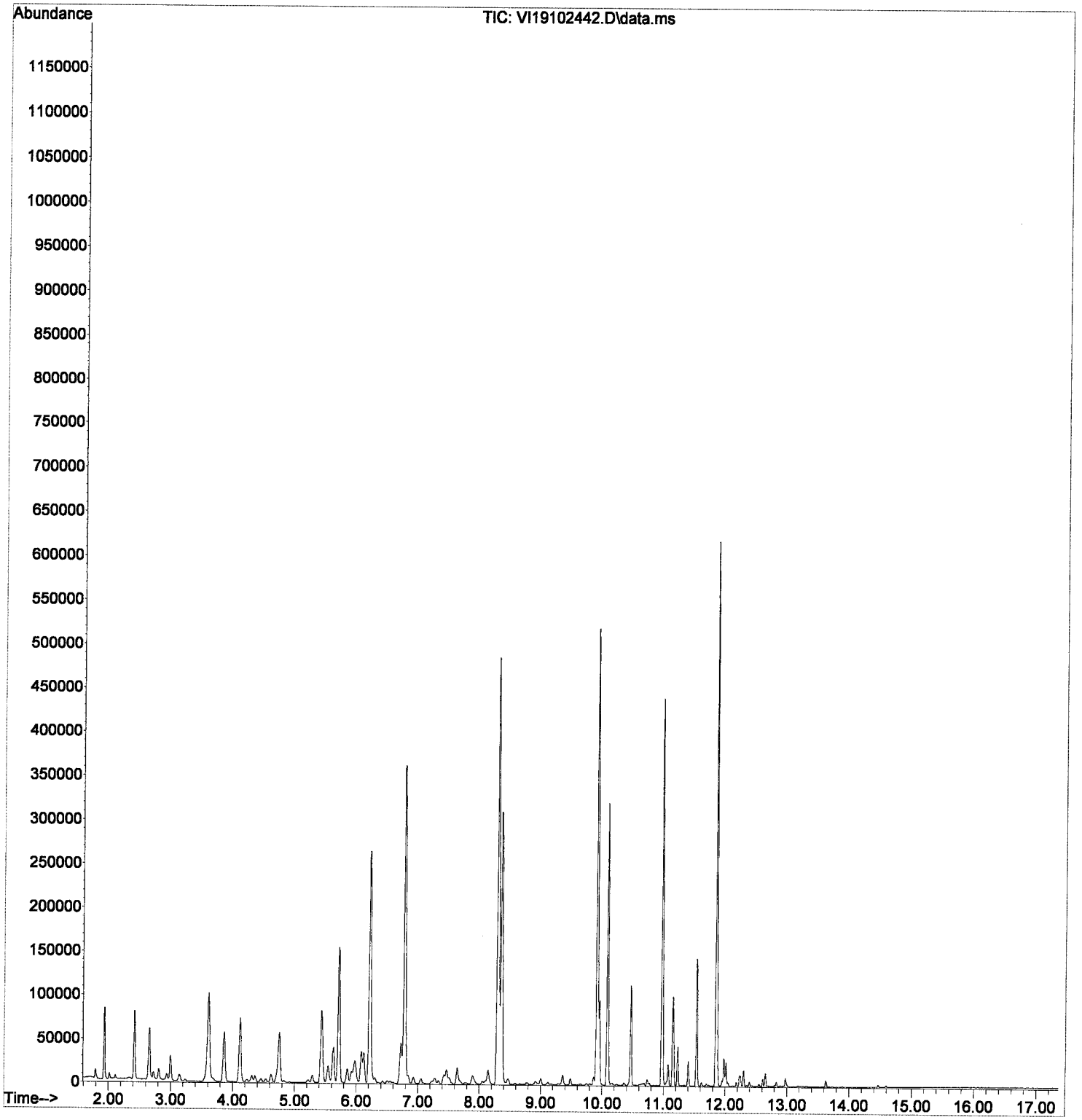
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	214780	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	347086	47.60	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115043	45.16	ug/L	0.00
9) Toluene-d8 (NR)	8.298	98	395742	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	299444	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	223960	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	2976997m	447.66	ug/L	
5) TPHg (C5-C9)	9.890	TIC	4135130m	425.95	ug/L	
6) TPHg (C6-C10)	9.890	TIC	3507779m	433.73	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	4877141m	424.71	ug/L	
8) Benzene (NR)	6.120	78	31187	No Calib		
10) Toluene (NR)	8.358	91	281045	No Calib		
13) Naphthalene (NR)	13.627	128	6060	No Calib	#	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102442.D
Acq On : 25 Oct 2019 3:07 am
Operator : MM
Sample : 9J24043-CALF
Misc : 1X 5mL 500PPB GX
ALS Vial : 29 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:22 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102443.D
Acq On : 25 Oct 2019 3:34 am
Operator : MM
Sample : 9J24043-CALG
Misc : 1X 5mL 1000PPB GX
ALS Vial : 30 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:25 2019
Quant Method : C:\msdchem\1\methods\~~VI191025G~~.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

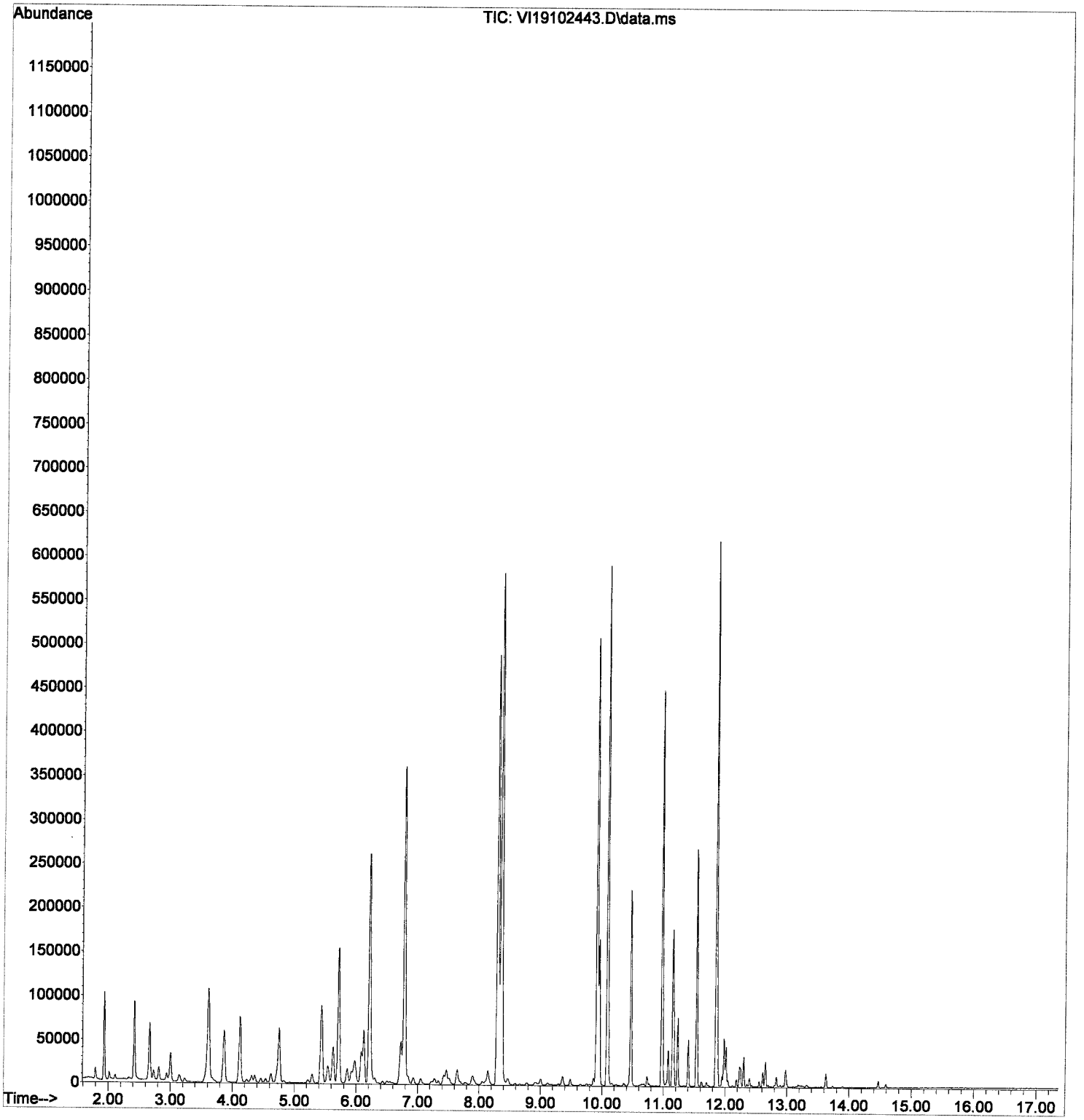
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	211453	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	348407	48.54	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115114	45.90	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	392439	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	298529	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	222551	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	4888792m	727.40	ug/L	
5) TPHg (C5-C9)	9.890	TIC	5510904m	585.41	ug/L	
6) TPHg (C6-C10)	9.890	TIC	4867313m	622.06	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	6835714m	611.85	ug/L	
8) Benzene (NR)	6.119	78	58175	No Calib		
10) Toluene (NR)	8.358	91	520899	No Calib		
13) Naphthalene (NR)	13.627	128	12132	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102443.D
Acq On : 25 Oct 2019 3:34 am
Operator : MM
Sample : 9J24043-CALG
Misc : 1X 5mL 1000PPB GX
ALS Vial : 30 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:25 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102444.D
Acq On : 25 Oct 2019 4:00 am
Operator : MM
Sample : 9J24043-CALH
Misc : 1X 5mL 2500PPB GX
ALS Vial : 31 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:28 2019
Quant Method : C:\msdchem\1\methods\~~VI191025~~G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

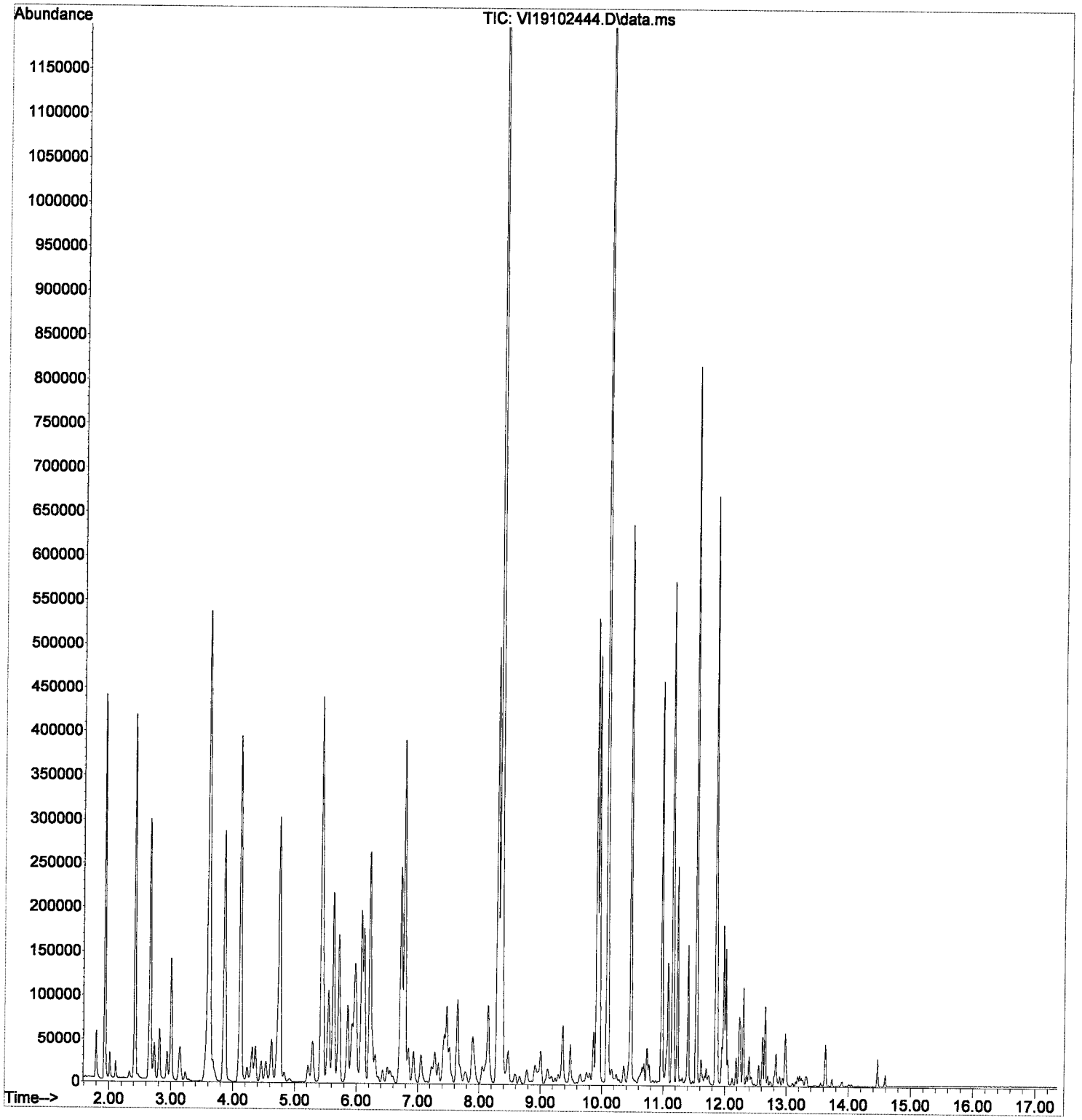
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	216435	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	352248	47.94	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	120135	46.80	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	398721	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	303642	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	237458	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	16775203m	2359.89	ug/L	
5) TPHg (C5-C9)	9.890	TIC	21028250m	2263.03	ug/L	
6) TPHg (C6-C10)	9.890	TIC	17780255m	2293.78	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	25461195m	2277.93	ug/L	
8) Benzene (NR)	6.119	78	158403	No Calib		
10) Toluene (NR)	8.358	91	1477009	No Calib		
13) Naphthalene (NR)	13.627	128	35052	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102444.D
Acq On : 25 Oct 2019 4:00 am
Operator : MM
Sample : 9J24043-CALH
Misc : 1X 5mL 2500PPB GX
ALS Vial : 31 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:28 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102445.D
Acq On : 25 Oct 2019 4:27 am
Operator : MM
Sample : 9J24043-CALI
Misc : 1X 5mL 5000PPB GX
ALS Vial : 32 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:31 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

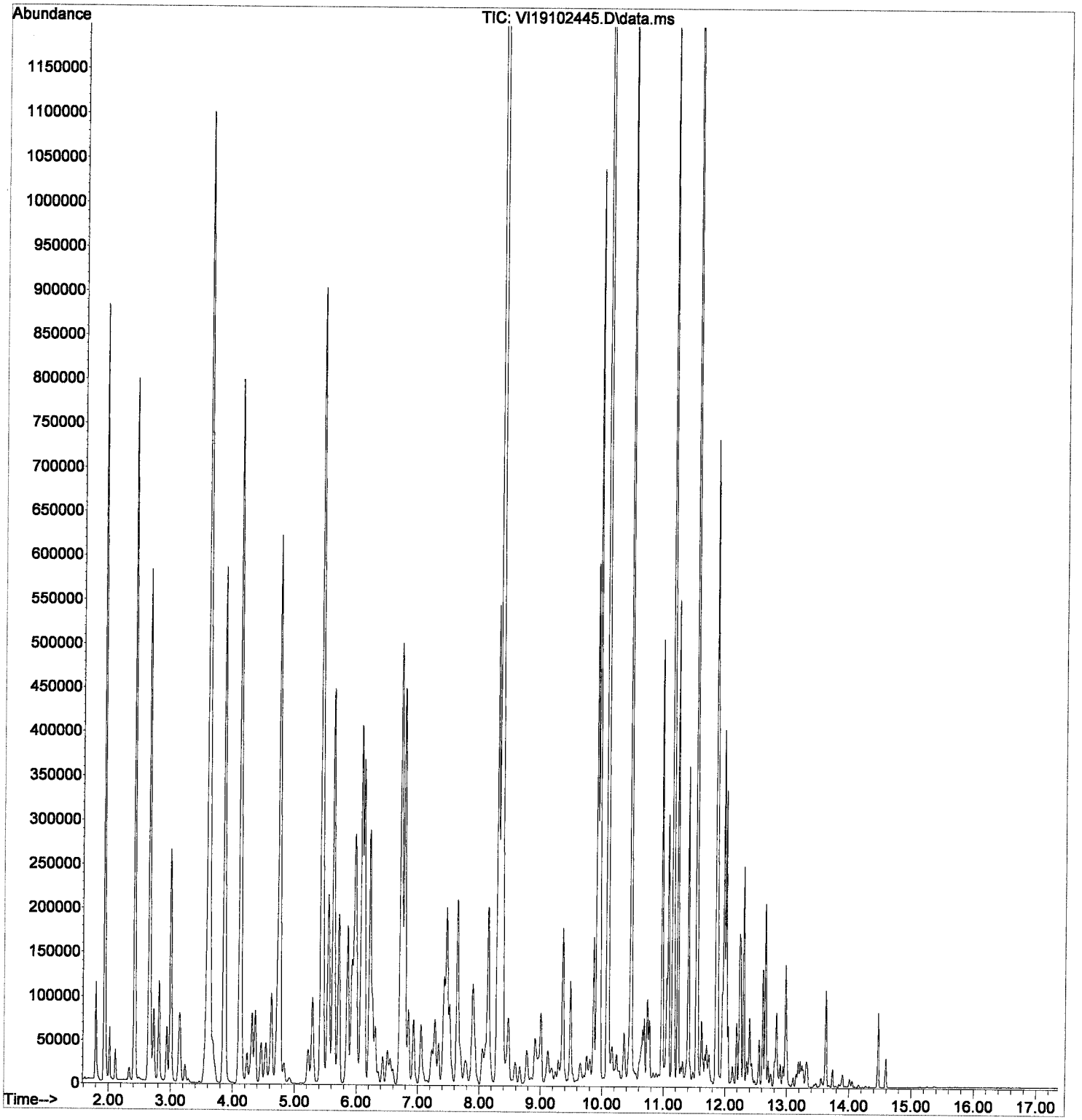
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	233849	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	379658	47.83	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	131653	47.47	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	428988	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	328511	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	265485	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	36698243m	4712.25	ug/L	
5) TPHg (C5-C9)	9.890	TIC	44004926m	4445.71	ug/L	
6) TPHg (C6-C10)	9.890	TIC	37352617m	4504.22	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	53937364m	4503.02	ug/L	
8) Benzene (NR)	6.119	78	331579	No Calib		
10) Toluene (NR)	8.358	91	3164737	No Calib		
13) Naphthalene (NR)	13.627	128	80787	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102445.D
Acq On : 25 Oct 2019 4:27 am
Operator : MM
Sample : 9J24043-CALI
Misc : 1X 5mL 5000PPB GX
ALS Vial : 32 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:31 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102446.D
Acq On : 25 Oct 2019 4:54 am
Operator : MM
Sample : 9J24043-CALJ
Misc : 1X 5mL 10000PPB GX
ALS Vial : 33 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:34 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

W 10/28/19

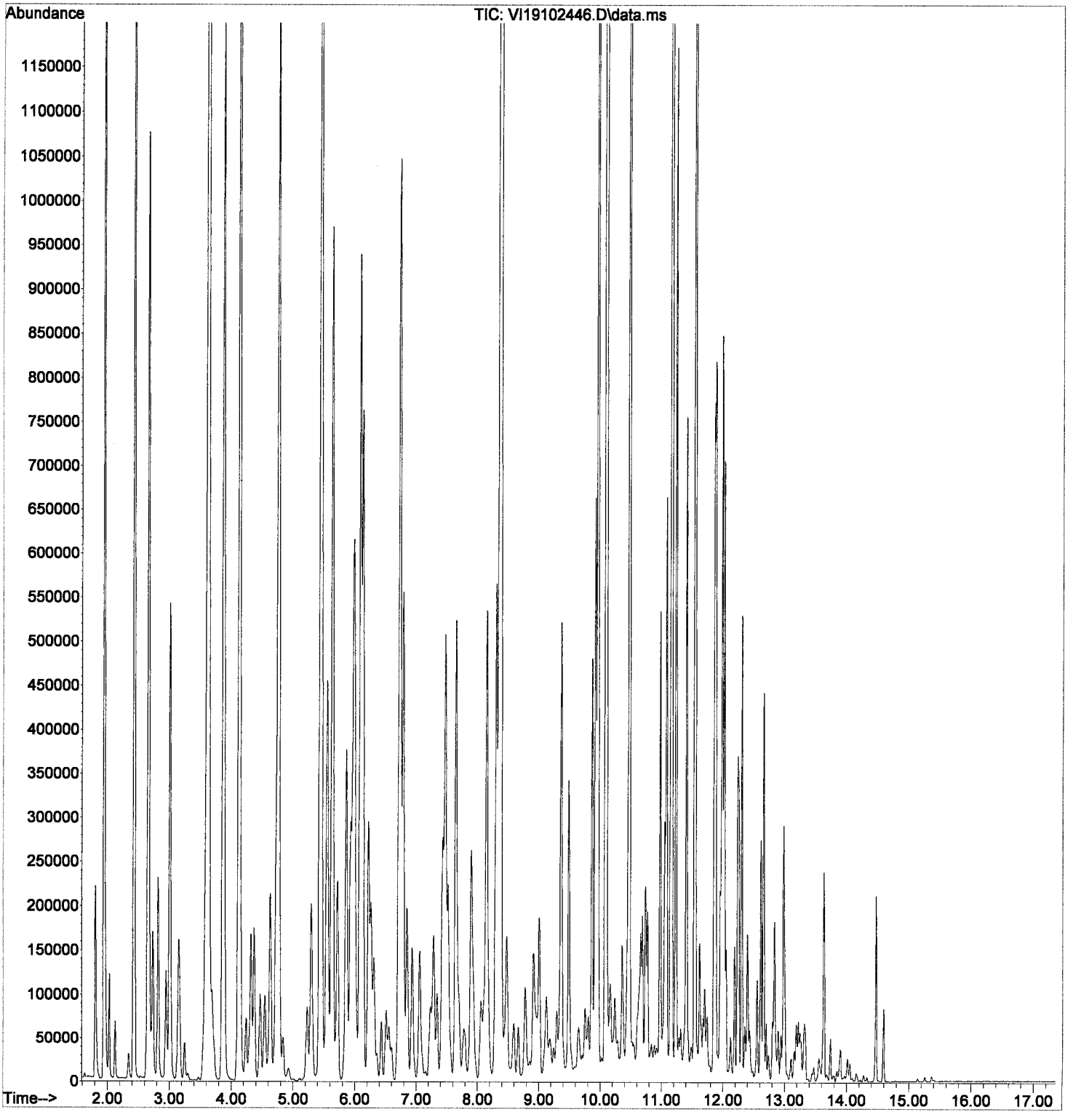
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	234183	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	384961	48.42	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	134509	48.43	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	441445	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	336849	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	271148	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	79562476m	9992.42	ug/L	
5) TPHg (C5-C9)	9.890	TIC	92937489m	9609.74	ug/L	
6) TPHg (C6-C10)	9.890	TIC	79339461m	9683.51	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	114341182m	9654.93	ug/L	
8) Benzene (NR)	6.126	78	681943	No Calib		
10) Toluene (NR)	8.358	91	6524048	No Calib		
13) Naphthalene (NR)	13.627	128	171453	No Calib		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102446.D
Acq On : 25 Oct 2019 4:54 am
Operator : MM
Sample : 9J24043-CALJ
Misc : 1X 5mL 10000PPB GX
ALS Vial : 33 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 08:55:34 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102447.D
Acq On : 25 Oct 2019 5:21 am
Operator : MM
Sample : 9J24043-IBL8
Misc : 1X 5mL DI
ALS Vial : 34 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:23 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

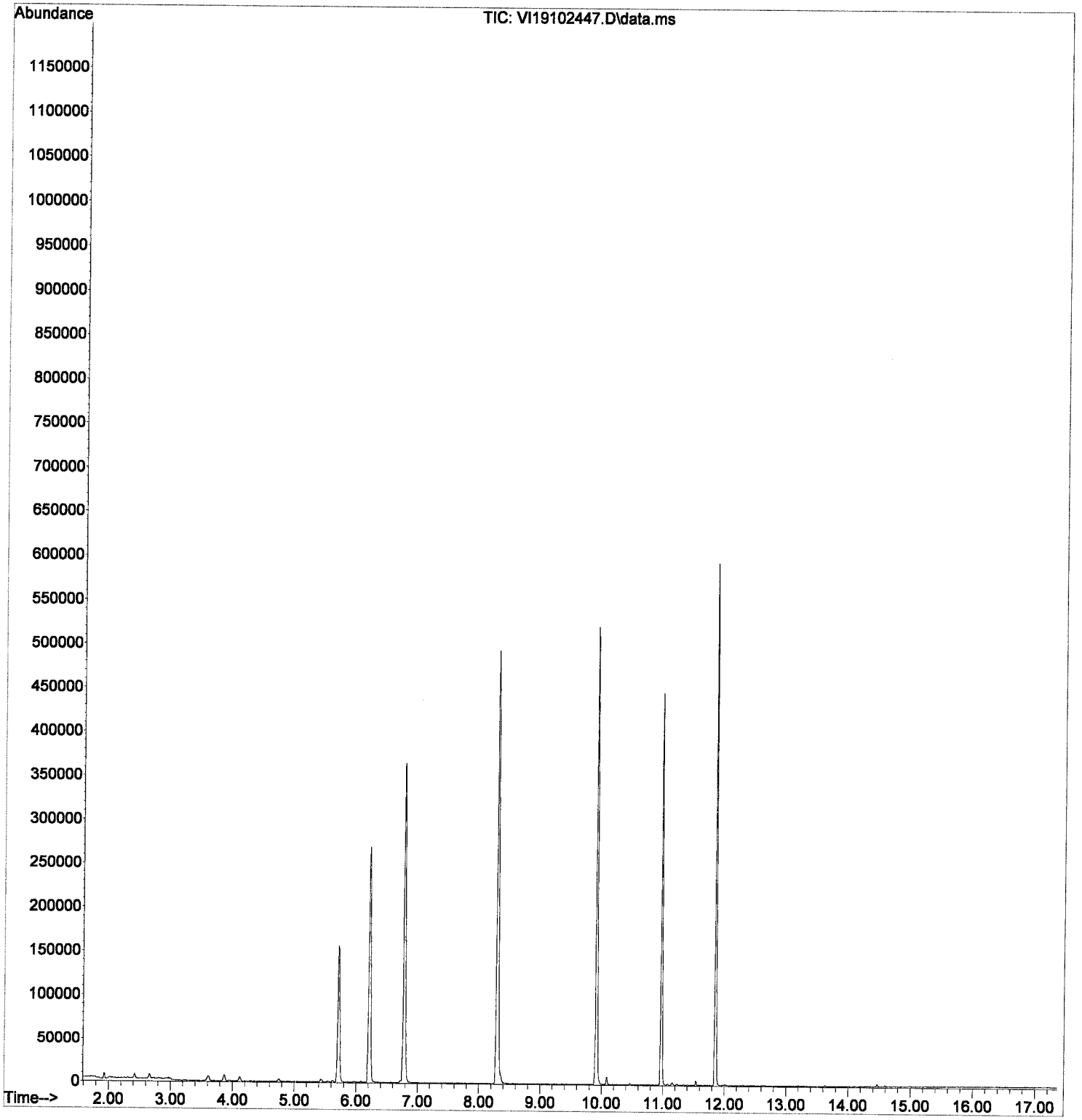
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220300	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	358131	50.00	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115759	48.41	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	401614	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	304304	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	217857	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	67010m	34.98	ug/L	
5) TPHg (C5-C9)	9.890	TIC	462754m	29.19	ug/L	
6) TPHg (C6-C10)	9.890	TIC	415778m	30.25	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	479273m	32.16	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102447.D
Acq On : 25 Oct 2019 5:21 am
Operator : MM
Sample : 9J24043-IBL8
Misc : 1X 5mL DI
ALS Vial : 34 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:23 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102448.D
Acq On : 25 Oct 2019 5:48 am
Operator : MM
Sample : 9J24043-IBL9
Misc : 1X 5mL DI
ALS Vial : 35 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:26 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

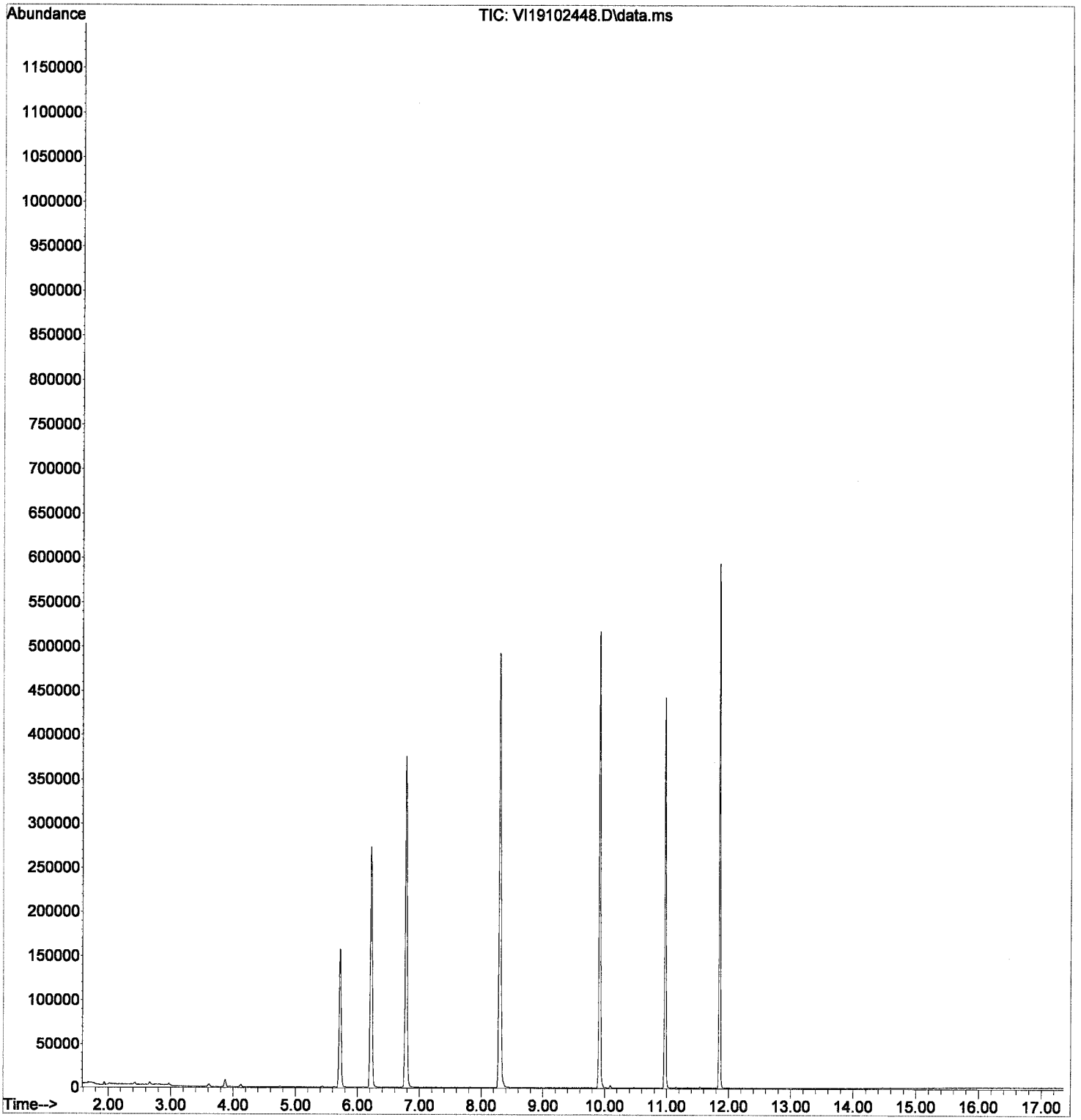
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	224165	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	364141	49.96	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	116148	47.73	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	404017	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	307716	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	221768	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	6246m	25.58	ug/L	
5) TPHg (C5-C9)	9.890	TIC	423048m	23.38	ug/L	
6) TPHg (C6-C10)	9.890	TIC	367482m	22.24	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	414999m	24.87	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102448.D
Acq On : 25 Oct 2019 5:48 am
Operator : MM
Sample : 9J24043-IBL9
Misc : 1X 5mL DI
ALS Vial : 35 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:26 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102449.D
Acq On : 25 Oct 2019 6:15 am
Operator : MM
Sample : NOT USED-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 36 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:29 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

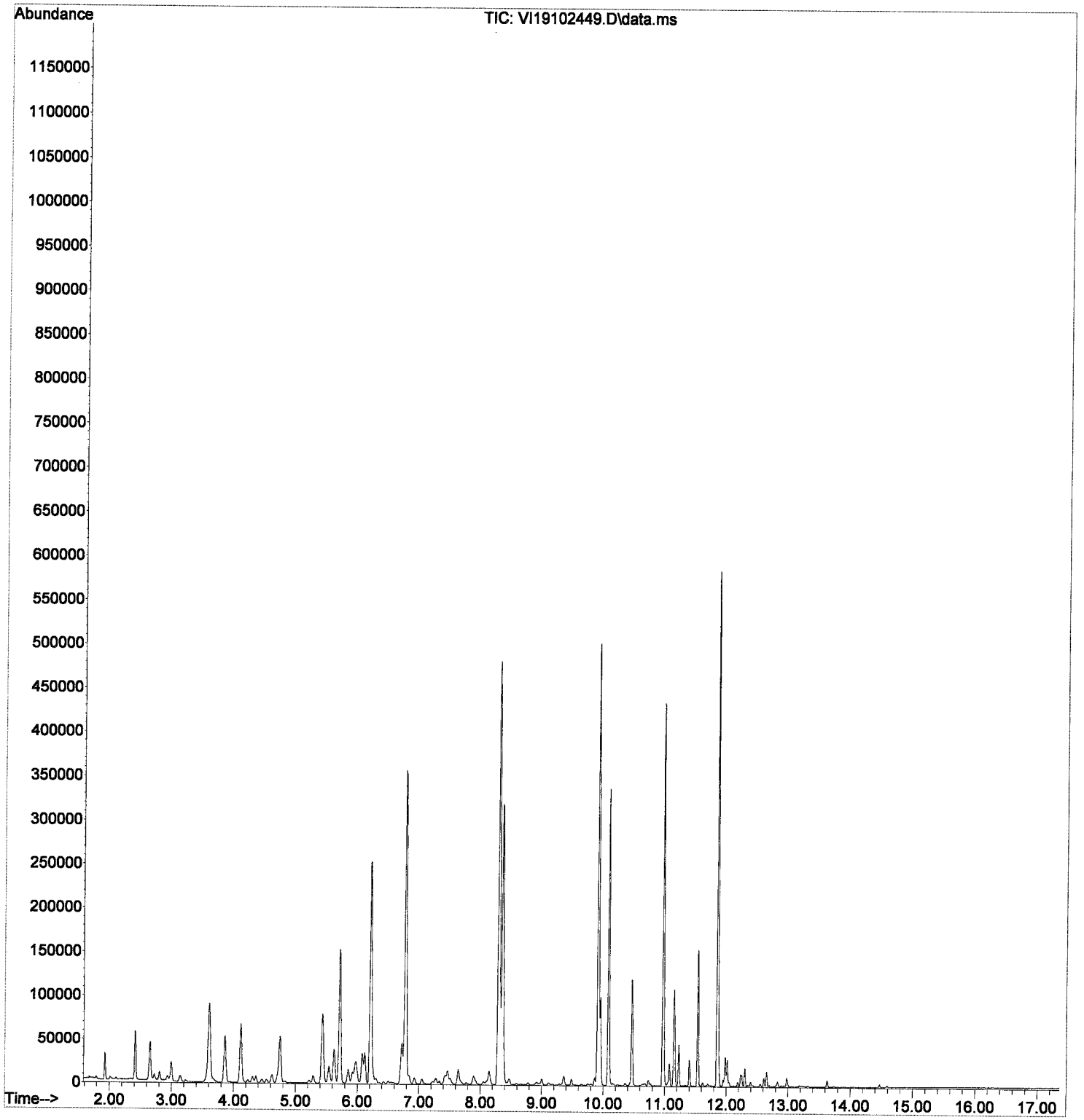
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210169	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342543	50.13	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	111447	48.85	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	389625	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	294881	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	215811	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	3057398m	515.56	ug/L	
5) TPHg (C5-C9)	9.890	TIC	4012577m	490.15	ug/L	
6) TPHg (C6-C10)	9.890	TIC	3490261m	503.63	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	4796224m	494.15	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102449.D
Acq On : 25 Oct 2019 6:15 am
Operator : MM
Sample : NOT USED-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 36 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:29 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102450.D
Acq On : 25 Oct 2019 6:42 am
Operator : MM
Sample : 9J24043-IBLA
Misc : 1X 5mL DI
ALS Vial : 37 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:32 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

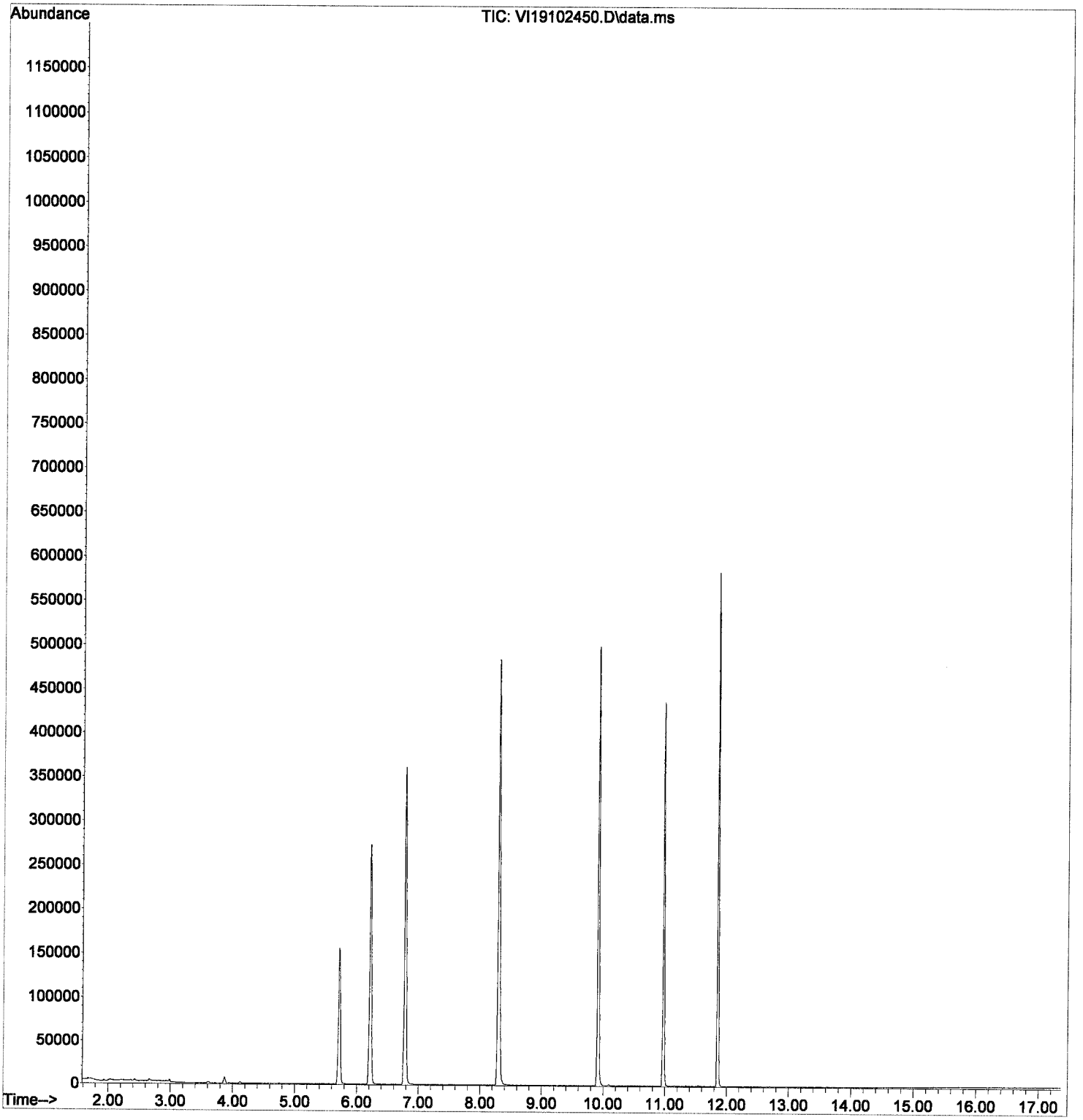
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220005	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	355641	49.72	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	113694	47.61	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	395183	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	297812	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	216661	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	1338m	24.84	ug/L	
5) TPHg (C5-C9)	9.890	TIC	395852m	20.99	ug/L	
6) TPHg (C6-C10)	9.890	TIC	356830m	21.68	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	380718m	22.16	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102450.D
Acq On : 25 Oct 2019 6:42 am
Operator : MM
Sample : 9J24043-IBLA
Misc : 1X 5mL DI
ALS Vial : 37 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:32 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102451.D
Acq On : 25 Oct 2019 9:37 am
Operator : MM
Sample : 9J24043-IBLB
Misc : 1X 5mL DI
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:35 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

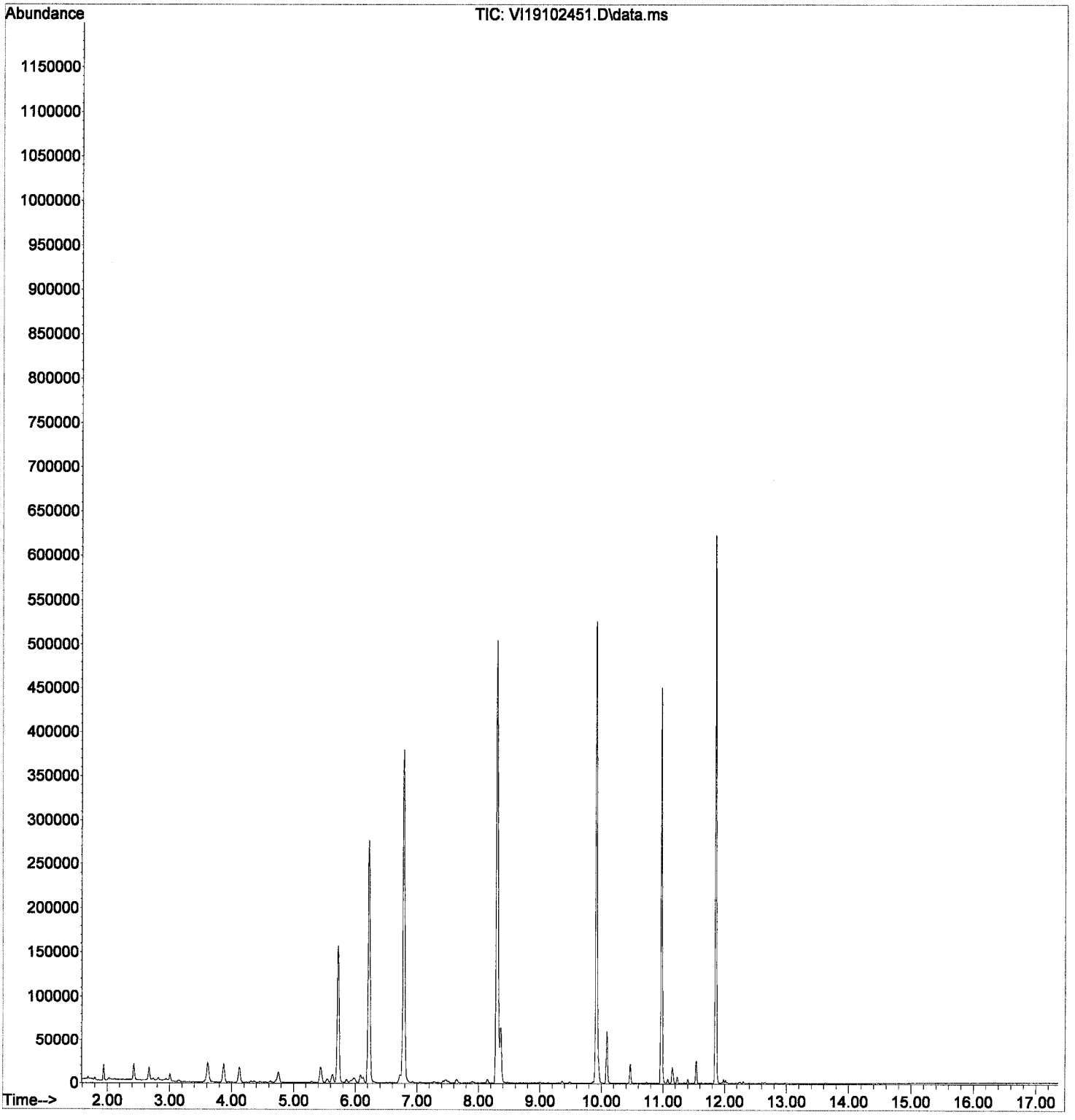
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220874	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	362775	50.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	117808	49.14	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	408461	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	309494	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	224643	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	516538m	104.07	ug/L	
5) TPHg (C5-C9)	9.890	TIC	1099818m	107.51	ug/L	
6) TPHg (C6-C10)	9.890	TIC	929473m	105.15	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	1204383m	105.77	ug/L	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102451.D
Acq On : 25 Oct 2019 9:37 am
Operator : MM
Sample : 9J24043-IBLB
Misc : 1X 5mL DI
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:36:35 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102452.D
Acq On : 25 Oct 2019 10:13 am
Operator : MM
Sample : 9J24043-CALG
Misc : 1X 5mL 1000PPB GX
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:30:48 2019
Quant Method : C:\msdchem\1\methods\~~VI191025G~~.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 09:04:24 2019
Response via : Initial Calibration

MM 10/25/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	234293	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	376297	49.24	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	126230	49.57	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	425778	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	321320	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	240304	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	6735895m	1025.45	ug/L	
5) TPHg (C5-C9)	9.890	TIC	9031832m	1085.81	ug/L	
6) TPHg (C6-C10)	9.890	TIC	7648071m	1079.95	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	10733621m	1066.65	ug/L	
8) Benzene (NR)	6.126	78	64412	No Calib		
10) Toluene (NR)	8.358	91	587525	No Calib		
13) Naphthalene (NR)	13.627	128	13369	No Calib		

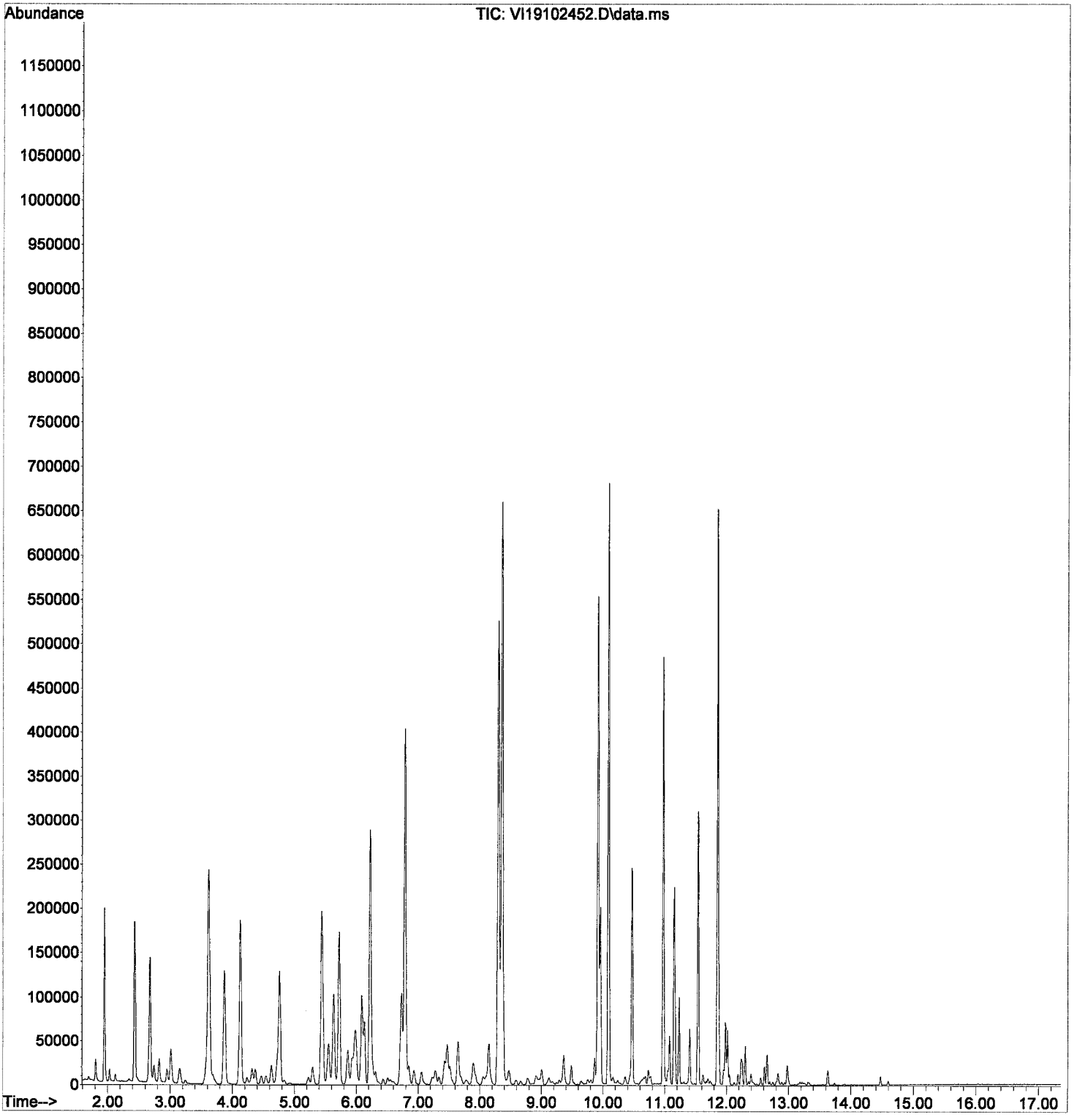
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Re-prepped @ 10/25/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102452.D
Acq On : 25 Oct 2019 10:13 am
Operator : MM
Sample : 9J24043-CALG
Misc : 1X 5mL 1000PPB GX
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:30:48 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 09:04:24 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102453.D
Acq On : 25 Oct 2019 10:40 am
Operator : MM
Sample : 9J24043-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:55:48 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

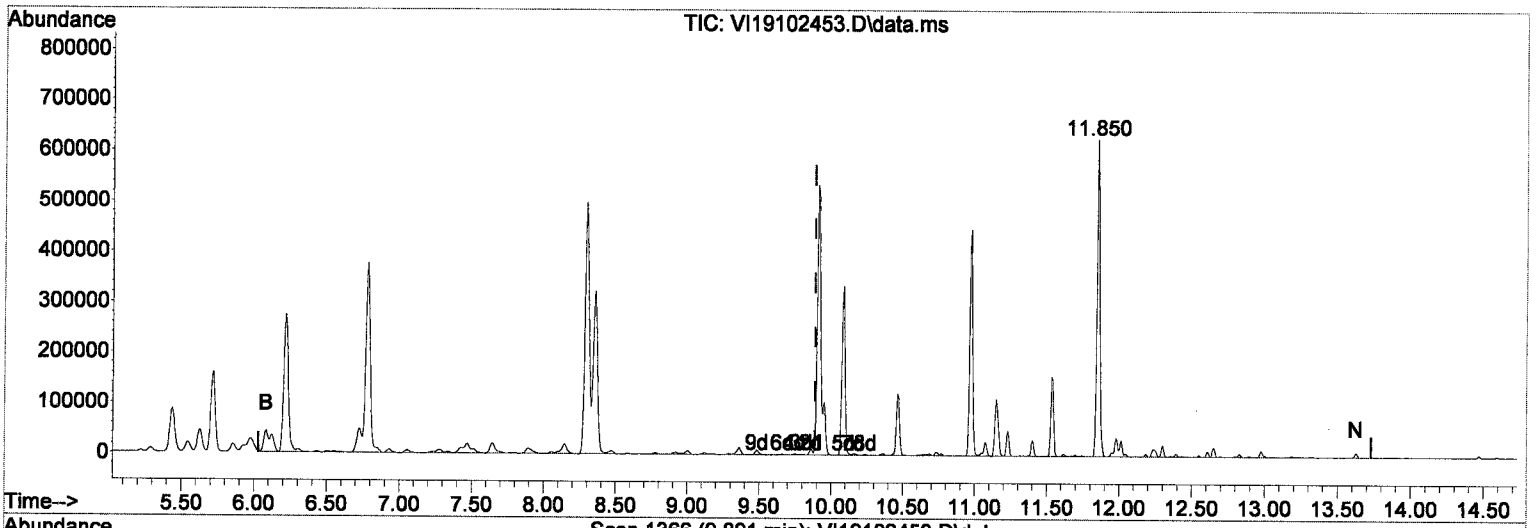
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	221958	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	358721	49.70	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	117543	48.79	ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	403727	0.00	ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.910	117	307598	0.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	224832	0.00	ug/L	0.00
Target Compounds						Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	3205343m	512.01	ug/L	
5) TPHg (C5-C9)	9.890	TIC	4234043m	489.71	ug/L	
6) TPHg (C6-C10)	9.890	TIC	3681976m	503.04	ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	5059070m	493.53	ug/L	

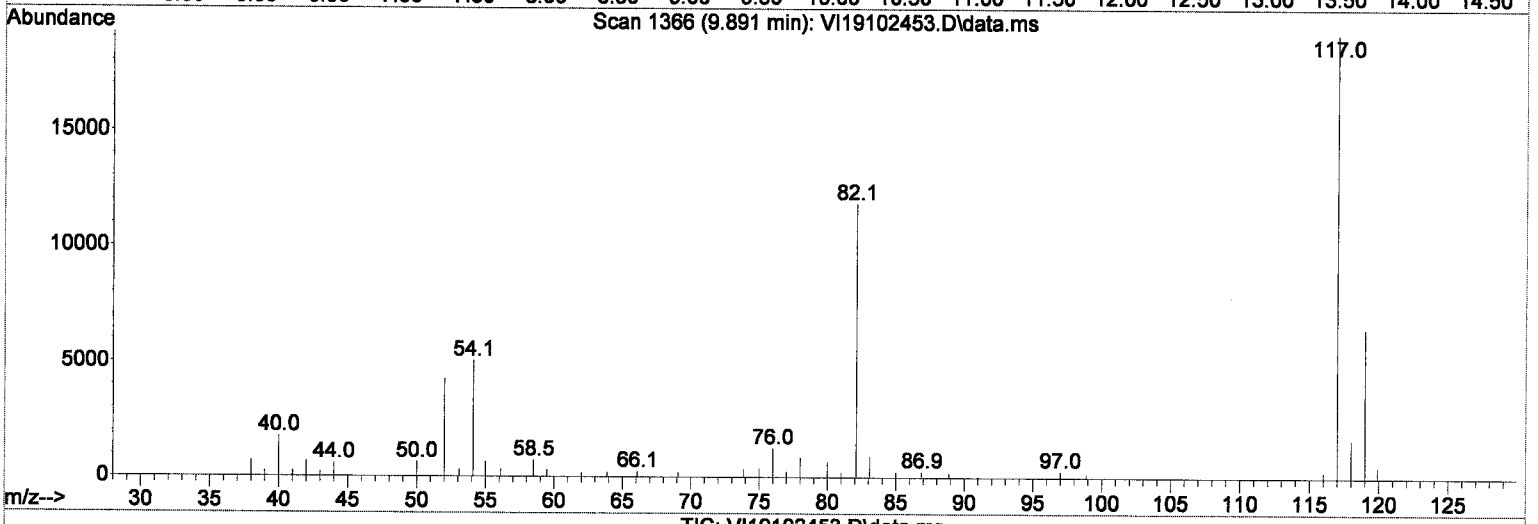
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102453.D
Acq On : 25 Oct 2019 10:40 am
Operator : MM
Sample : 9J24043-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:55:48 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration





TIC: VI19102453.D\data.ms

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

9.890min (0.000) 512.01 ug/L m

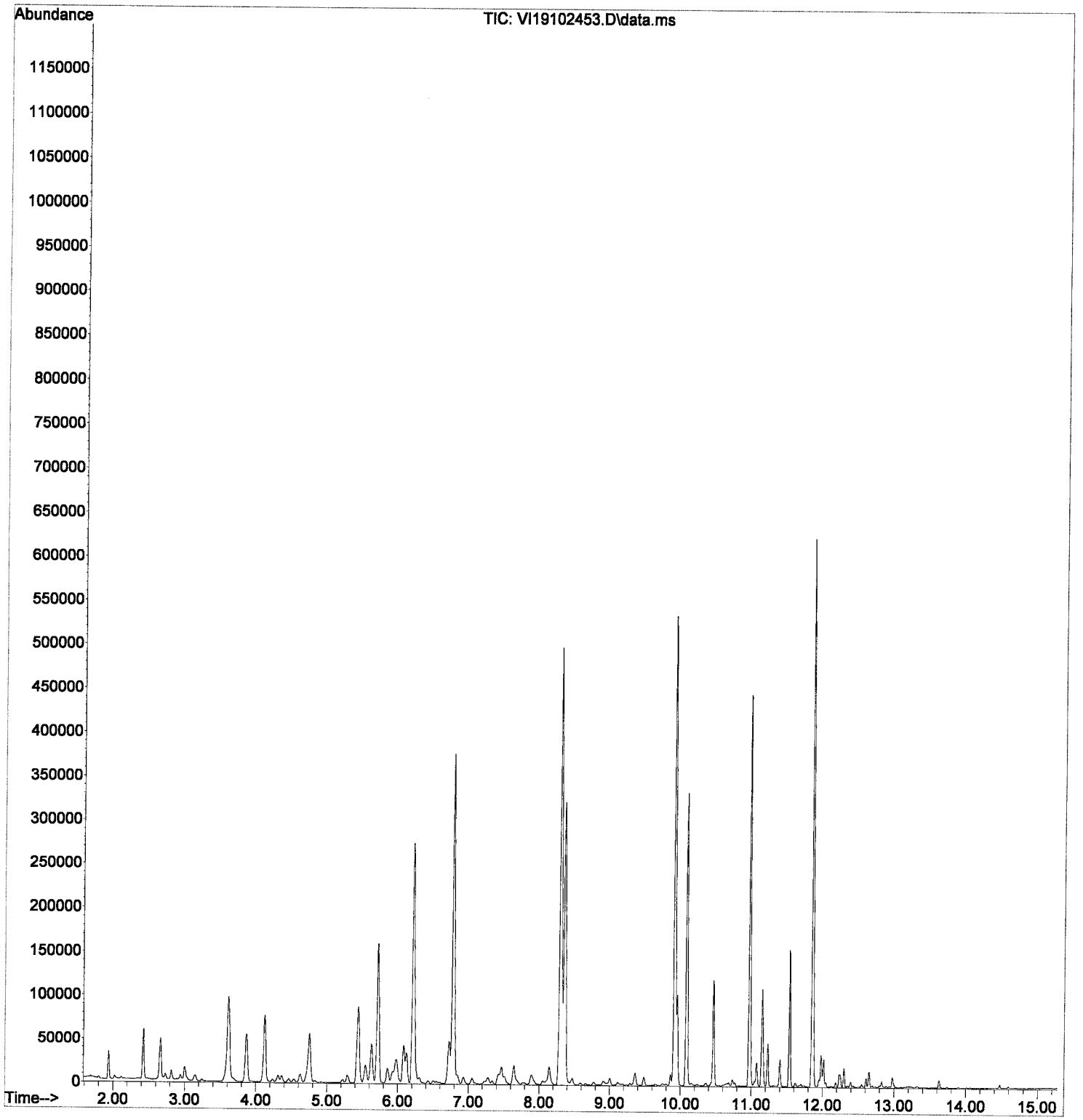
response 3205343

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J24043\
Data File : VI19102453.D
Acq On : 25 Oct 2019 10:40 am
Operator : MM
Sample : 9J24043-ICV3
Misc : 1X 5mL 500PPB GX
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 25 10:55:48 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration



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

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Batch 9110780
Sequence 9K14009 (A9K0332-04,05,06)

APEX LABORATORIES

- Apex Laboratories

PREPARATION BENCH SHEET

NOV 2 0 2019

BATCH #: 9110780 (Soil)

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
	9110780-BLK1		QC	11/14/19 07:06	31	2				100					
	9110780-BSD1		QC	11/14/19 07:07	30	2	A19K051		100	100					
	9110780-BS1		QC	11/14/19 07:06	30	2	A19K051		100	100					
	A9K0332-04	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.71	2				100	PDI-140RAB-00-10-191108	+1262,1268			
	A9K0332-05	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.61	2				100	PDI-140RAB-10-12.7-191108	+1262,1268			
	A9K0332-06	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.41	2				100	PDI-141RAB-00-10-191107	+1262,1268			
	A9K0332-07	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.18	5				100	PDI-141RAB-10-17.7-191107	+1262,1268			
	A9K0332-08	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.51	2				100	PDI-143RAB-00-10-191111	+1262,1268			
	A9K0332-09	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.05	2				100	PDI-143RAB-10-20-191112	+1262,1268			
	A9K0332-10	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.6	2				100	PDI-143RAB-20-31.1-191111	+1262,1268			
	A9K0332-10RE1	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	30.6	2				100	PDI-143RAB-20-31.1-191111	Added 11/18/2019 By KAK			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19C104	09/03/23	Florisil Lot 817211-CM
A19G280	01/18/20	Sulfuric Acid
A19H411	08/31/21	n-Hexane Lot# 192712
A19I211	05/07/22	Copper, Granular Lot# J260003
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K051	02/28/20	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19K052	04/17/20	8082 PCB Surrogate Spike

Prepared By: Date

Reviewed By: 11/19/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110780 (Soil)

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

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Printed: 11/19/2019 9:28:40AM

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110780 (Soil)

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	9110780-BLK1		QC	11/14/19 07:06	~~30~~ 31.00	2				100					
2	9110780-BSD1		QC	11/14/19 07:07	30	2	A19K051		100	100					
3	9110780-BS1		QC	11/14/19 07:06	30	2	A19K051		100	100					
4	A9K0332-04	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.71	2				100	PDI-140RAB-00-10-191108	+1262,1268 Soil			
5	A9K0332-05	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.61	2				100	PDI-140RAB-10-12.7-191108	+1262,1268 Soil			
6	A9K0332-06	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.41	2				100	PDI-141RAB-00-10-191107	+1262,1268 Soil			
7	A9K0332-07	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.18	~~2~~ 5				100	PDI-141RAB-10-17.7-191107	+1262,1268 Soil, color ★			
8	A9K0332-08	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.51	2				100	PDI-143RAB-00-10-191111	+1262,1268 Soil			
9	A9K0332-09	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.05	2				100	PDI-143RAB-10-20-191112	+1262,1268 Soil			
10	A9K0332-10	G	8082 PCBs - Low Level (30g/2mL)	11/14/19 07:06	~~30~~ 30.60	2				100	PDI-143RAB-20-31.1-191111	+1262,1268 Soil			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19C104	09/03/23	Florisil Lot 817211-CM
A19G280	01/18/20	Sulfuric Acid
A19H411	08/31/21	n-Hexane Lot# 192712
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777
A19I211	05/07/22	Copper, Granular lot# 326003

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K051	02/28/20	8082 PCB Matrix Spike

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19K052	04/17/20	8082 PCB Surrogate Spike

JAG

★ stained TurboVap Before and After Hexane exchange.

Method 3546 digestion time and temperture achieved. JAG 11/14/19

Initial: JAG

Witness: ~~AJJ~~ 11-14-19

Prepared By: JAG Date: 11/14/19

Reviewed By: CAH Date: 11/14/19

AJJ 11/14/19

Printed: 11/14/2019 7:10:42AM

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K14009**	Instrument:	**DUALECD2F**
Date:	**11/14/19 07:22**	Calibration:	**A9K0701**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14009-CCV1	Soil	QC	QC				A19J268
2	9K14009-CCB1	Soil	QC	QC				A19K026
3	9110780-BLK1	Soil	QC	QC		9110780		
4	9110780-BS1	Soil	QC	QC		9110780		
5	9110780-BSD1	Soil	QC	QC		9110780		
6	A9K0332-04	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
7	9K14009-IBL1	Soil	QC	QC				
8	A9K0332-05	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
9	9K14009-IBL2	Soil	QC	QC				
10	A9K0332-06	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
11	9K14009-IBL3	Soil	QC	QC				
12	9K14009-CCV2	Soil	QC	QC				A19J268
13	9K14009-CCB2	Soil	QC	QC				A19K026

Comments:

Data Entered By: 11/18/19

Data Reviewed By: MJ 11/18/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14009-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.813	17788129	302.786	ng/ml
62)	S DCBP (S)	9.601	21754549	241.028	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.734	1632665	495.451	ng/ml
3)	Aroclor 1016 (2)	6.148	3274535	507.440	ng/ml
4)	Aroclor 1016 (3)	6.231	1778280	504.915	ng/ml
5)	Aroclor 1016 (4)	6.389	1487309	485.035	ng/ml
6)	Aroclor 1016 (5)	6.612	1779412	490.889	ng/ml
7)	Aroclor 1016 (6)	6.738	1276310	504.464	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.172	165988	168.252	ng/ml
10)	Aroclor 1221 (2)	5.291	181036	277.444	ng/ml
11)	Aroclor 1221 (3)	5.372	835807	391.144	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.372	835807	484.172	ng/ml
14)	Aroclor 1232 (2)	6.148	3274535	1288.359	ng/ml
15)	Aroclor 1232 (3)	6.231	1778280	1278.202	ng/ml
16)	Aroclor 1232 (4)	6.389	1487309	1495.562	ng/ml
17)	Aroclor 1232 (5)	6.612	1779412	1404.070	ng/ml
18)	Aroclor 1232 (6)	6.738	1276310	1234.574	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.734	1632665	712.299	ng/ml
21)	Aroclor 1242 (2)	6.148	3274535	709.645	ng/ml
22)	Aroclor 1242 (3)	6.231	1778280	732.990	ng/ml
23)	Aroclor 1242 (4)	6.389	1487309	727.712	ng/ml
24)	Aroclor 1242 (5)	6.612	1779412	681.006	ng/ml
25)	Aroclor 1242 (6)	6.738	1276310	599.545	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.148	3274535	1103.382	ng/ml
28)	Aroclor 1248 (2)	6.389	1487309	407.263	ng/ml
29)	Aroclor 1248 (3)	6.612	1779412	407.902	ng/ml
30)	Aroclor 1248 (4)	6.906	340085	67.956	ng/ml
31)	Aroclor 1248 (5)	6.941	1275804	248.578	ng/ml
32)	Aroclor 1248 (6)	7.430	2535006	908.508	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.941	1275804	240.963	ng/ml
35)	Aroclor 1254 (2)	7.051	1277623	202.625	ng/ml
36)	Aroclor 1254 (3)	7.430	2535006	266.622	ng/ml
37)	Aroclor 1254 (4)	7.590	371451	58.280	ng/ml
38)	Aroclor 1254 (5)	7.972	3585111	545.882	ng/ml
39)	Aroclor 1254 (6)	8.264	391027	187.711	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.543	3553255	507.540	ng/ml
42)	Aroclor 1260 (2)	7.677	4619259	518.983	ng/ml
43)	Aroclor 1260 (3)	8.235	3297877	495.088	ng/ml
44)	Aroclor 1260 (4)	~~8.377~~ 8.406	~~420869~~	~~26.633~~	ng/ml 490.816MI
45)	Aroclor 1260 (5)	8.706	5188330	503.032	ng/ml
46)	Aroclor 1260 (6)	9.101	2055947	477.254	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

498.03

498.79

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14009-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.677	4619259	693.059	ng/ml
49)	Aroclor 1262 (2)	8.002	3392404	363.468	ng/ml
50)	Aroclor 1262 (3)	8.235	3297877	415.557	ng/ml
51)	Aroclor 1262 (4)	8.377	420869	23.941	ng/ml
52)	Aroclor 1262 (5)	8.706	5188330	482.376	ng/ml
53)	Aroclor 1262 (6)	9.101	2055947	360.987	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.235	3297877	802.133	ng/ml
56)	Aroclor 1268 (2)	8.654	1802046	88.687	ng/ml
57)	Aroclor 1268 (3)	8.706	5188330	309.409	ng/ml
58)	Aroclor 1268 (4)	8.879	150120	9.862	ng/ml
59)	Aroclor 1268 (5)	9.101	2055947	326.593	ng/ml
60)	Aroclor 1268 (6)	9.362	470863	10.871	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

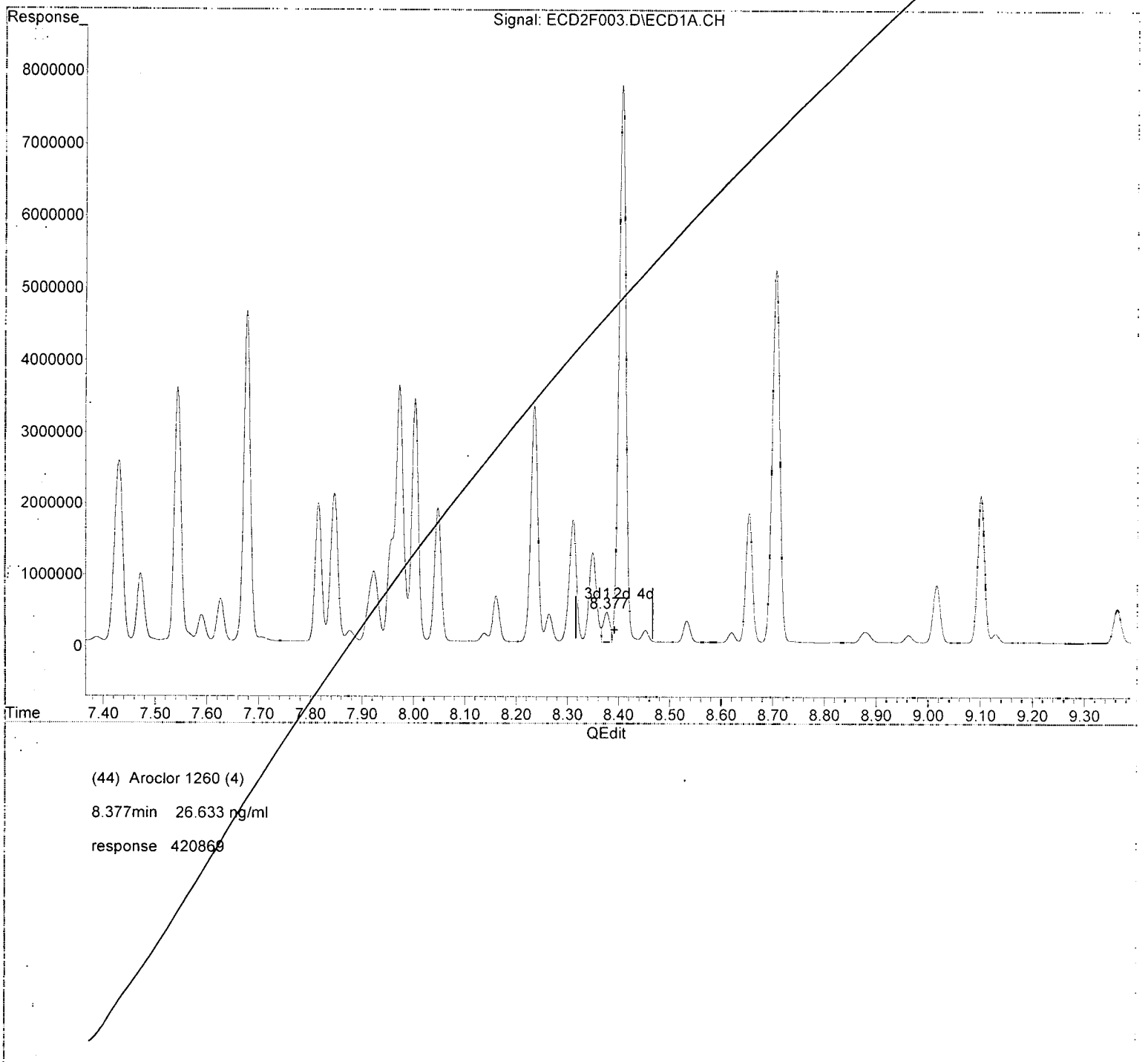
Quantitation Report (Qedit)

Data Path : K:\DATA\9K14009\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14009-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

MI



(44) Aroclor 1260 (4)

8.377min 26.633 ng/ml

response 420869

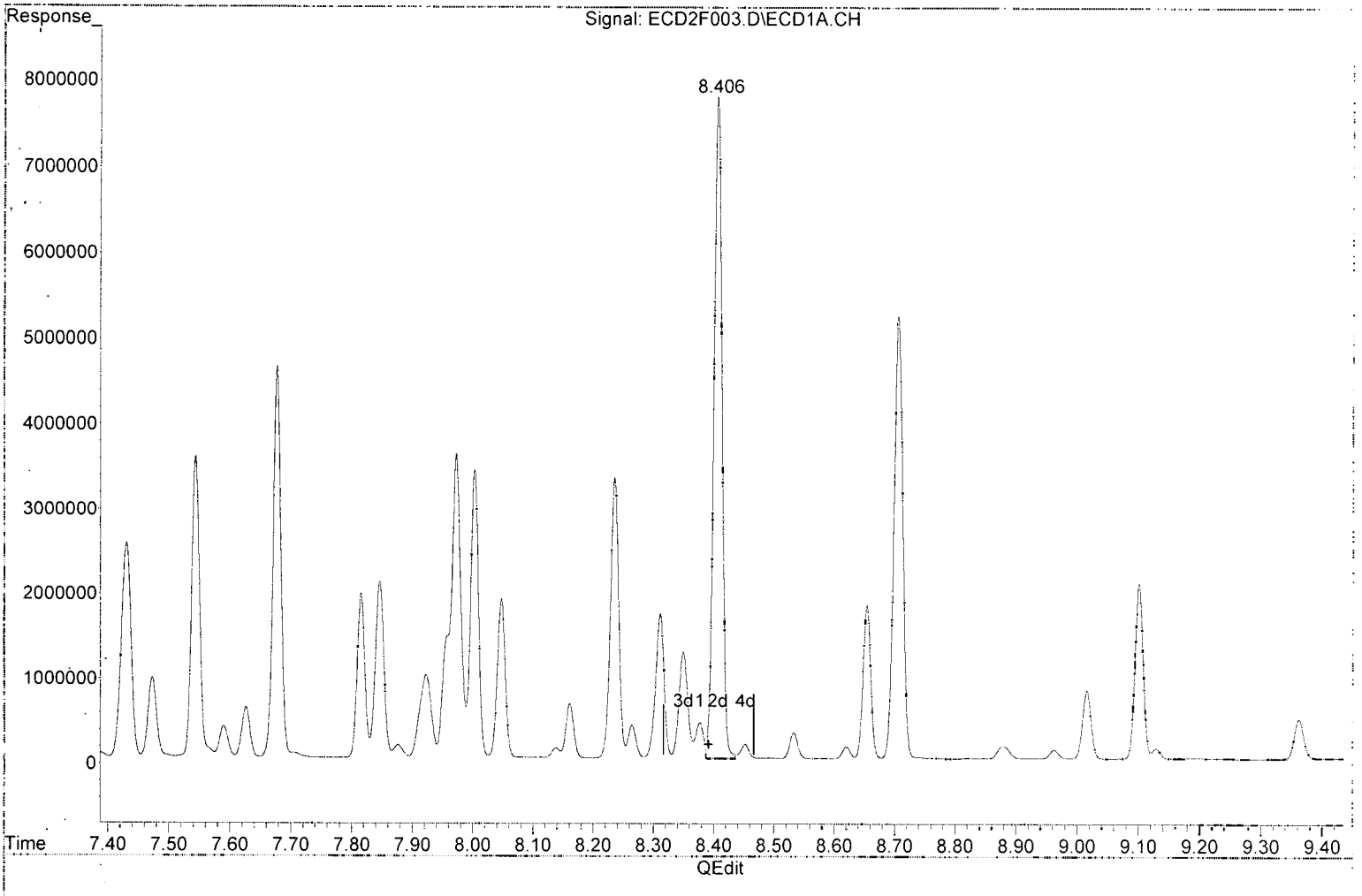
(+) = Expected Retention Time

FECD2_QUANTPCB_191105.M Mon Nov 18 07:50:33 2019

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14009\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14009-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(44) Aroclor 1260 (4)

8.406min 490.816 ng/ml m 11/18/19

response 7756035

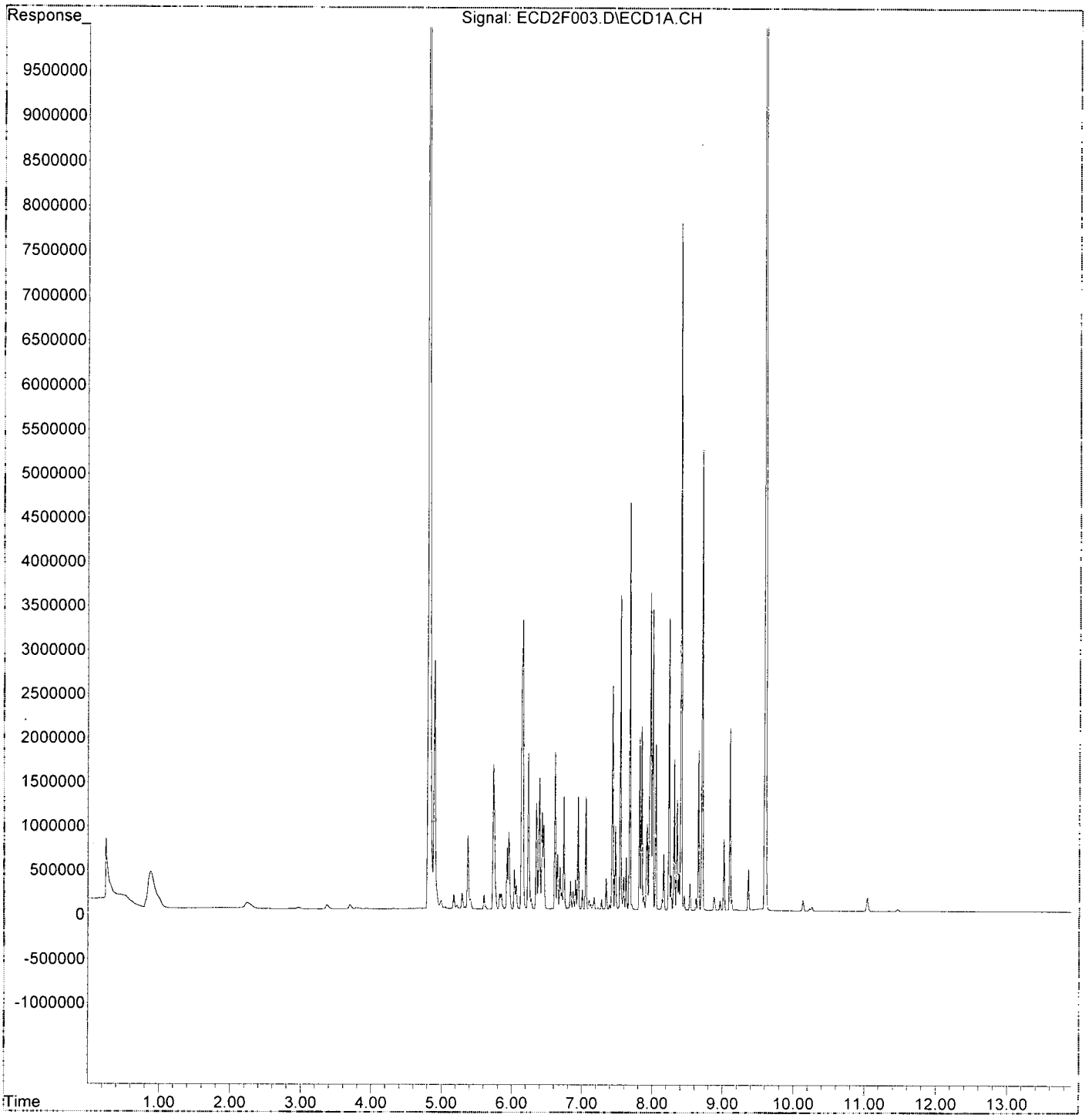
(+) = Expected Retention Time

FECD2_QUANTPCB_191105.M Mon Nov 18 07:50:42 2019 Page: 1

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14009-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14009-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:18 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19 clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.812	7163162	121.930 ng/ml
62) S	DCBP (S)	9.598	8531946	94.529 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.727	3241	0.984 ng/ml
3)	Aroclor 1016 (2)	6.149	6859	1.063 ng/ml
4)	Aroclor 1016 (3)	6.220	3956	1.123 ng/ml
5)	Aroclor 1016 (4)	6.375	4363	1.423 ng/ml
6)	Aroclor 1016 (5)	6.595	5327	1.470 ng/ml
7)	Aroclor 1016 (6)	6.728	5311	2.099 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.173	7851	7.958 ng/ml
10)	Aroclor 1221 (2)	5.258	8951	13.718 ng/ml
11)	Aroclor 1221 (3)	5.351	5813	2.720 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.351	5813	3.367 ng/ml
14)	Aroclor 1232 (2)	6.149	6859	2.699 ng/ml
15)	Aroclor 1232 (3)	6.220	3956	2.843 ng/ml
16)	Aroclor 1232 (4)	6.375	4363	4.387 ng/ml
17)	Aroclor 1232 (5)	6.595	5327	4.204 ng/ml
18)	Aroclor 1232 (6)	6.728	5311	5.137 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.727	3241	1.414 ng/ml
21)	Aroclor 1242 (2)	6.149	6859	1.486 ng/ml
22)	Aroclor 1242 (3)	6.220	3956	1.631 ng/ml
23)	Aroclor 1242 (4)	6.375	4363	2.135 ng/ml
24)	Aroclor 1242 (5)	6.595	5327	2.039 ng/ml
25)	Aroclor 1242 (6)	6.728	5311	2.495 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.149	6859	2.311 ng/ml
28)	Aroclor 1248 (2)	6.375	4363	1.195 ng/ml
29)	Aroclor 1248 (3)	6.595	5327	1.221 ng/ml
30)	Aroclor 1248 (4)	6.895	5700	1.139 ng/ml
31)	Aroclor 1248 (5)	6.943	5789	1.128 ng/ml
32)	Aroclor 1248 (6)	7.407	9486	3.400 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.943	5789	1.093 ng/ml
35)	Aroclor 1254 (2)	7.055	6950	1.102 ng/ml
36)	Aroclor 1254 (3)	7.415	9424	0.991 ng/ml
37)	Aroclor 1254 (4)	7.576	7430	1.166 ng/ml
38)	Aroclor 1254 (5)	7.973	6465	0.984 ng/ml
39)	Aroclor 1254 (6)	8.254	2967	1.424 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.531	8252	1.179 ng/ml
42)	Aroclor 1260 (2)	7.676	8709	0.978 ng/ml
43)	Aroclor 1260 (3)	8.234	3944	0.592 ng/ml
44)	Aroclor 1260 (4)	8.378	2892	0.183 ng/ml
45)	Aroclor 1260 (5)	8.704	2895	0.281 ng/ml
46)	Aroclor 1260 (6)	9.080	436	0.101 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14009-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:18 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

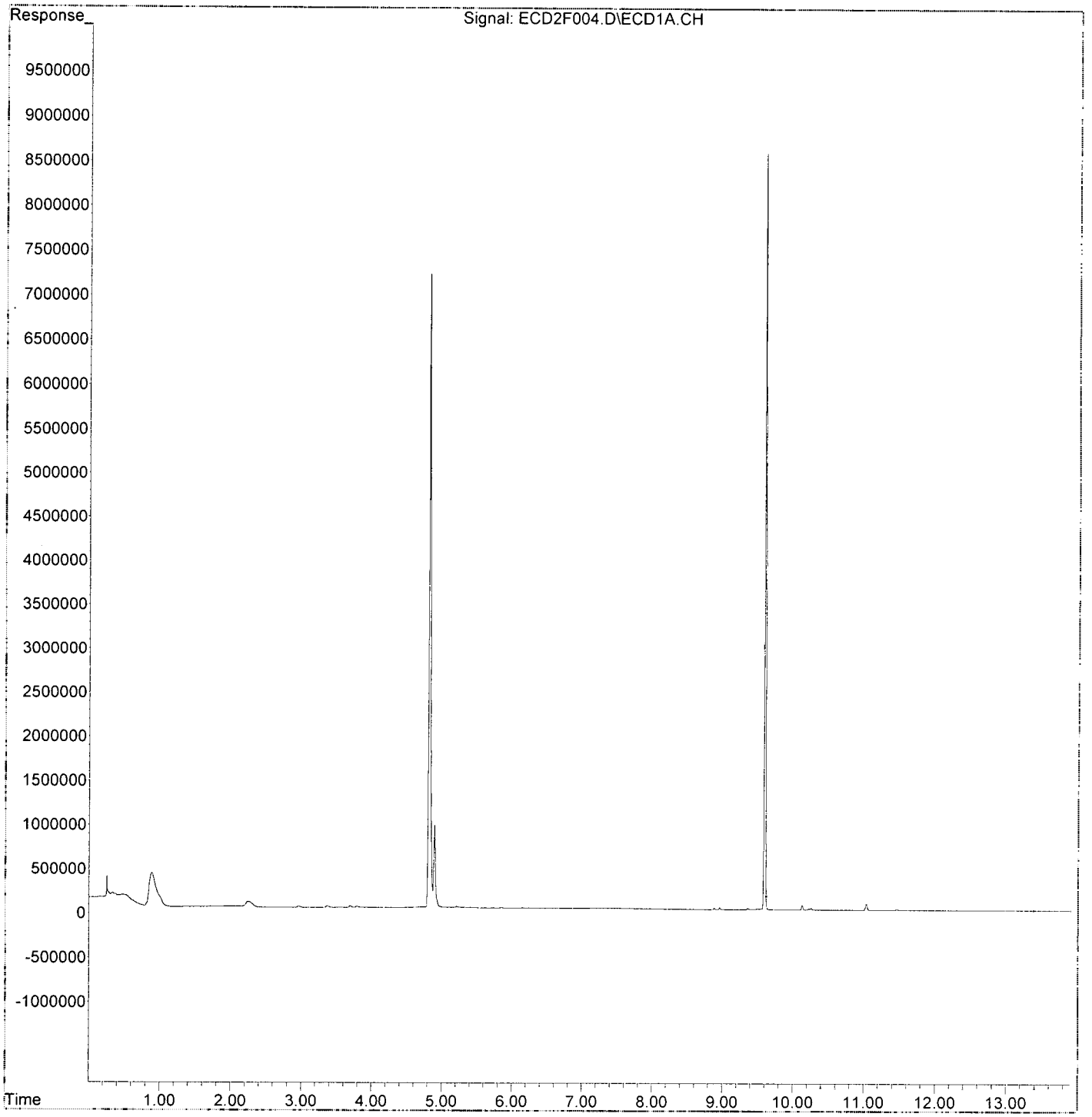
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.676	8709	1.307 ng/ml
49)	Aroclor 1262 (2)	7.999	4547	0.487 ng/ml
50)	Aroclor 1262 (3)	8.208	3314	0.418 ng/ml
51)	Aroclor 1262 (4)	8.378	2892	0.165 ng/ml
52)	Aroclor 1262 (5)	8.675	1206	0.112 ng/ml
53)	Aroclor 1262 (6)	9.080	436	0.077 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.208	3314	0.806 ng/ml
56)	Aroclor 1268 (2)	8.653	1426	0.070 ng/ml
57)	Aroclor 1268 (3)	8.675	1206	0.072 ng/ml
58)	Aroclor 1268 (4)	8.884	19847	1.304 ng/ml
59)	Aroclor 1268 (5)	9.080	436	0.069 ng/ml
60)	Aroclor 1268 (6)	9.323	1069	0.025 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14009-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:18 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9110780-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.810	11030805	187.764 ng/ml
62) S	DCBP (S)	9.598	21469512	237.870 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.732	5594	1.697 ng/ml
3)	Aroclor 1016 (2)	6.147	9208	1.427 ng/ml
4)	Aroclor 1016 (3)	6.227	6714	1.906 ng/ml
5)	Aroclor 1016 (4)	6.386	7186	2.344 ng/ml
6)	Aroclor 1016 (5)	6.609	8632	2.381 ng/ml
7)	Aroclor 1016 (6)	6.737	8052	3.183 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.169	9428	9.557 ng/ml
10)	Aroclor 1221 (2)	5.259	10885	16.682 ng/ml
11)	Aroclor 1221 (3)	5.363	8609	4.029 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.363	8609	4.987 ng/ml
14)	Aroclor 1232 (2)	6.147	9208	3.623 ng/ml
15)	Aroclor 1232 (3)	6.227	6714	4.826 ng/ml
16)	Aroclor 1232 (4)	6.386	7186	7.226 ng/ml
17)	Aroclor 1232 (5)	6.609	8632	6.811 ng/ml
18)	Aroclor 1232 (6)	6.737	8052	7.789 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.732	5594	2.440 ng/ml
21)	Aroclor 1242 (2)	6.147	9208	1.996 ng/ml
22)	Aroclor 1242 (3)	6.227	6714	2.767 ng/ml
23)	Aroclor 1242 (4)	6.386	7186	3.516 ng/ml
24)	Aroclor 1242 (5)	6.609	8632	3.304 ng/ml
25)	Aroclor 1242 (6)	6.737	8052	3.782 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.147	9208	3.103 ng/ml
28)	Aroclor 1248 (2)	6.386	7186	1.968 ng/ml
29)	Aroclor 1248 (3)	6.609	8632	1.979 ng/ml
30)	Aroclor 1248 (4)	6.888	6640	1.327 ng/ml
31)	Aroclor 1248 (5)	6.939	8611	1.678 ng/ml
32)	Aroclor 1248 (6)	7.399	10464	3.750 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.939	8611	1.626 ng/ml
35)	Aroclor 1254 (2)	7.050	9339	1.481 ng/ml
36)	Aroclor 1254 (3)	7.399	10464	1.101 ng/ml
37)	Aroclor 1254 (4)	7.573	8457	1.327 ng/ml
38)	Aroclor 1254 (5)	7.955	6386	0.972 ng/ml
39)	Aroclor 1254 (6)	8.254	3550	1.704 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.540	13443	1.920 ng/ml
42)	Aroclor 1260 (2)	7.675	12669	1.423 ng/ml
43)	Aroclor 1260 (3)	8.231	5884	0.883 ng/ml
44)	Aroclor 1260 (4)	8.403	8658	0.548 ng/ml
45)	Aroclor 1260 (5)	8.703	4157	0.403 ng/ml
46)	Aroclor 1260 (6)	9.082	1729	0.401 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9110780-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

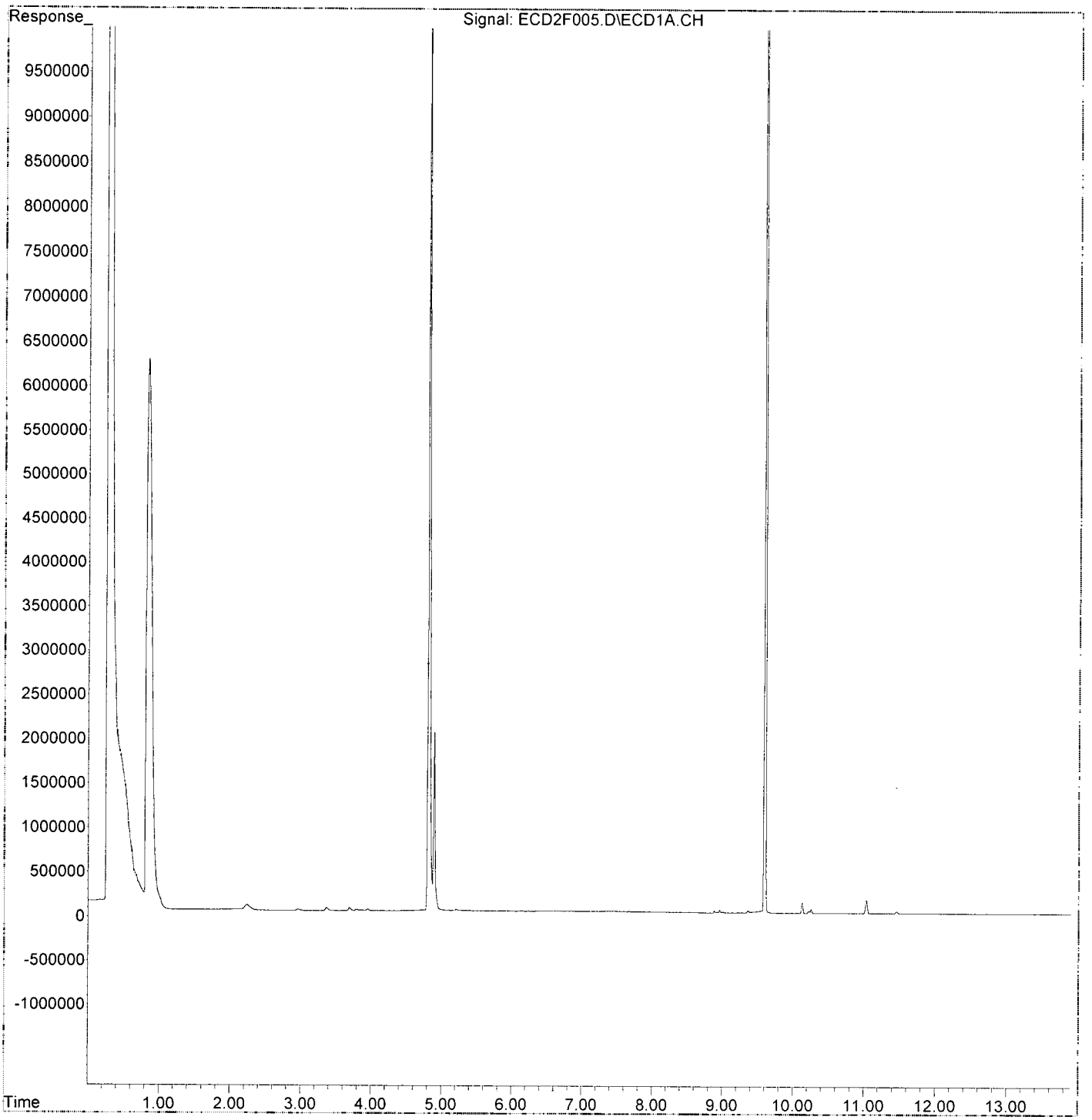
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.652	7468	1.120 ng/ml
49)	Aroclor 1262 (2)	8.001	7534	0.807 ng/ml
50)	Aroclor 1262 (3)	8.209	3900	0.491 ng/ml
51)	Aroclor 1262 (4)	8.379	3456	0.197 ng/ml
52)	Aroclor 1262 (5)	8.703	4157	0.387 ng/ml
53)	Aroclor 1262 (6)	9.082	1729	0.304 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.209	3900	0.949 ng/ml
56)	Aroclor 1268 (2)	8.651	2303	0.113 ng/ml
57)	Aroclor 1268 (3)	8.669	1399	0.083 ng/ml
58)	Aroclor 1268 (4)	8.856	92	0.006 ng/ml
59)	Aroclor 1268 (5)	9.082	1729	0.275 ng/ml
60)	Aroclor 1268 (6)	9.362	26090	0.602 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9110780-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9110780-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	4.812	12734224	216.760	ng/ml
62)	S	DCBP (S)	9.597	21723506	240.684	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	5.732	2802716	850.516	ng/ml
3)		Aroclor 1016 (2)	6.146	6155083	953.826	ng/ml
4)		Aroclor 1016 (3)	6.229	3140387	891.664	ng/ml
5)		Aroclor 1016 (4)	6.387	2874630	937.462	ng/ml
6)		Aroclor 1016 (5)	6.609	3152548	869.698	ng/ml
7)		Aroclor 1016 (6)	6.735	2116741	836.645	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.170	256830	260.333	ng/ml
10)		Aroclor 1221 (2)	5.289	281827	431.910	ng/ml
11)		Aroclor 1221 (3)	5.369	1363152	637.932	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.369	1363152	789.656	ng/ml
14)		Aroclor 1232 (2)	6.146	6155083	2421.704	ng/ml
15)		Aroclor 1232 (3)	6.229	3140387	2257.265	ng/ml
16)		Aroclor 1232 (4)	6.387	2874630	2890.582	ng/ml
17)		Aroclor 1232 (5)	6.609	3152548	2487.562	ng/ml
18)		Aroclor 1232 (6)	6.735	2116741	2047.521	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	5.732	2802716	1222.770	ng/ml
21)		Aroclor 1242 (2)	6.146	6155083	1333.907	ng/ml
22)		Aroclor 1242 (3)	6.229	3140387	1294.438	ng/ml
23)		Aroclor 1242 (4)	6.387	2874630	1406.503	ng/ml
24)		Aroclor 1242 (5)	6.609	3152548	1206.525	ng/ml
25)		Aroclor 1242 (6)	6.735	2116741	994.336	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.146	6155083	2074.007	ng/ml
28)		Aroclor 1248 (2)	6.387	2874630	787.146	ng/ml
29)		Aroclor 1248 (3)	6.609	3152548	722.672	ng/ml
30)		Aroclor 1248 (4)	6.904	647754	129.434	ng/ml
31)		Aroclor 1248 (5)	6.939	2289205	446.029	ng/ml
32)		Aroclor 1248 (6)	7.428	5183756	1857.781	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	6.939	2289205	432.366	ng/ml
35)		Aroclor 1254 (2)	7.049	2581740	409.451	ng/ml
36)		Aroclor 1254 (3)	7.428	5183756	545.207	ng/ml
37)		Aroclor 1254 (4)	7.587	766579	120.274	ng/ml
38)		Aroclor 1254 (5)	7.969	7258333	1105.180	ng/ml
39)		Aroclor 1254 (6)	8.262	702758	337.357	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	7.541	7472809	1067.402	ng/ml
42)		Aroclor 1260 (2)	7.675	9438578	1060.444	ng/ml
43)		Aroclor 1260 (3)	8.233	7050912	1058.506	ng/ml
44)		Aroclor 1260 (4)	8.405	17934262	1134.912	ng/ml
45)		Aroclor 1260 (5)	8.704	11518538	1116.773	ng/ml
46)		Aroclor 1260 (6)	9.097	4547759	1055.687	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

889.97

1082.29

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9110780-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

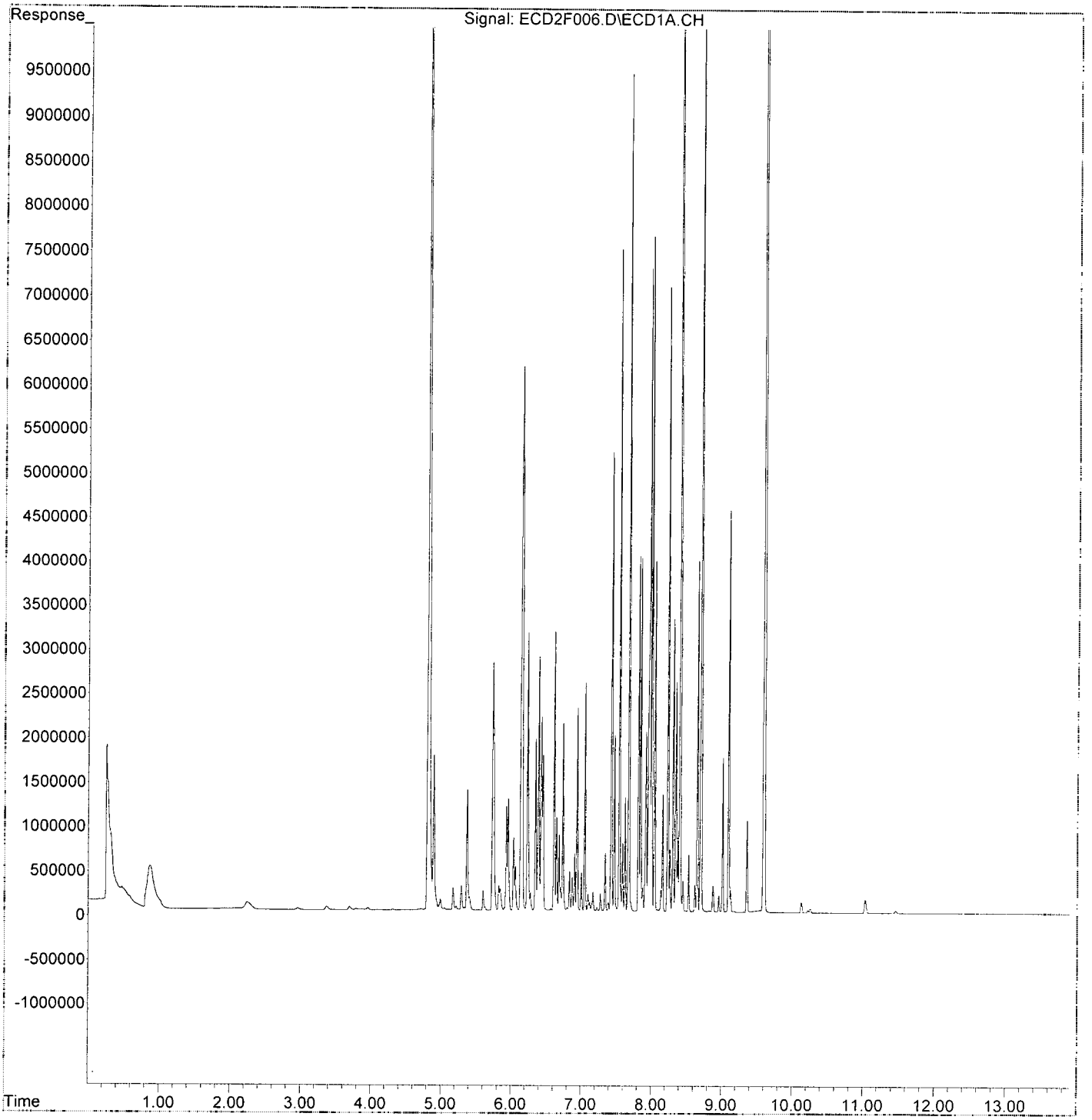
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.675	9438578	1416.134	ng/ml
49)	Aroclor 1262 (2)	7.999	7607530	815.083	ng/ml
50)	Aroclor 1262 (3)	8.233	7050912	888.468	ng/ml
51)	Aroclor 1262 (4)	8.405	17934262	1020.176	ng/ml
52)	Aroclor 1262 (5)	8.704	11518538	1070.916	ng/ml
53)	Aroclor 1262 (6)	9.097	4547759	798.505	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.233	7050912	1714.973	ng/ml
56)	Aroclor 1268 (2)	8.652	3966611	195.216	ng/ml
57)	Aroclor 1268 (3)	8.704	11518538	686.915	ng/ml
58)	Aroclor 1268 (4)	8.875	296910	19.505	ng/ml
59)	Aroclor 1268 (5)	9.097	4547759	722.424	ng/ml
60)	Aroclor 1268 (6)	9.358	1029197	23.762	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9110780-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:13:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : 9110780-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

Q-19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.811	11800490	200.866	ng/ml
62)	S DCBP (S)	9.597	22025451	244.029	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.732	2534839	769.226	ng/ml
3)	Aroclor 1016 (2)	6.146	5869051	909.501	ng/ml
4)	Aroclor 1016 (3)	6.228	2856080	810.940	ng/ml
5)	Aroclor 1016 (4)	6.387	2668165	870.131	ng/ml
6)	Aroclor 1016 (5)	6.609	2968321	818.875	ng/ml
7)	Aroclor 1016 (6)	6.735	1926909	761.614	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.169	231832	234.994	ng/ml
10)	Aroclor 1221 (2)	5.288	266384	408.243	ng/ml
11)	Aroclor 1221 (3)	5.369	1271568	595.073	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.369	1271568	736.603	ng/ml
14)	Aroclor 1232 (2)	6.146	5869051	2309.165	ng/ml
15)	Aroclor 1232 (3)	6.228	2856080	2052.909	ng/ml
16)	Aroclor 1232 (4)	6.387	2668165	2682.972	ng/ml
17)	Aroclor 1232 (5)	6.609	2968321	2342.195	ng/ml
18)	Aroclor 1232 (6)	6.735	1926909	1863.897	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.732	2534839	1105.900	ng/ml
21)	Aroclor 1242 (2)	6.146	5869051	1271.919	ng/ml
22)	Aroclor 1242 (3)	6.228	2856080	1177.250	ng/ml
23)	Aroclor 1242 (4)	6.387	2668165	1305.483	ng/ml
24)	Aroclor 1242 (5)	6.609	2968321	1136.018	ng/ml
25)	Aroclor 1242 (6)	6.735	1926909	905.163	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.146	5869051	1977.626	ng/ml
28)	Aroclor 1248 (2)	6.387	2668165	730.611	ng/ml
29)	Aroclor 1248 (3)	6.609	2968321	680.441	ng/ml
30)	Aroclor 1248 (4)	6.904	599141	119.720	ng/ml
31)	Aroclor 1248 (5)	6.938	2220164	432.577	ng/ml
32)	Aroclor 1248 (6)	7.427	4848275	1737.550	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.938	2220164	419.326	ng/ml
35)	Aroclor 1254 (2)	7.049	2509654	398.019	ng/ml
36)	Aroclor 1254 (3)	7.427	4848275	509.922	ng/ml
37)	Aroclor 1254 (4)	7.587	697438	109.426	ng/ml
38)	Aroclor 1254 (5)	7.969	6818086	1038.146	ng/ml
39)	Aroclor 1254 (6)	8.262	647249	310.710	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.541	6984274	997.620	ng/ml
42)	Aroclor 1260 (2)	7.675	9247019	1038.922	ng/ml
43)	Aroclor 1260 (3)	8.234	6934649	1041.052	ng/ml
44)	Aroclor 1260 (4)	8.404	17692736	1119.628	ng/ml
45)	Aroclor 1260 (5)	8.704	10767711	1043.977	ng/ml
46)	Aroclor 1260 (6)	9.098	4512363	1047.471	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

823.38

1048.11

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : 9110780-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

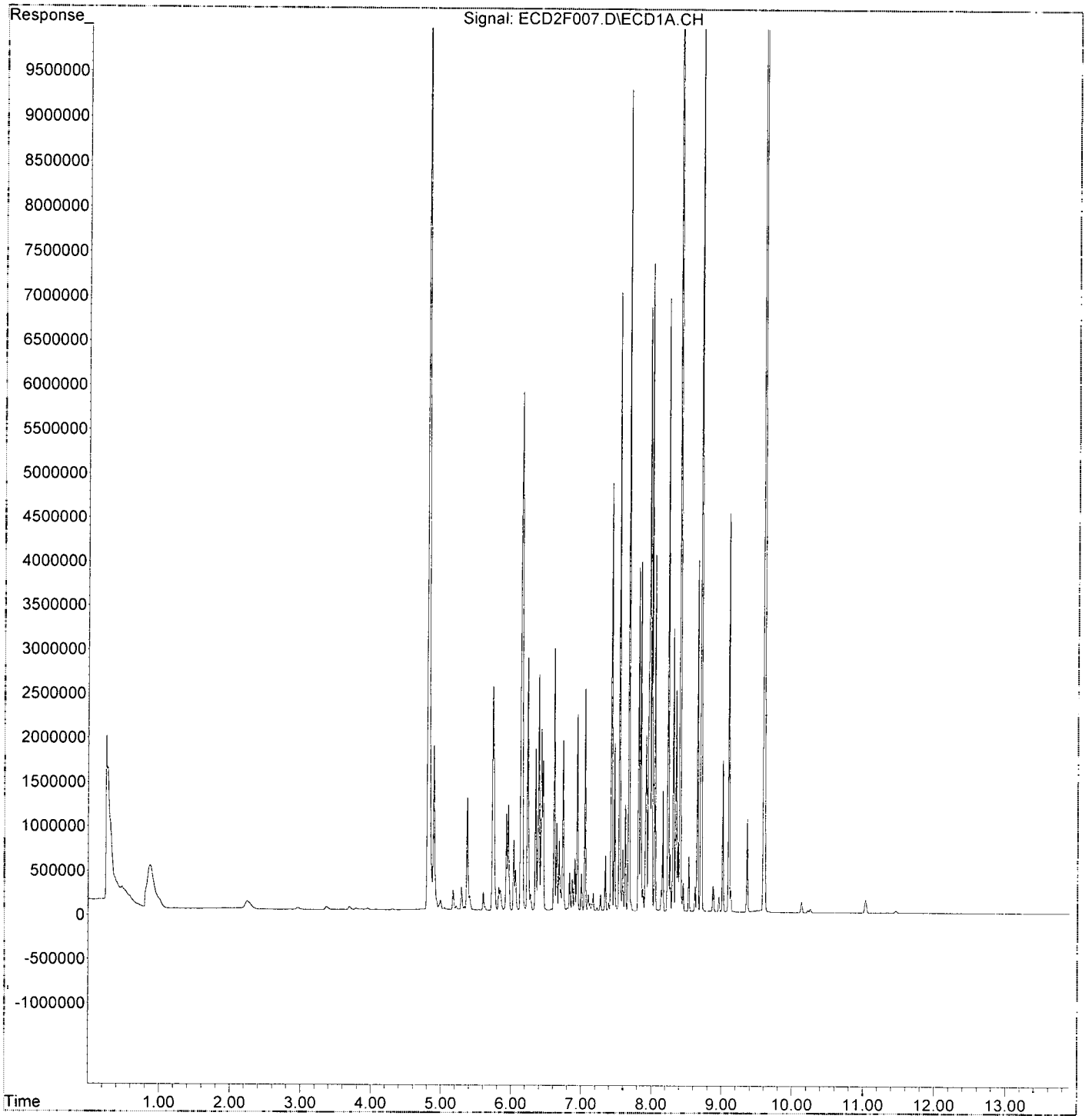
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.675	9247019	1387.393	ng/ml
49)	Aroclor 1262 (2)	8.000	7328851	785.225	ng/ml
50)	Aroclor 1262 (3)	8.234	6934649	873.818	ng/ml
51)	Aroclor 1262 (4)	8.404	17692736	1006.437	ng/ml
52)	Aroclor 1262 (5)	8.704	10767711	1001.110	ng/ml
53)	Aroclor 1262 (6)	9.098	4512363	792.290	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.234	6934649	1686.695	ng/ml
56)	Aroclor 1268 (2)	8.652	3984118	196.078	ng/ml
57)	Aroclor 1268 (3)	8.704	10767711	642.139	ng/ml
58)	Aroclor 1268 (4)	8.876	295356	19.403	ng/ml
59)	Aroclor 1268 (5)	9.098	4512363	716.801	ng/ml
60)	Aroclor 1268 (6)	9.359	1054866	24.355	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : 9110780-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:48
Operator : MJB / KAK
Sample : A9K0332-04
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.811	11499799	195.748	ng/ml
62)	S DCBP (S)	9.597	15019552	166.408	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.725	7180	2.179	ng/ml
3)	Aroclor 1016 (2)	6.146	14960	2.318	ng/ml
4)	Aroclor 1016 (3)	6.240	7112	2.019	ng/ml
5)	Aroclor 1016 (4)	6.387	8432	2.750	ng/ml
6)	Aroclor 1016 (5)	6.609	11126	3.069	ng/ml
7)	Aroclor 1016 (6)	6.736	8624	3.409	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.173	7915	8.023	ng/ml
10)	Aroclor 1221 (2)	5.289	6895	10.566	ng/ml
11)	Aroclor 1221 (3)	5.383	75243	35.213	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.383	75243	43.587	ng/ml
14)	Aroclor 1232 (2)	6.146	14960	5.886	ng/ml
15)	Aroclor 1232 (3)	6.240	7112	5.112	ng/ml
16)	Aroclor 1232 (4)	6.387	8432	8.479	ng/ml
17)	Aroclor 1232 (5)	6.609	11126	8.779	ng/ml
18)	Aroclor 1232 (6)	6.736	8624	8.342	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.725	7180	3.132	ng/ml
21)	Aroclor 1242 (2)	6.146	14960	3.242	ng/ml
22)	Aroclor 1242 (3)	6.240	7112	2.932	ng/ml
23)	Aroclor 1242 (4)	6.387	8432	4.126	ng/ml
24)	Aroclor 1242 (5)	6.609	11126	4.258	ng/ml
25)	Aroclor 1242 (6)	6.736	8624	4.051	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.146	14960	5.041	ng/ml
28)	Aroclor 1248 (2)	6.387	8432	2.309	ng/ml
29)	Aroclor 1248 (3)	6.609	11126	2.550	ng/ml
30)	Aroclor 1248 (4)	6.903	10864	2.171	ng/ml
31)	Aroclor 1248 (5)	6.938	26371	5.138	ng/ml
32)	Aroclor 1248 (6)	7.421	43501	15.590	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.938	26371	4.981	ng/ml
35)	Aroclor 1254 (2)	7.049	24009	3.808	ng/ml
36)	Aroclor 1254 (3)	7.421	43501	4.575	ng/ml
37)	Aroclor 1254 (4)	7.586	22046	3.459	ng/ml
38)	Aroclor 1254 (5)	7.969	51006	7.766	ng/ml
39)	Aroclor 1254 (6)	8.261	16126	7.741	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.540	45482	6.497	ng/ml
42)	Aroclor 1260 (2)	7.674	59109	6.641	ng/ml
43)	Aroclor 1260 (3)	8.231	30003	4.504	ng/ml
44)	Aroclor 1260 (4)	8.402	80200	5.075	ng/ml
45)	Aroclor 1260 (5)	8.701	55402	5.371	ng/ml
46)	Aroclor 1260 (6)	9.096	20483	4.755	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

<MDL

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:48
Operator : MJB / KAK
Sample : A9K0332-04
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

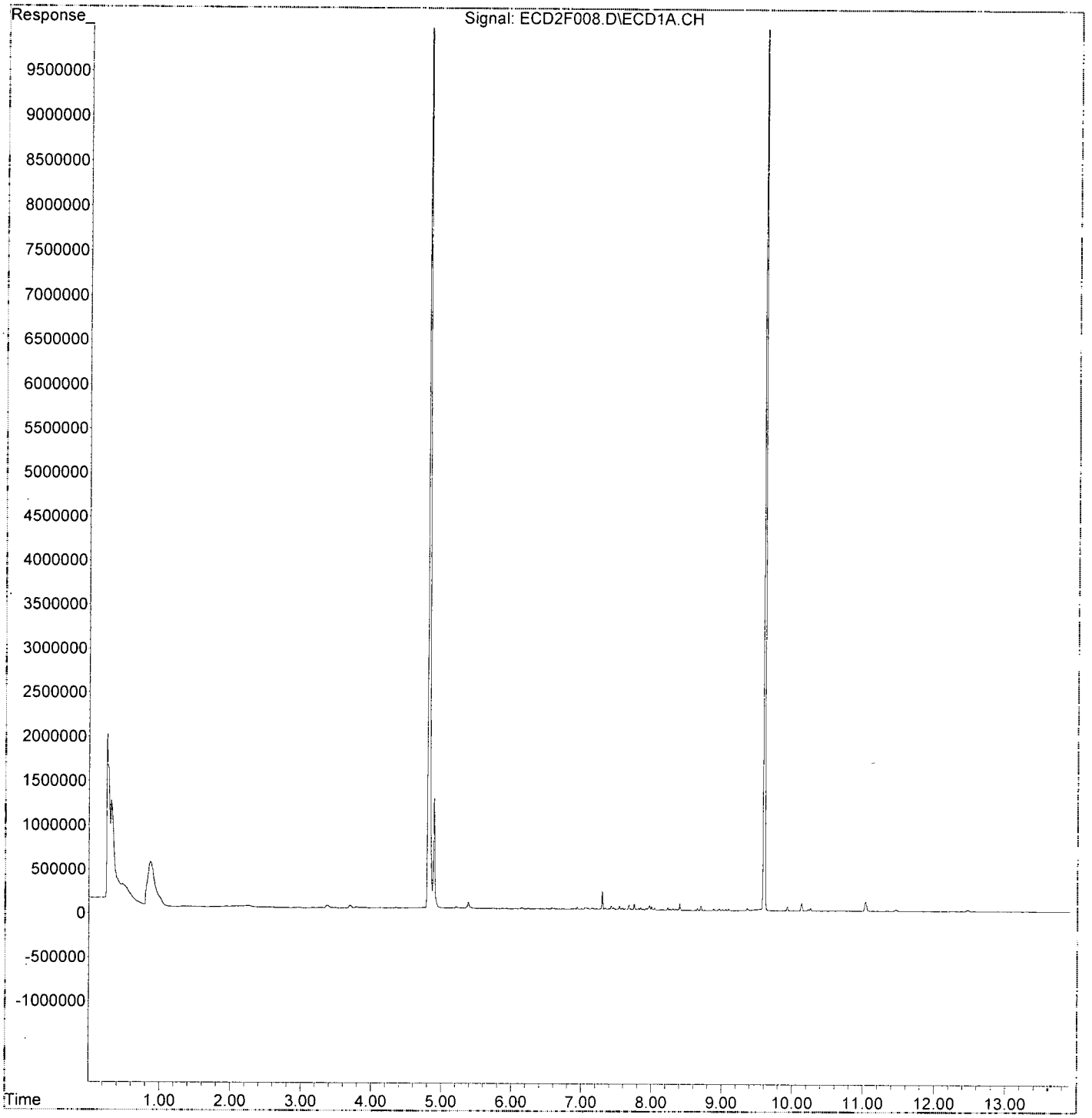
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.674	59109	8.868 ng/ml
49)	Aroclor 1262 (2)	7.999	39513	4.233 ng/ml
50)	Aroclor 1262 (3)	8.231	30003	3.781 ng/ml
51)	Aroclor 1262 (4)	8.402	80200	4.562 ng/ml
52)	Aroclor 1262 (5)	8.701	55402	5.151 ng/ml
53)	Aroclor 1262 (6)	9.096	20483	3.597 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.200	3696	0.899 ng/ml
56)	Aroclor 1268 (2)	8.651	24014	1.182 ng/ml
57)	Aroclor 1268 (3)	8.701	55402	3.304 ng/ml
58)	Aroclor 1268 (4)	8.882	19467	1.279 ng/ml
59)	Aroclor 1268 (5)	9.096	20483	3.254 ng/ml
60)	Aroclor 1268 (6)	9.359	28303	0.653 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 13:48
Operator : MJB / KAK
Sample : A9K0332-04
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:23
Operator : MJB / KAK
Sample : A9K0332-05
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:46 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.811	10632423	180.983	ng/ml
62)	S DCBP (S)	9.595	16184745	179.318	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.724	6635	2.014	ng/ml
3)	Aroclor 1016 (2)	6.148	7430	1.151	ng/ml
4)	Aroclor 1016 (3)	6.231	5164	1.466	ng/ml
5)	Aroclor 1016 (4)	6.387	7476	2.438	ng/ml
6)	Aroclor 1016 (5)	6.610	8427	2.325	ng/ml
7)	Aroclor 1016 (6)	6.737	7013	2.772	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.175	7945	8.053	ng/ml
10)	Aroclor 1221 (2)	5.282	7940	12.169	ng/ml
11)	Aroclor 1221 (3)	5.362	20505	9.596	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.362	20505	11.878	ng/ml
14)	Aroclor 1232 (2)	6.148	7430	2.923	ng/ml
15)	Aroclor 1232 (3)	6.231	5164	3.712	ng/ml
16)	Aroclor 1232 (4)	6.387	7476	7.517	ng/ml
17)	Aroclor 1232 (5)	6.610	8427	6.650	ng/ml
18)	Aroclor 1232 (6)	6.737	7013	6.784	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.724	6635	2.895	ng/ml
21)	Aroclor 1242 (2)	6.148	7430	1.610	ng/ml
22)	Aroclor 1242 (3)	6.231	5164	2.129	ng/ml
23)	Aroclor 1242 (4)	6.387	7476	3.658	ng/ml
24)	Aroclor 1242 (5)	6.610	8427	3.225	ng/ml
25)	Aroclor 1242 (6)	6.737	7013	3.294	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.148	7430	2.504	ng/ml
28)	Aroclor 1248 (2)	6.387	7476	2.047	ng/ml
29)	Aroclor 1248 (3)	6.610	8427	1.932	ng/ml
30)	Aroclor 1248 (4)	6.904	9775	1.953	ng/ml
31)	Aroclor 1248 (5)	6.939	19392	3.778	ng/ml
32)	Aroclor 1248 (6)	7.423	36631	13.128	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.939	19392	3.663	ng/ml
35)	Aroclor 1254 (2)	7.050	19867	3.151	ng/ml
36)	Aroclor 1254 (3)	7.423	36631	3.853	ng/ml
37)	Aroclor 1254 (4)	7.587	19863	3.117	ng/ml
38)	Aroclor 1254 (5)	7.969	58957	8.977	ng/ml
39)	Aroclor 1254 (6)	8.262	18627	8.942	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.540	41319	5.902	ng/ml
42)	Aroclor 1260 (2)	7.675	54907	6.169	ng/ml
43)	Aroclor 1260 (3)	8.231	33036	4.959	ng/ml
44)	Aroclor 1260 (4)	8.402	84628	5.355	ng/ml
45)	Aroclor 1260 (5)	8.702	56831	5.510	ng/ml
46)	Aroclor 1260 (6)	9.096	22040	5.116	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

<MDL

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:23
Operator : MJB / KAK
Sample : A9K0332-05
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:46 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

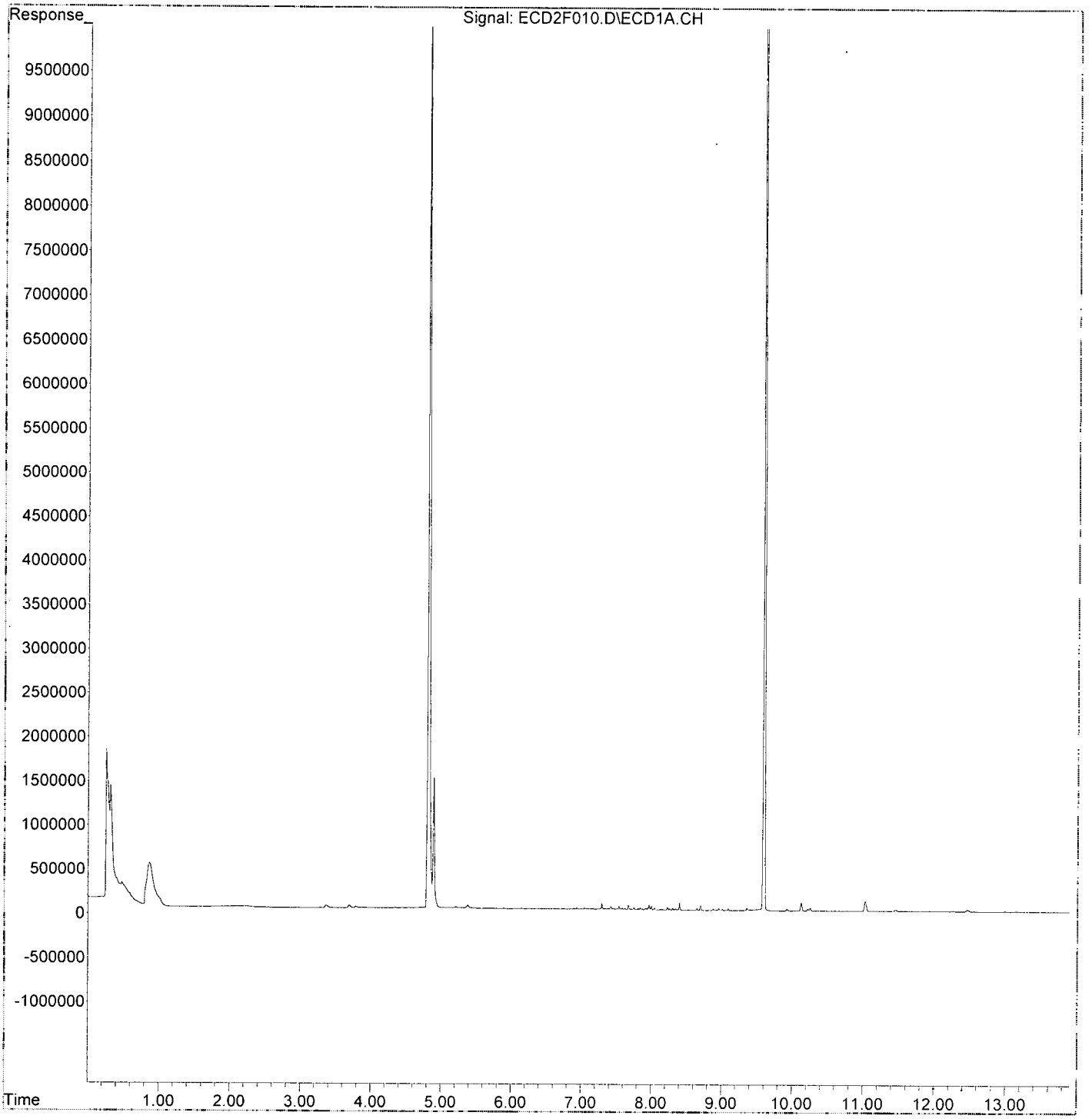
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.675	54907	8.238 ng/ml
49)	Aroclor 1262 (2)	8.000	44693	4.788 ng/ml
50)	Aroclor 1262 (3)	8.231	33036	4.163 ng/ml
51)	Aroclor 1262 (4)	8.402	84628	4.814 ng/ml
52)	Aroclor 1262 (5)	8.702	56831	5.284 ng/ml
53)	Aroclor 1262 (6)	9.096	22040	3.870 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.201	4266	1.038 ng/ml
56)	Aroclor 1268 (2)	8.650	25022	1.231 ng/ml
57)	Aroclor 1268 (3)	8.702	56831	3.389 ng/ml
58)	Aroclor 1268 (4)	8.883	20079	1.319 ng/ml
59)	Aroclor 1268 (5)	9.096	22040	3.501 ng/ml
60)	Aroclor 1268 (6)	9.359	28162	0.650 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:23
Operator : MJB / KAK
Sample : A9K0332-05
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:14:46 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:59
Operator : MJB / KAK
Sample : A9K0332-06
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

1242 P-10
1254 P-10
1260 P-10

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.811	13350393	227.248	ng/ml
62)	S DCBP (S)	9.597	18910005	209.512	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.731	148665	45.114	ng/ml
3)	Aroclor 1016 (2)	6.146	245248	38.005	ng/ml
4)	Aroclor 1016 (3)	6.228	192719	54.719	ng/ml
5)	Aroclor 1016 (4)	6.387	498380	162.529	ng/ml
6)	Aroclor 1016 (5)	6.609	406831	112.233	ng/ml
7)	Aroclor 1016 (6)	6.735	233818	92.417	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.171	15765	15.980	ng/ml
10)	Aroclor 1221 (2)	5.289	8999	13.792	ng/ml
11)	Aroclor 1221 (3)	5.352	272387	127.473	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.352	272387	157.790	ng/ml
14)	Aroclor 1232 (2)	6.146	245248	96.492	ng/ml
15)	Aroclor 1232 (3)	6.228	192719	138.523	ng/ml
16)	Aroclor 1232 (4)	6.387	498380	501.145	ng/ml
17)	Aroclor 1232 (5)	6.609	406831	321.016	ng/ml
18)	Aroclor 1232 (6)	6.735	233818	226.172	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.731	148665	64.859	ng/ml
21)	Aroclor 1242 (2)	6.146	245248	53.149	ng/ml
22)	Aroclor 1242 (3)	6.228	192719	79.437	ng/ml
23)	Aroclor 1242 (4)	6.387	498380	243.848	ng/ml
24)	Aroclor 1242 (5)	6.609	406831	155.700	ng/ml
25)	Aroclor 1242 (6)	6.735	233818	109.836	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.146	245248	82.638	ng/ml
28)	Aroclor 1248 (2)	6.387	498380	136.469	ng/ml
29)	Aroclor 1248 (3)	6.609	406831	93.260	ng/ml
30)	Aroclor 1248 (4)	6.903	479033	95.720	ng/ml
31)	Aroclor 1248 (5)	6.938	2261861	440.701	ng/ml
32)	Aroclor 1248 (6)	7.422	3829136	1372.305	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.938	2261861	427.201	ng/ml
35)	Aroclor 1254 (2)	7.049	1675788	265.772	ng/ml
36)	Aroclor 1254 (3)	7.422	3829136	402.733	ng/ml
37)	Aroclor 1254 (4)	7.586	1195507	187.572	ng/ml
38)	Aroclor 1254 (5)	7.970	4667082	710.627	ng/ml
39)	Aroclor 1254 (6)	8.261	1328966	637.967	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.541	3139261	448.406	ng/ml
42)	Aroclor 1260 (2)	7.675	3755665	421.957	ng/ml
43)	Aroclor 1260 (3)	8.232	1660452	249.272	ng/ml
44)	Aroclor 1260 (4)	8.404	5015335	317.379	ng/ml
45)	Aroclor 1260 (5)	8.703	3521432	341.418	ng/ml
46)	Aroclor 1260 (6)	9.098	1191031	276.478	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

65.815 ✓

320.820 ✓

296.137 ✓

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:59
Operator : MJB / KAK
Sample : A9K0332-06
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

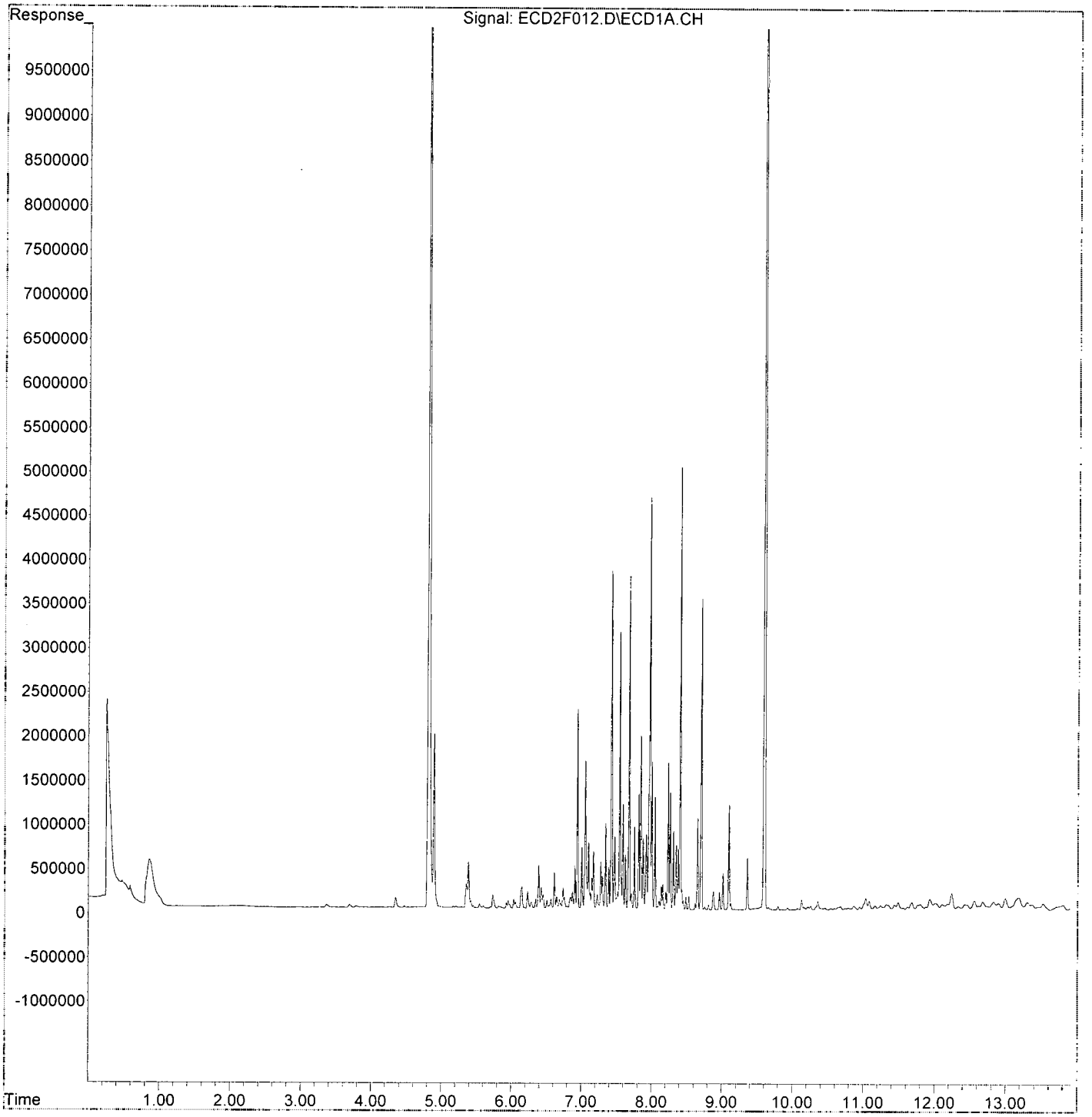
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.675	3755665	563.488 ng/ml
49)	Aroclor 1262 (2)	8.000	1674087	179.364 ng/ml
50)	Aroclor 1262 (3)	8.232	1660452	209.230 ng/ml
51)	Aroclor 1262 (4)	8.404	5015335	285.293 ng/ml
52)	Aroclor 1262 (5)	8.703	3521432	327.399 ng/ml
53)	Aroclor 1262 (6)	9.098	1191031	209.124 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.201	202167	49.173 ng/ml
56)	Aroclor 1268 (2)	8.651	1036280	51.000 ng/ml
57)	Aroclor 1268 (3)	8.703	3521432	210.003 ng/ml
58)	Aroclor 1268 (4)	8.879	205607	13.507 ng/ml
59)	Aroclor 1268 (5)	9.098	1191031	189.198 ng/ml
60)	Aroclor 1268 (6)	9.359	589110	13.602 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 14:59
Operator : MJB / KAK
Sample : A9K0332-06
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:34
Operator : MJB / KAK
Sample : 9K14009-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:24 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	4.812	18271115	311.008	ng/ml
62)	S	DCBP (S)	9.596	22637176	250.807	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	5.733	1690189	512.907	ng/ml
3)		Aroclor 1016 (2)	6.148	3529667	546.977	ng/ml
4)		Aroclor 1016 (3)	6.229	1839981	522.434	ng/ml
5)		Aroclor 1016 (4)	6.388	1535841	500.862	ng/ml
6)		Aroclor 1016 (5)	6.610	1841548	508.030	ng/ml
7)		Aroclor 1016 (6)	6.736	1272728	503.048	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.170	173831	176.202	ng/ml
10)		Aroclor 1221 (2)	5.290	186636	286.026	ng/ml
11)		Aroclor 1221 (3)	5.370	848127	396.909	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.370	848127	491.309	ng/ml
14)		Aroclor 1232 (2)	6.148	3529667	1388.740	ng/ml
15)		Aroclor 1232 (3)	6.229	1839981	1322.551	ng/ml
16)		Aroclor 1232 (4)	6.388	1535841	1544.364	ng/ml
17)		Aroclor 1232 (5)	6.610	1841548	1453.099	ng/ml
18)		Aroclor 1232 (6)	6.736	1272728	1231.108	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	5.733	1690189	737.396	ng/ml
21)		Aroclor 1242 (2)	6.148	3529667	764.937	ng/ml
22)		Aroclor 1242 (3)	6.229	1839981	758.423	ng/ml
23)		Aroclor 1242 (4)	6.388	1535841	751.458	ng/ml
24)		Aroclor 1242 (5)	6.610	1841548	704.786	ng/ml
25)		Aroclor 1242 (6)	6.736	1272728	597.862	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.148	3529667	1189.351	ng/ml
28)		Aroclor 1248 (2)	6.388	1535841	420.552	ng/ml
29)		Aroclor 1248 (3)	6.610	1841548	422.146	ng/ml
30)		Aroclor 1248 (4)	6.905	359475	71.830	ng/ml
31)		Aroclor 1248 (5)	6.939	1240204	241.642	ng/ml
32)		Aroclor 1248 (6)	7.428	2692628	964.998	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	6.939	1240204	234.239	ng/ml
35)		Aroclor 1254 (2)	7.049	1326070	210.308	ng/ml
36)		Aroclor 1254 (3)	7.428	2692628	283.200	ng/ml
37)		Aroclor 1254 (4)	7.588	388758	60.995	ng/ml
38)		Aroclor 1254 (5)	7.970	3490919	531.540	ng/ml
39)		Aroclor 1254 (6)	8.262	397051	190.603	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	7.541	3641109	520.089	ng/ml
42)		Aroclor 1260 (2)	7.675	4642399	521.583	ng/ml
43)		Aroclor 1260 (3)	8.233	3403892	511.003	ng/ml
44)		Aroclor 1260 (4)	8.403	8246661	521.864	ng/ml
45)		Aroclor 1260 (5)	8.703	5306628	514.501	ng/ml
46)		Aroclor 1260 (6)	9.097	2102209	487.993	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

515.71

512.84

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:34
Operator : MJB / KAK
Sample : 9K14009-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:24 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

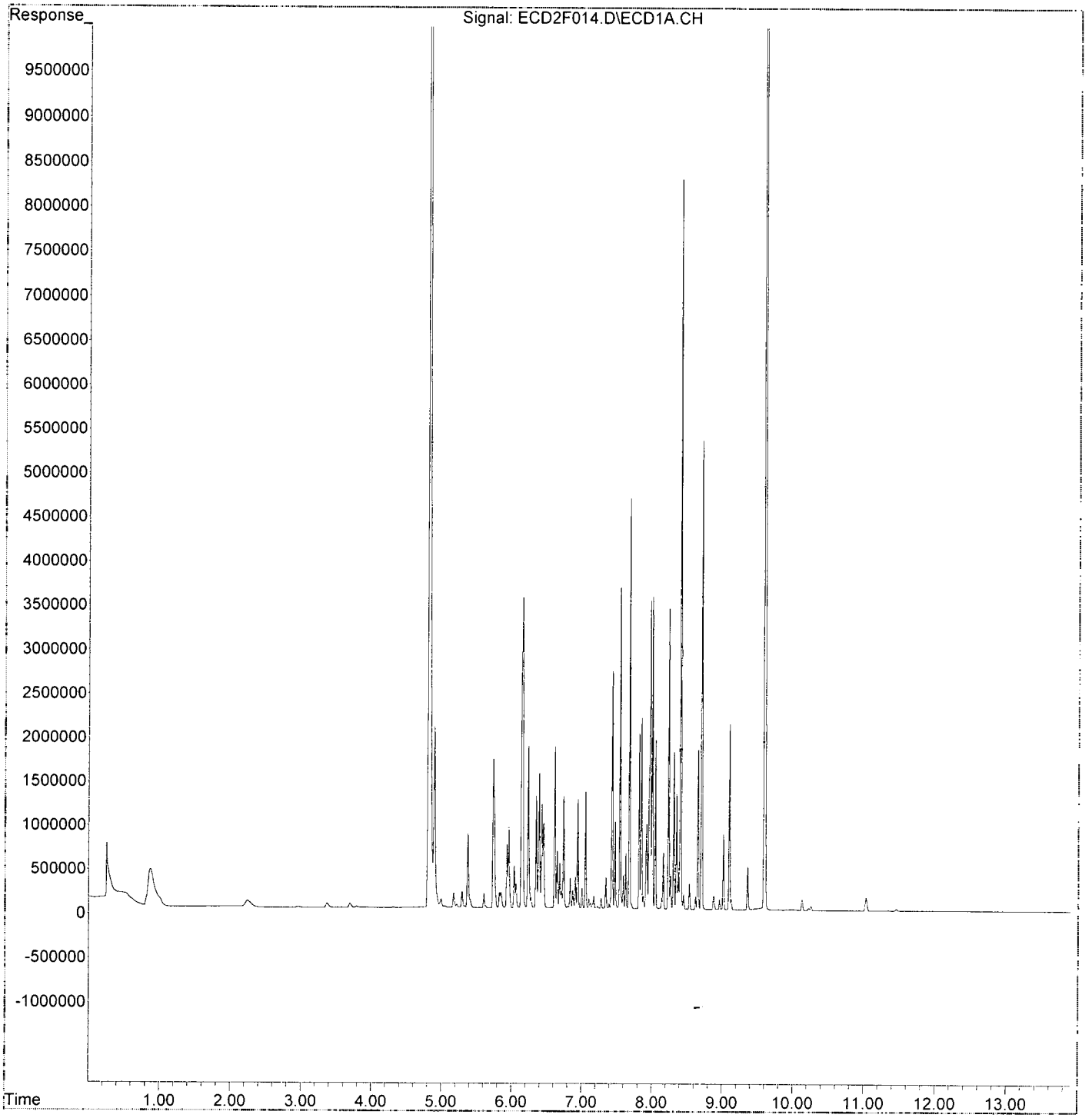
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.675	4642399	696.530 ng/ml
49)	Aroclor 1262 (2)	8.000	3537293	378.991 ng/ml
50)	Aroclor 1262 (3)	8.233	3403892	428.916 ng/ml
51)	Aroclor 1262 (4)	8.403	8246661	469.105 ng/ml
52)	Aroclor 1262 (5)	8.703	5306628	493.375 ng/ml
53)	Aroclor 1262 (6)	9.097	2102209	369.110 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.233	3403892	827.919 ng/ml
56)	Aroclor 1268 (2)	8.651	1816810	89.414 ng/ml
57)	Aroclor 1268 (3)	8.703	5306628	316.464 ng/ml
58)	Aroclor 1268 (4)	8.877	156193	10.261 ng/ml
59)	Aroclor 1268 (5)	9.097	2102209	333.942 ng/ml
60)	Aroclor 1268 (6)	9.358	488092	11.269 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:34
Operator : MJB / KAK
Sample : 9K14009-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:24 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14009-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19
clear

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	4.811	6951823	118.333 ng/ml
62)	S DCBP (S)	9.595	8660385	95.952 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.725	3554	1.078 ng/ml
3)	Aroclor 1016 (2)	6.148	6323	0.980 ng/ml
4)	Aroclor 1016 (3)	6.208	4217	1.197 ng/ml
5)	Aroclor 1016 (4)	6.377	4522	1.475 ng/ml
6)	Aroclor 1016 (5)	6.602	5788	1.597 ng/ml
7)	Aroclor 1016 (6)	6.724	5637	2.228 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.156	7094	7.191 ng/ml
10)	Aroclor 1221 (2)	5.306	7171	10.990 ng/ml
11)	Aroclor 1221 (3)	5.372	5774	2.702 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.361	5842	3.384 ng/ml
14)	Aroclor 1232 (2)	6.148	6323	2.488 ng/ml
15)	Aroclor 1232 (3)	6.208	4217	3.031 ng/ml
16)	Aroclor 1232 (4)	6.377	4522	4.547 ng/ml
17)	Aroclor 1232 (5)	6.602	5788	4.567 ng/ml
18)	Aroclor 1232 (6)	6.724	5637	5.453 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.725	3554	1.550 ng/ml
21)	Aroclor 1242 (2)	6.148	6323	1.370 ng/ml
22)	Aroclor 1242 (3)	6.208	4217	1.738 ng/ml
23)	Aroclor 1242 (4)	6.377	4522	2.213 ng/ml
24)	Aroclor 1242 (5)	6.602	5788	2.215 ng/ml
25)	Aroclor 1242 (6)	6.724	5637	2.648 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.148	6323	2.131 ng/ml
28)	Aroclor 1248 (2)	6.377	4522	1.238 ng/ml
29)	Aroclor 1248 (3)	6.602	5788	1.327 ng/ml
30)	Aroclor 1248 (4)	6.892	6595	1.318 ng/ml
31)	Aroclor 1248 (5)	6.942	6521	1.271 ng/ml
32)	Aroclor 1248 (6)	7.413	9949	3.565 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.925	6361	1.201 ng/ml
35)	Aroclor 1254 (2)	7.055	7232	1.147 ng/ml
36)	Aroclor 1254 (3)	7.413	9949	1.046 ng/ml
37)	Aroclor 1254 (4)	7.590	8054	1.264 ng/ml
38)	Aroclor 1254 (5)	7.953	4856	0.739 ng/ml
39)	Aroclor 1254 (6)	8.256	2450	1.176 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.542	9317	1.331 ng/ml
42)	Aroclor 1260 (2)	7.675	8567	0.963 ng/ml
43)	Aroclor 1260 (3)	8.231	3078	0.462 ng/ml
44)	Aroclor 1260 (4)	8.403	5344	0.338 ng/ml
45)	Aroclor 1260 (5)	8.704	3636	0.353 ng/ml
46)	Aroclor 1260 (6)	9.095	680	0.158 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14009-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

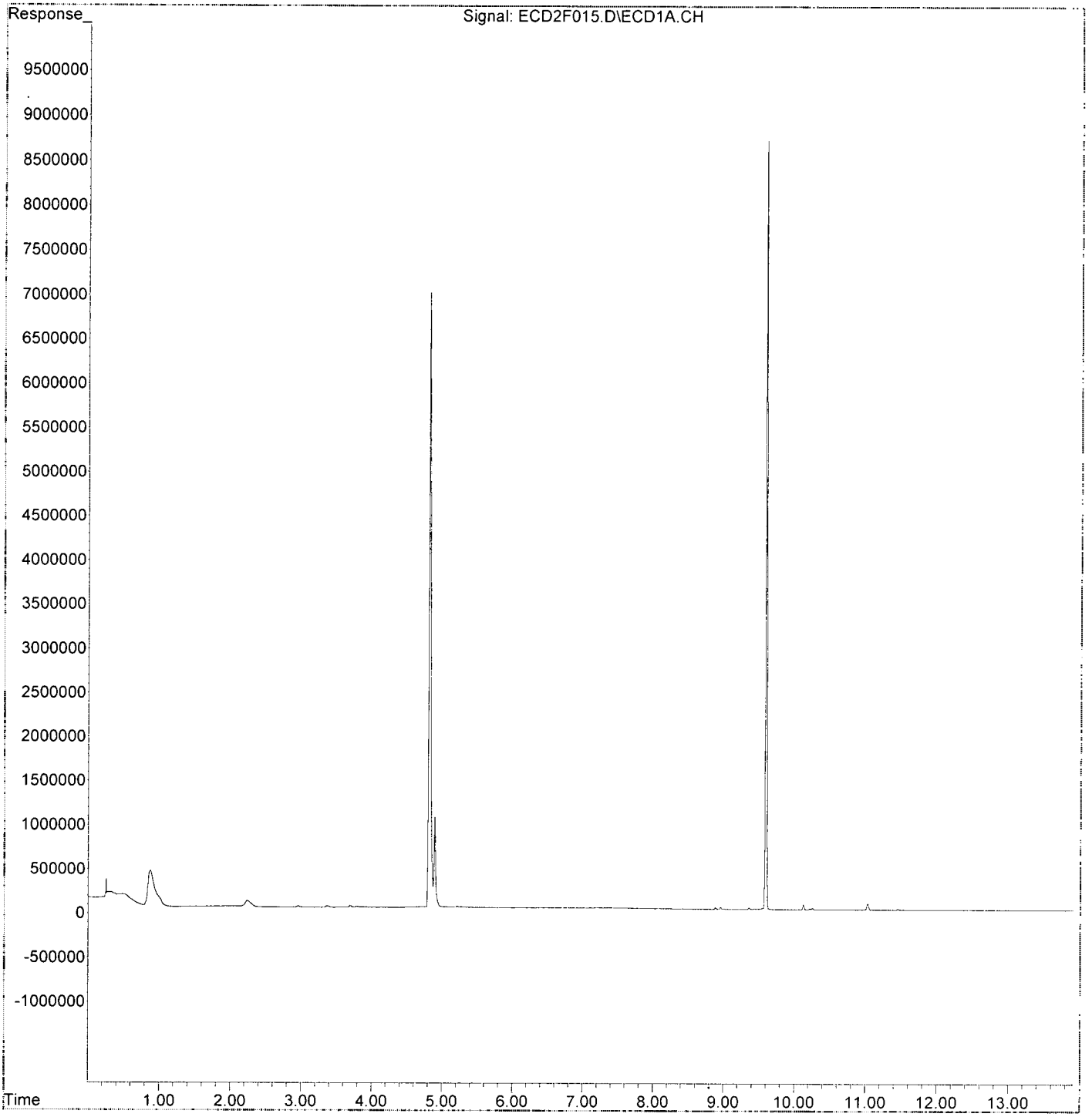
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.675	8567	1.285 ng/ml
49)	Aroclor 1262 (2)	7.998	4303	0.461 ng/ml
50)	Aroclor 1262 (3)	8.231	3078	0.388 ng/ml
51)	Aroclor 1262 (4)	8.403	5344	0.304 ng/ml
52)	Aroclor 1262 (5)	8.677	1676	0.156 ng/ml
53)	Aroclor 1262 (6)	9.095	680	0.119 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.193	2816	0.685 ng/ml
56)	Aroclor 1268 (2)	8.635	1322	0.065 ng/ml
57)	Aroclor 1268 (3)	8.677	1676	0.100 ng/ml
58)	Aroclor 1268 (4)	8.857	691	0.045 ng/ml
59)	Aroclor 1268 (5)	9.095	680	0.108 ng/ml
60)	Aroclor 1268 (6)	9.324	878	0.020 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14009\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14009-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 07:15:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Sequence 9K14010 (A9K0332-07,08,09)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K14010**	Instrument:	**DUALECD2R**
Date:	**11/14/19 07:22**	Calibration:	**A9J2803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14010-CCV1	Soil	QC	QC				A19J268
2	9K14010-CCB1	Soil	QC	QC				A19K026
3	A9K0332-07	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
4	9K14010-IBL1	Soil	QC	QC				
5	A9K0332-08	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
6	9K14010-IBL2	Soil	QC	QC				
7	A9K0332-09	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
8	9K14010-IBL3	Soil	QC	QC				
9	A9K0332-10	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
10	9K14010-IBL4	Soil	QC	QC				
11	9K14010-IBL5	Soil	QC	QC				
12	9K14010-IBL6	Soil	QC	QC				
13	9K14010-CCV2	Soil	QC	QC				A19J268
14	9K14010-CCB2	Soil	QC	QC				A19K026

Comments:

Data Entered By: 11/18/19

Data Reviewed By: MSB 11/18/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:24:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.721	67780428	258.377	ng/ml
62)	S DCBP (S)	10.714	35837853	244.143	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.394	4278205	481.612	ng/ml
3)	Aroclor 1016 (2)	6.884	7832789	478.681	ng/ml
4)	Aroclor 1016 (3)	7.011	3505943	475.974	ng/ml
5)	Aroclor 1016 (4)	7.097	3480195	466.682	ng/ml
6)	Aroclor 1016 (5)	7.142	3805027	461.156	ng/ml
7)	Aroclor 1016 (6)	7.267	3856106	468.481	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.896	292989	136.665	ng/ml
10)	Aroclor 1221 (2)	5.969	554505	253.662	ng/ml
11)	Aroclor 1221 (3)	6.058	2528430	357.386	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.058	2528430	441.673	ng/ml
14)	Aroclor 1232 (2)	6.394	4278205	1230.698	ng/ml
15)	Aroclor 1232 (3)	6.884	7832789	1209.837	ng/ml
16)	Aroclor 1232 (4)	7.097	3480195	1457.612	ng/ml
17)	Aroclor 1232 (5)	7.142	3805027	1392.584	ng/ml
18)	Aroclor 1232 (6)	7.267	3856106	1300.094	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.394	4278205	653.015	ng/ml
21)	Aroclor 1242 (2)	6.884	7832789	662.015	ng/ml
22)	Aroclor 1242 (3)	7.011	3505943	663.696	ng/ml
23)	Aroclor 1242 (4)	7.097	3480195	697.052	ng/ml
24)	Aroclor 1242 (5)	7.142	3805027	654.452	ng/ml
25)	Aroclor 1242 (6)	7.267	3856106	622.446	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.856	6408418	858.764	ng/ml
28)	Aroclor 1248 (2)	7.097	3480195	372.765	ng/ml
29)	Aroclor 1248 (3)	7.142	3805027	433.889	ng/ml
30)	Aroclor 1248 (4)	7.267	3856106	368.281	ng/ml
31)	Aroclor 1248 (5)	7.633	868225	67.133	ng/ml
32)	Aroclor 1248 (6)	7.791	3328076	282.253	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.611	2859932	221.270	ng/ml
35)	Aroclor 1254 (2)	7.791	3328076	164.369	ng/ml
36)	Aroclor 1254 (3)	8.103	1878153	87.651	ng/ml
37)	Aroclor 1254 (4)	8.342	1284329	77.760	ng/ml
38)	Aroclor 1254 (5)	8.678	10027499	638.973	ng/ml
39)	Aroclor 1254 (6)	8.895	1455886	297.718	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.239	8021463	508.239	ng/ml
42)	Aroclor 1260 (2)	8.445	9517325	486.230	ng/ml
43)	Aroclor 1260 (3)	8.678	10027499	498.083	ng/ml
44)	Aroclor 1260 (4)	9.170	16676805	538.897	ng/ml
45)	Aroclor 1260 (5)	9.438	9187964	513.375	ng/ml
46)	Aroclor 1260 (6)	10.024	3542819	513.560	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

472.10

509.73

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:24:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

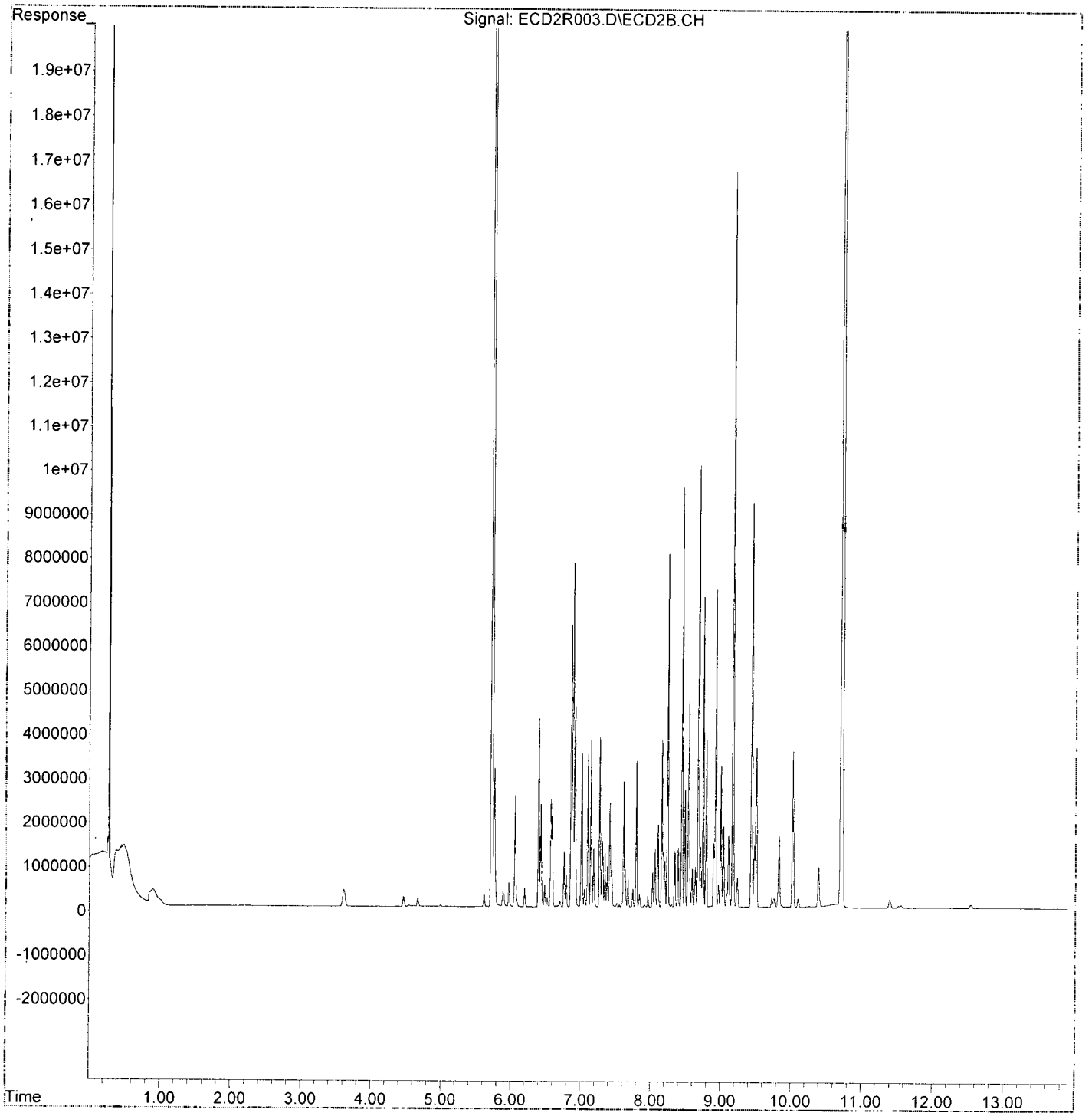
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.445	9517325	628.891	ng/ml
49)	Aroclor 1262 (2)	8.746	7053261	333.420	ng/ml
50)	Aroclor 1262 (3)	8.924	7204108	412.411	ng/ml
51)	Aroclor 1262 (4)	9.170	16676805	465.711	ng/ml
52)	Aroclor 1262 (5)	9.438	9187964	418.304	ng/ml
53)	Aroclor 1262 (6)	10.024	3542819	365.219	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.965	511811	54.837	ng/ml
56)	Aroclor 1268 (2)	9.438	9187964	234.171	ng/ml
57)	Aroclor 1268 (3)	9.503	3628083	115.078	ng/ml
58)	Aroclor 1268 (4)	9.727	238991	8.824	ng/ml
59)	Aroclor 1268 (5)	10.024	3542819	334.349	ng/ml
60)	Aroclor 1268 (6)	10.388	910177	12.387	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:19
Operator : MJB / KAK
Sample : 9K14010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:24:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:16 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19 clean

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
1)	S	TCMX (S)	5.719	26212453	99.921 ng/ml
62)	S	DCBP (S)	10.709	14618386	99.587 ng/ml
		Target Compounds			
2)		Aroclor 1016 (1)	6.392	1395	0.157 ng/ml
3)		Aroclor 1016 (2)	6.892	3196	0.195 ng/ml
4)		Aroclor 1016 (3)	7.008	2434	0.330 ng/ml
5)		Aroclor 1016 (4)	7.087	1490	0.200 ng/ml
6)		Aroclor 1016 (5)	7.136	1831	0.222 ng/ml
7)		Aroclor 1016 (6)	7.261	1608	0.195 ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)		Aroclor 1221 (1)	5.949f	6242	2.911 ng/ml
10)		Aroclor 1221 (2)	5.971	4966	2.272 ng/ml
11)		Aroclor 1221 (3)	6.071	7107	1.005 ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)		Aroclor 1232 (1)	6.071	7107	1.241 ng/ml
14)		Aroclor 1232 (2)	6.392	1395	0.401 ng/ml
15)		Aroclor 1232 (3)	6.892	3196	0.494 ng/ml
16)		Aroclor 1232 (4)	7.087	1490	0.624 ng/ml
17)		Aroclor 1232 (5)	7.136	1831	0.670 ng/ml
18)		Aroclor 1232 (6)	7.261	1608	0.542 ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)		Aroclor 1242 (1)	6.392	1395	0.213 ng/ml
21)		Aroclor 1242 (2)	6.892	3196	0.270 ng/ml
22)		Aroclor 1242 (3)	7.008	2434	0.461 ng/ml
23)		Aroclor 1242 (4)	7.087	1490	0.299 ng/ml
24)		Aroclor 1242 (5)	7.136	1831	0.315 ng/ml
25)		Aroclor 1242 (6)	7.261	1608	0.260 ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)		Aroclor 1248 (1)	6.865	2779	0.372 ng/ml
28)		Aroclor 1248 (2)	7.087	1490	0.160 ng/ml
29)		Aroclor 1248 (3)	7.136	1831	0.209 ng/ml
30)		Aroclor 1248 (4)	7.261	1608	0.154 ng/ml
31)		Aroclor 1248 (5)	7.636	1044	0.081 ng/ml
32)		Aroclor 1248 (6)	7.799	13384	1.135 ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)		Aroclor 1254 (1)	7.609	854	0.066 ng/ml
35)		Aroclor 1254 (2)	7.799	13384	0.661 ng/ml
36)		Aroclor 1254 (3)	8.089	5689	0.265 ng/ml
37)		Aroclor 1254 (4)	8.333	3911	0.237 ng/ml
38)		Aroclor 1254 (5)	8.645	10800	0.688 ng/ml
39)		Aroclor 1254 (6)	8.908	4448	0.910 ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)		Aroclor 1260 (1)	8.241	5478	0.347 ng/ml
42)		Aroclor 1260 (2)	8.442	5950	0.304 ng/ml
43)		Aroclor 1260 (3)	8.645	10800	0.536 ng/ml
44)		Aroclor 1260 (4)	9.162	9300	0.301 ng/ml
45)		Aroclor 1260 (5)	9.434	5169	0.289 ng/ml
46)		Aroclor 1260 (6)	10.019	8015	1.162 ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:16 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

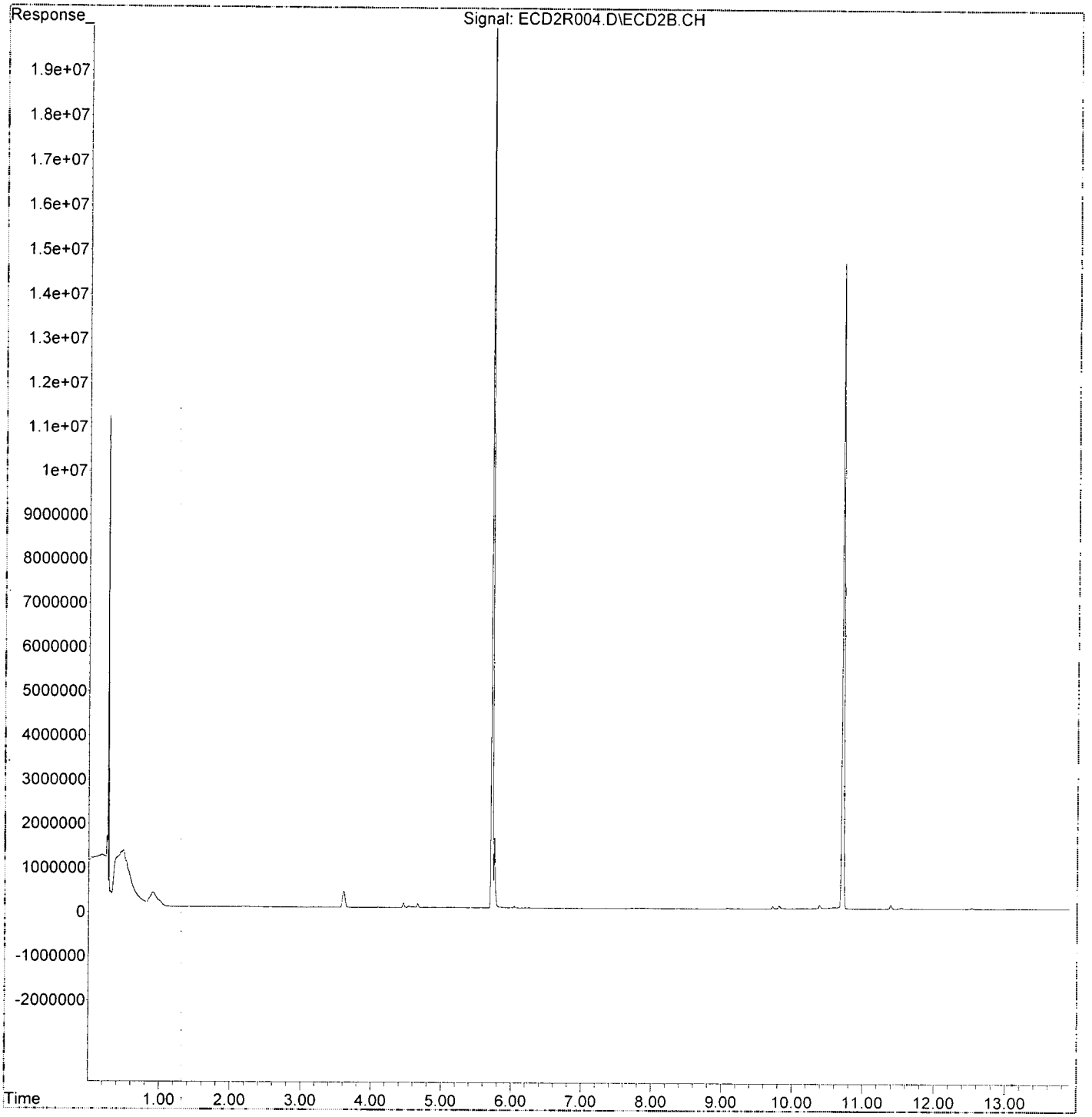
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.442	5950	0.393 ng/ml
49)	Aroclor 1262 (2)	8.736	4158	0.197 ng/ml
50)	Aroclor 1262 (3)	8.919	4618	0.264 ng/ml
51)	Aroclor 1262 (4)	9.162	9300	0.260 ng/ml
52)	Aroclor 1262 (5)	9.434	5169	0.235 ng/ml
53)	Aroclor 1262 (6)	10.019	8015	0.826 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.946	3753	0.402 ng/ml
56)	Aroclor 1268 (2)	9.434	5169	0.132 ng/ml
57)	Aroclor 1268 (3)	9.501	5203	0.165 ng/ml
58)	Aroclor 1268 (4)	9.727	61836	2.283 ng/ml
59)	Aroclor 1268 (5)	10.019	8015	0.756 ng/ml
60)	Aroclor 1268 (6)	10.387	85637	1.165 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:16 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : A9K0332-07
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

R-04 5mL F.V.

		Compound	R.T.	Response	Conc	Units	
		System Monitoring Compounds					
1)	S	TCMX (S)	5.722	14142602	53.911	ng/ml	
62)	S	DCBP (S)	10.712	7157397	48.759	ng/ml	
		Target Compounds					
2)		Aroclor 1016 (1)	6.387	17942	2.020	ng/ml	
3)		Aroclor 1016 (2)	6.886	17793	1.087	ng/ml	
4)		Aroclor 1016 (3)	7.012	12306	1.671	ng/ml	
5)		Aroclor 1016 (4)	7.099	22949	3.077	ng/ml	
6)		Aroclor 1016 (5)	7.140	20168	2.444	ng/ml	
7)		Aroclor 1016 (6)	7.268	19070	2.317	ng/ml	
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)		Aroclor 1221 (1)	5.916	45787	21.357	ng/ml	
10)		Aroclor 1221 (2)	~~5.916~~ 5.950	~~45787~~	~~20.945~~	ng/ml	5.398 MI
11)		Aroclor 1221 (3)	6.048	111933	15.821	ng/ml	
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)		Aroclor 1232 (1)	6.048	111933	19.553	ng/ml	
14)		Aroclor 1232 (2)	6.387	17942	5.161	ng/ml	
15)		Aroclor 1232 (3)	6.886	17793	2.748	ng/ml	
16)		Aroclor 1232 (4)	7.099	22949	9.612	ng/ml	
17)		Aroclor 1232 (5)	7.140	20168	7.381	ng/ml	
18)		Aroclor 1232 (6)	7.268	19070	6.429	ng/ml	
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)		Aroclor 1242 (1)	6.387	17942	2.739	ng/ml	
21)		Aroclor 1242 (2)	6.886	17793	1.504	ng/ml	
22)		Aroclor 1242 (3)	7.012	12306	2.330	ng/ml	
23)		Aroclor 1242 (4)	7.099	22949	4.596	ng/ml	
24)		Aroclor 1242 (5)	7.140	20168	3.469	ng/ml	
25)		Aroclor 1242 (6)	7.268	19070	3.078	ng/ml	
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)		Aroclor 1248 (1)	6.856	11757	1.576	ng/ml	
28)		Aroclor 1248 (2)	7.099	22949	2.458	ng/ml	
29)		Aroclor 1248 (3)	7.140	20168	2.300	ng/ml	
30)		Aroclor 1248 (4)	7.268	19070	1.821	ng/ml	
31)		Aroclor 1248 (5)	7.610	62248	4.813	ng/ml	
32)		Aroclor 1248 (6)	7.783	709880	60.205	ng/ml	
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)		Aroclor 1254 (1)	7.610	62248	4.816	ng/ml	
35)		Aroclor 1254 (2)	7.783	709880	35.060	ng/ml	
36)		Aroclor 1254 (3)	8.089	2496626	116.514	ng/ml	
37)		Aroclor 1254 (4)	8.342	78643	4.761	ng/ml	
38)		Aroclor 1254 (5)	8.676	137879	8.786	ng/ml	
39)		Aroclor 1254 (6)	~~8.923~~ 8.906	~~90043~~	~~18.413~~	ng/ml	13.679 MI
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)		Aroclor 1260 (1)	8.225	124278	7.874	ng/ml	
42)		Aroclor 1260 (2)	8.443	246820	12.610	ng/ml	
43)		Aroclor 1260 (3)	8.676	137879	6.849	ng/ml	
44)		Aroclor 1260 (4)	9.168	131137	4.238	ng/ml	
45)		Aroclor 1260 (5)	9.436	96535	5.394	ng/ml	
46)		Aroclor 1260 (6)	10.023	31708	4.596	ng/ml	
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : A9K0332-07
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

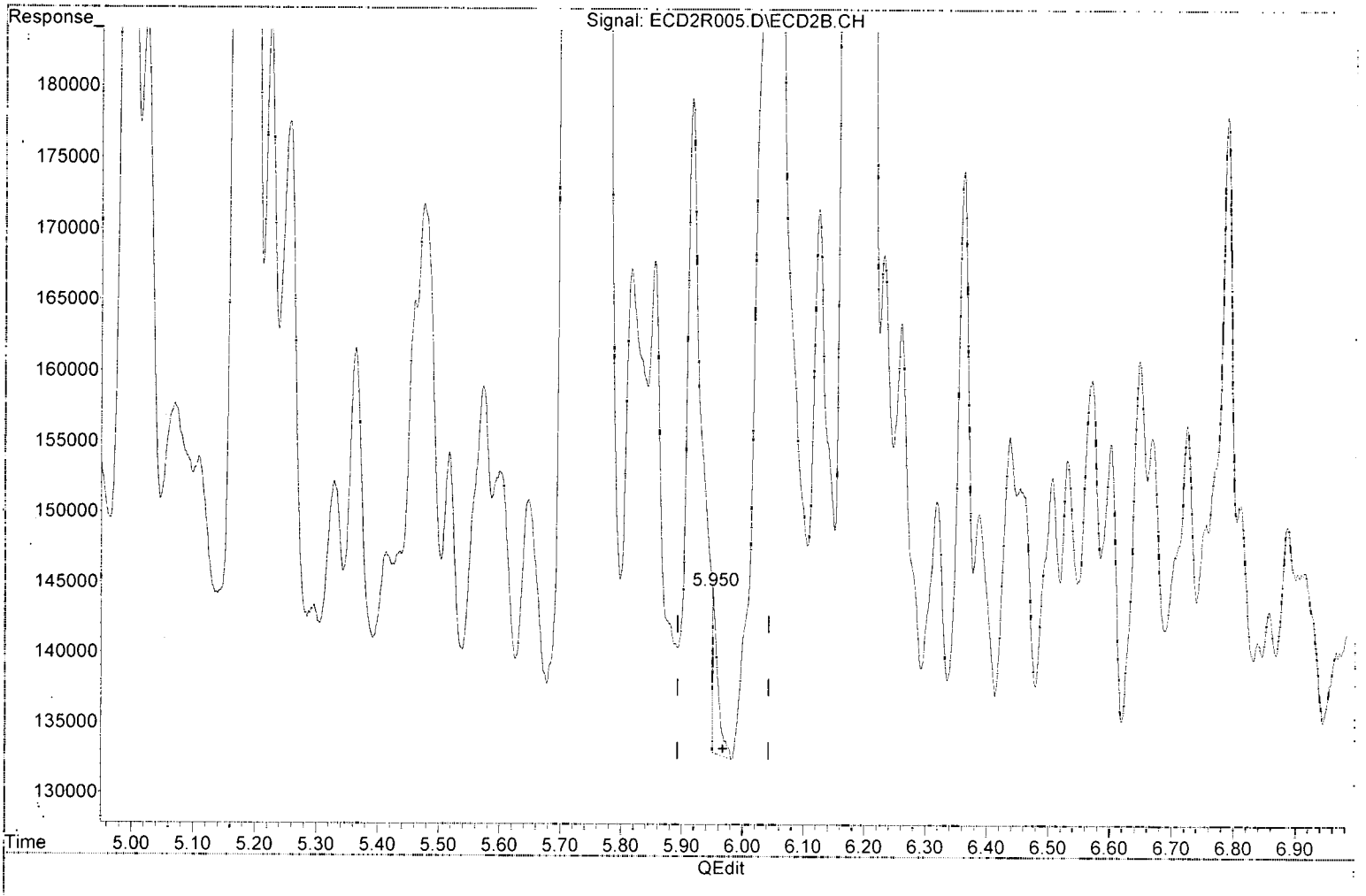
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.443	246820	16.309 ng/ml
49)	Aroclor 1262 (2)	8.744	94772	4.480 ng/ml
50)	Aroclor 1262 (3)	8.923	90043	5.155 ng/ml
51)	Aroclor 1262 (4)	9.168	131137	3.662 ng/ml
52)	Aroclor 1262 (5)	9.436	96535	4.395 ng/ml
53)	Aroclor 1262 (6)	10.023	31708	3.269 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.960	66520	7.127 ng/ml
56)	Aroclor 1268 (2)	9.436	96535	2.460 ng/ml
57)	Aroclor 1268 (3)	9.502	47726	1.514 ng/ml
58)	Aroclor 1268 (4)	9.726	28506	1.052 ng/ml
59)	Aroclor 1268 (5)	10.023	31708	2.992 ng/ml
60)	Aroclor 1268 (6)	10.388	46233	0.629 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14010\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : A9K0332-07
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(10) Aroclor 1221 (2)

5.950min 5.398 ng/ml (m) 11/18/19

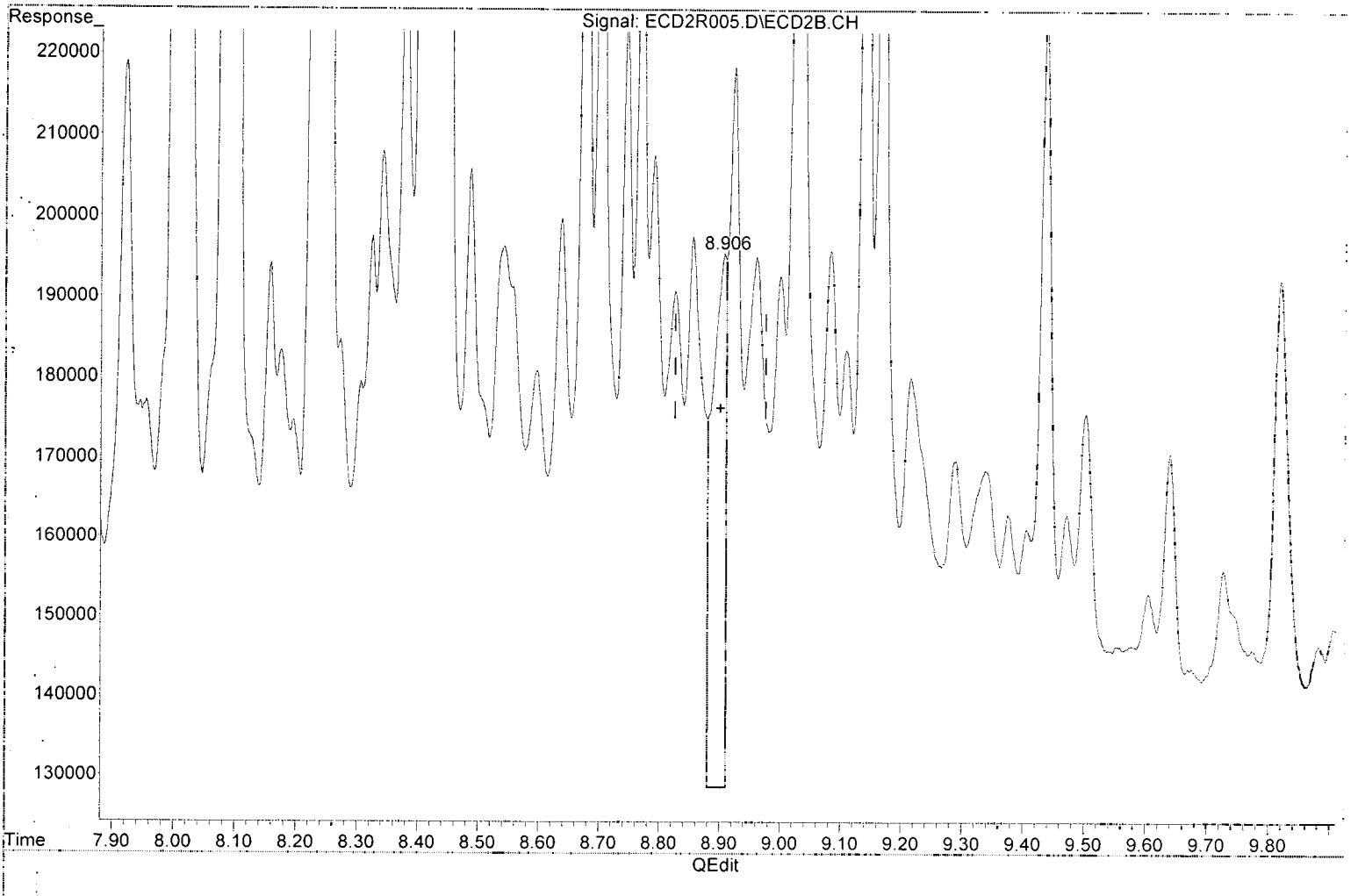
response 11800

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14010\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : A9K0332-07
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(39) Aroclor 1254 (6)

8.906min 13.679 ng/ml m 11/18/19

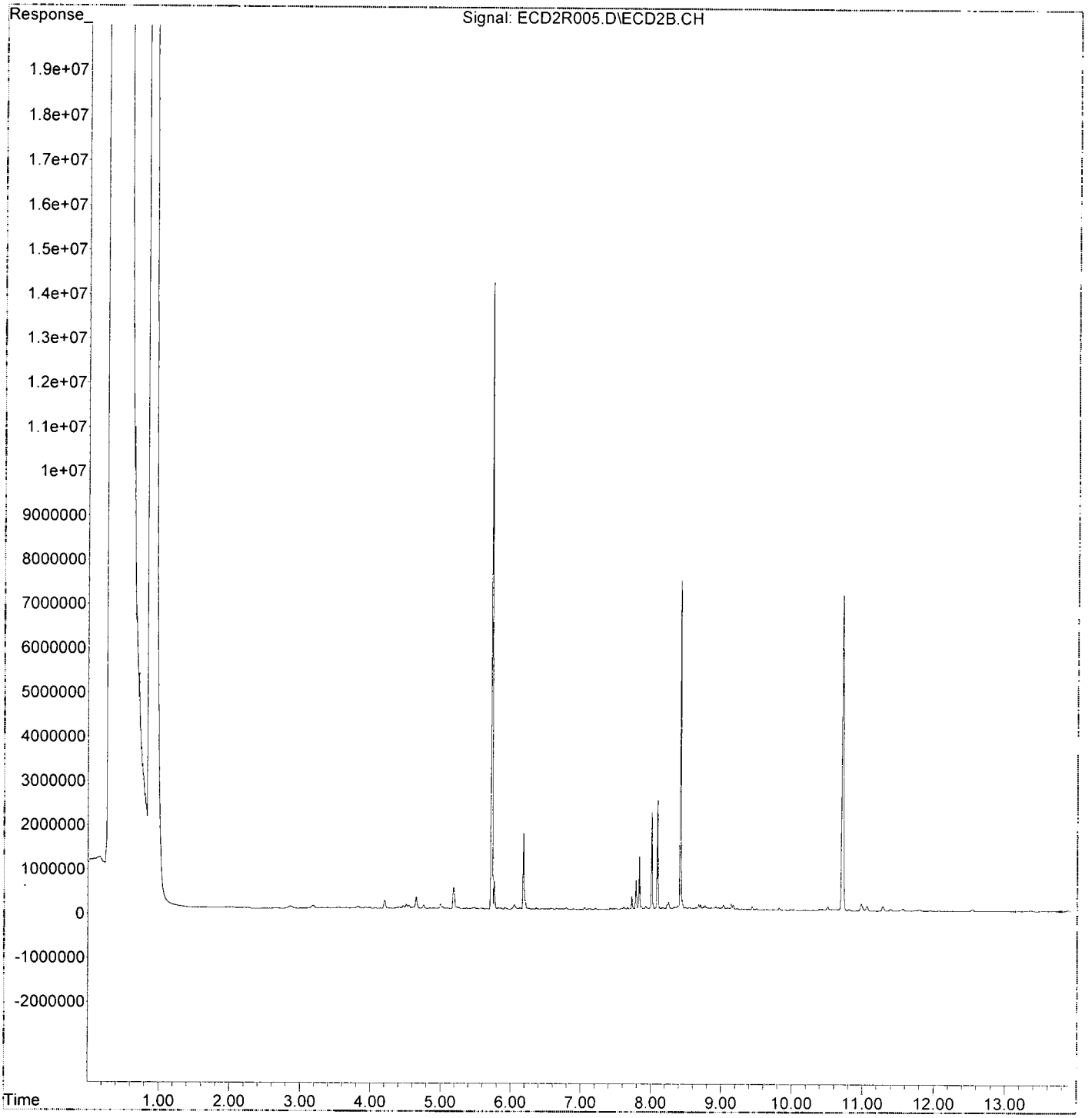
response 66891

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : A9K0332-07
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.719	43654553	166.410	ng/ml	
62)	S DCBP (S)	10.705	32222175	219.511	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.389	6215	0.700	ng/ml	
3)	Aroclor 1016 (2)	6.878	21274	1.300	ng/ml	
4)	Aroclor 1016 (3)	7.009	24042	3.264	ng/ml	
5)	Aroclor 1016 (4)	7.093	37937	5.087	ng/ml	
6)	Aroclor 1016 (5)	7.138	30629	3.712	ng/ml	
7)	Aroclor 1016 (6)	7.264	44688	5.429	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.915	8707	4.061	ng/ml	
10)	Aroclor 1221 (2)	6.007f	5544	2.536	ng/ml	
11)	Aroclor 1221 (3)	~~6.039~~ 6.042	~~59257~~	~~8.376~~	ng/ml	7.414MI
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	~~6.039~~6.043	~~59257~~	~~10.351~~	ng/ml	8.054MI
14)	Aroclor 1232 (2)	6.389	6215	1.788	ng/ml	
15)	Aroclor 1232 (3)	6.878	21274	3.286	ng/ml	
16)	Aroclor 1232 (4)	7.093	37937	15.889	ng/ml	
17)	Aroclor 1232 (5)	7.138	30629	11.210	ng/ml	
18)	Aroclor 1232 (6)	7.264	44688	15.066	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.389	6215	0.949	ng/ml	
21)	Aroclor 1242 (2)	6.878	21274	1.798	ng/ml	
22)	Aroclor 1242 (3)	7.009	24042	4.551	ng/ml	
23)	Aroclor 1242 (4)	7.093	37937	7.598	ng/ml	
24)	Aroclor 1242 (5)	7.138	30629	5.268	ng/ml	
25)	Aroclor 1242 (6)	7.264	44688	7.213	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.854	20293	2.719	ng/ml	
28)	Aroclor 1248 (2)	7.093	37937	4.063	ng/ml	
29)	Aroclor 1248 (3)	7.138	30629	3.493	ng/ml	
30)	Aroclor 1248 (4)	7.264	44688	4.268	ng/ml	
31)	Aroclor 1248 (5)	7.631	7720	0.597	ng/ml	
32)	Aroclor 1248 (6)	7.786	48723	4.132	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.606	29445	2.278	ng/ml	
35)	Aroclor 1254 (2)	7.786	48723	2.406	ng/ml	
36)	Aroclor 1254 (3)	8.096	42668	1.991	ng/ml	
37)	Aroclor 1254 (4)	8.337	26037	1.576	ng/ml	
38)	Aroclor 1254 (5)	8.672	70775	4.510	ng/ml	
39)	Aroclor 1254 (6)	~~8.919~~ 8.903	~~49287~~	~~10.079~~	ng/ml	6.481MI
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.234	53211	3.371	ng/ml	
42)	Aroclor 1260 (2)	8.441	52618	2.688	ng/ml	
43)	Aroclor 1260 (3)	8.672	70775	3.516	ng/ml	
44)	Aroclor 1260 (4)	9.163	82067	2.652	ng/ml	
45)	Aroclor 1260 (5)	9.432	67757	3.786	ng/ml	
46)	Aroclor 1260 (6)	10.018	24518	3.554	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

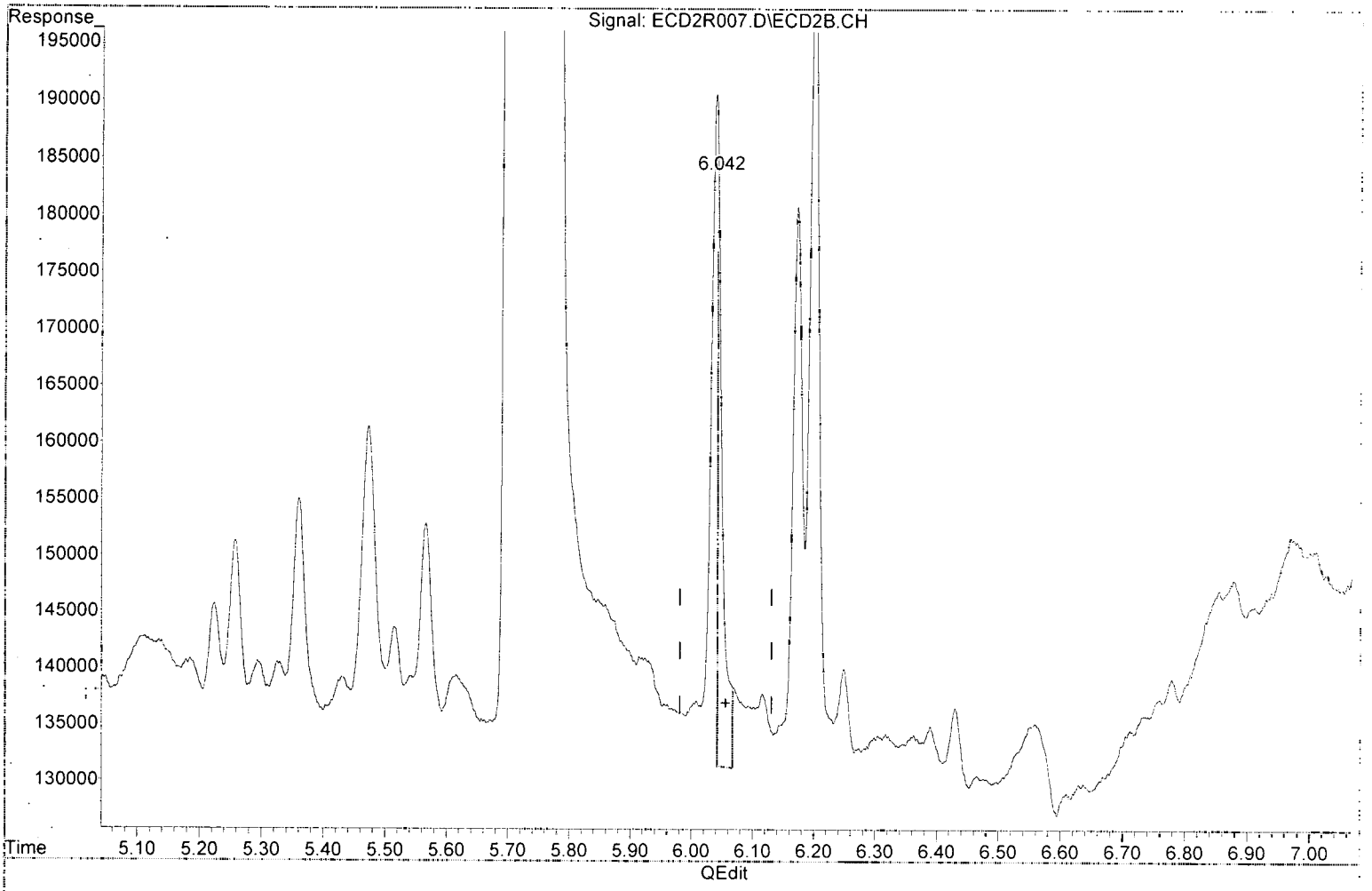
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.441	52618	3.477 ng/ml
49)	Aroclor 1262 (2)	8.741	54334	2.568 ng/ml
50)	Aroclor 1262 (3)	8.919	49287	2.822 ng/ml
51)	Aroclor 1262 (4)	9.163	82067	2.292 ng/ml
52)	Aroclor 1262 (5)	9.432	67757	3.085 ng/ml
53)	Aroclor 1262 (6)	10.018	24518	2.527 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.960	11975	1.283 ng/ml
56)	Aroclor 1268 (2)	9.432	67757	1.727 ng/ml
57)	Aroclor 1268 (3)	9.498	29153	0.925 ng/ml
58)	Aroclor 1268 (4)	9.724	49920	1.843 ng/ml
59)	Aroclor 1268 (5)	10.018	24518	2.314 ng/ml
60)	Aroclor 1268 (6)	10.384	74037	1.008 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(11) Aroclor 1221 (3)

6.042min 7.414 ng/ml (m) 11/18/19

response 52453

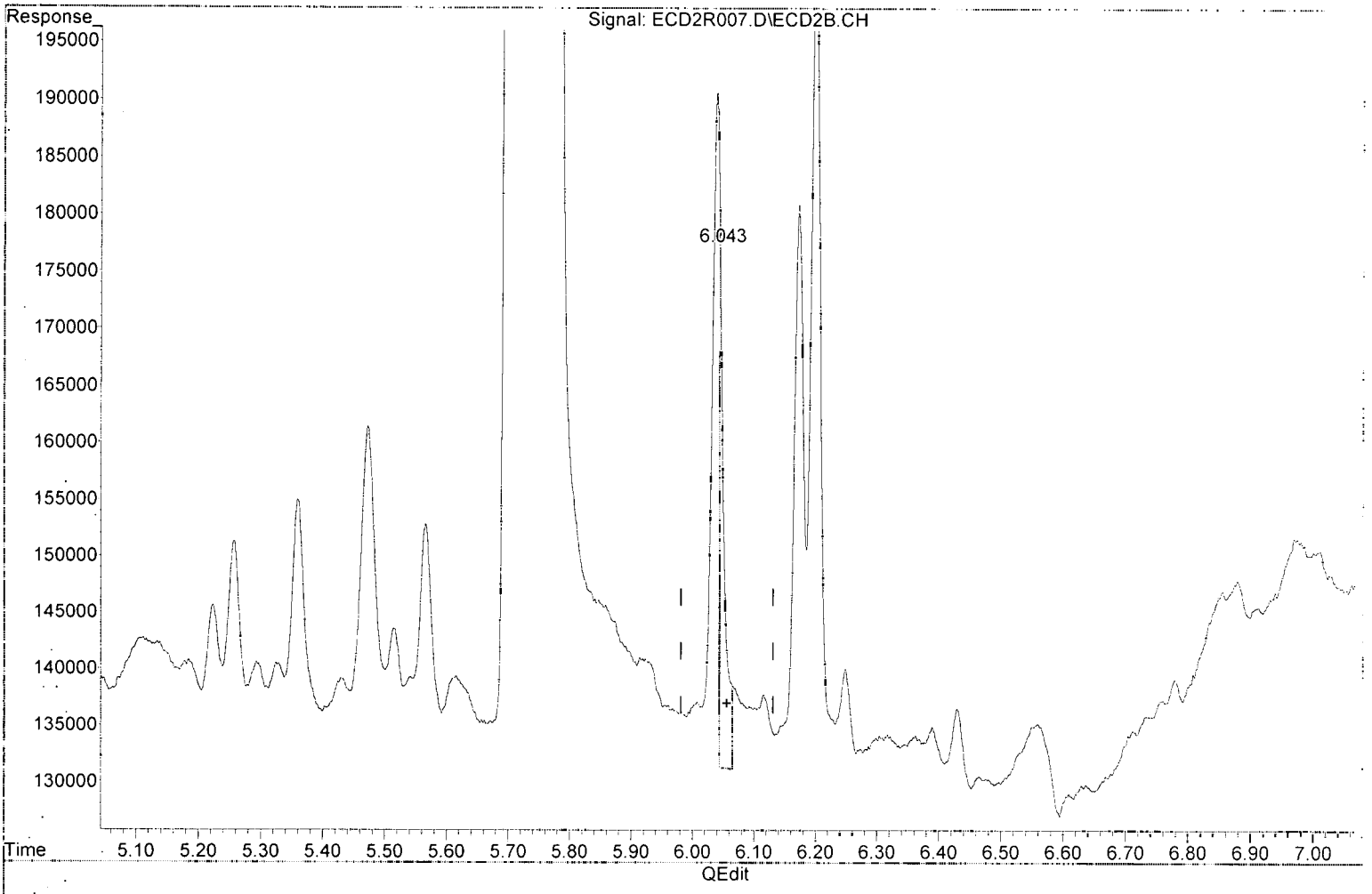
(+) = Expected Retention Time

RECD2_QUANTPCB_191025.M Mon Nov 18 09:13:01 2019 Page: 1

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(13) Aroclor 1232 (1)

6.043min 8.054 ng/ml m 11/18/19

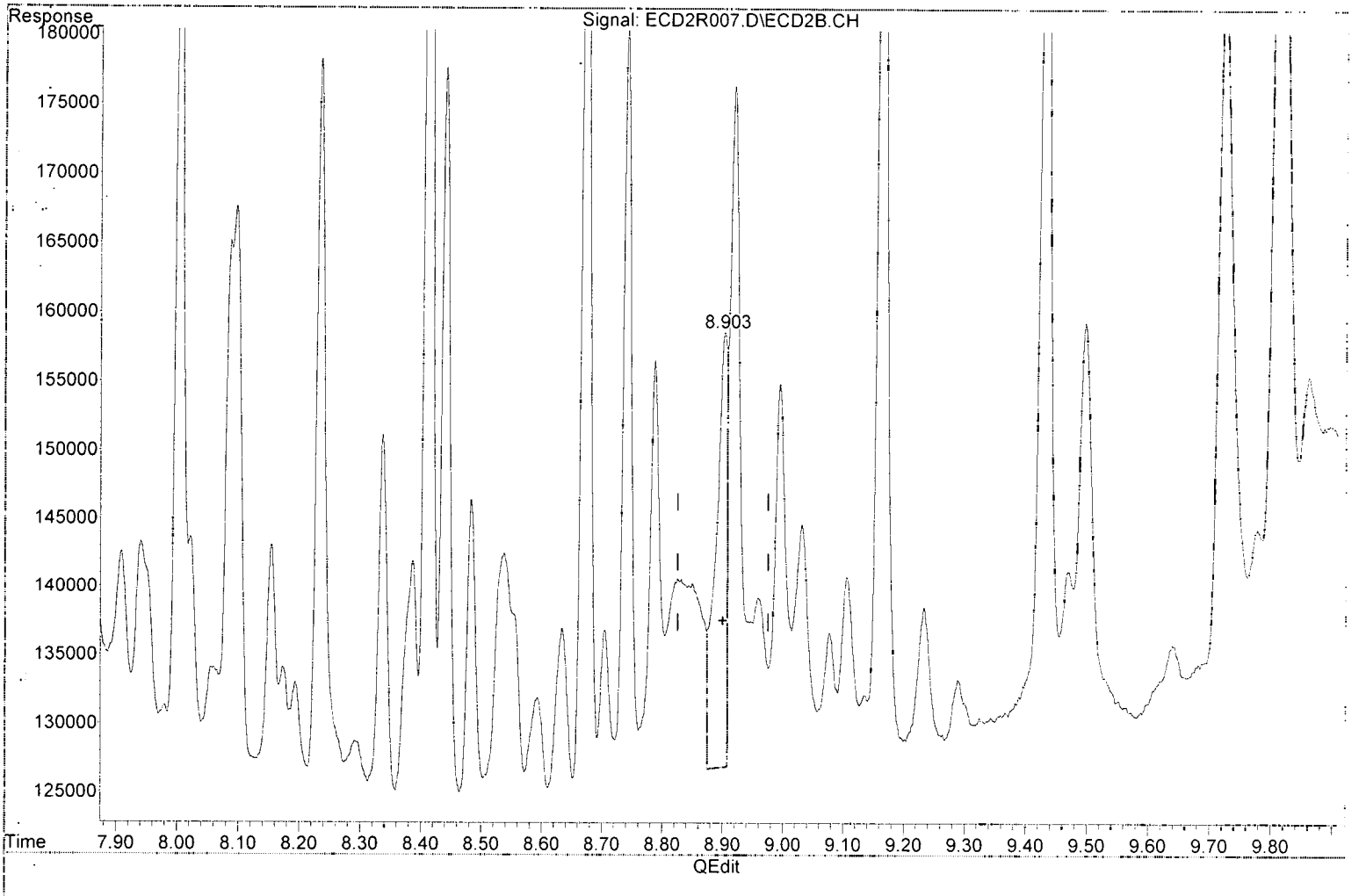
response 46108

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(39) Aroclor 1254 (6)

8.903min 6.481 ng/ml m 11/18/19

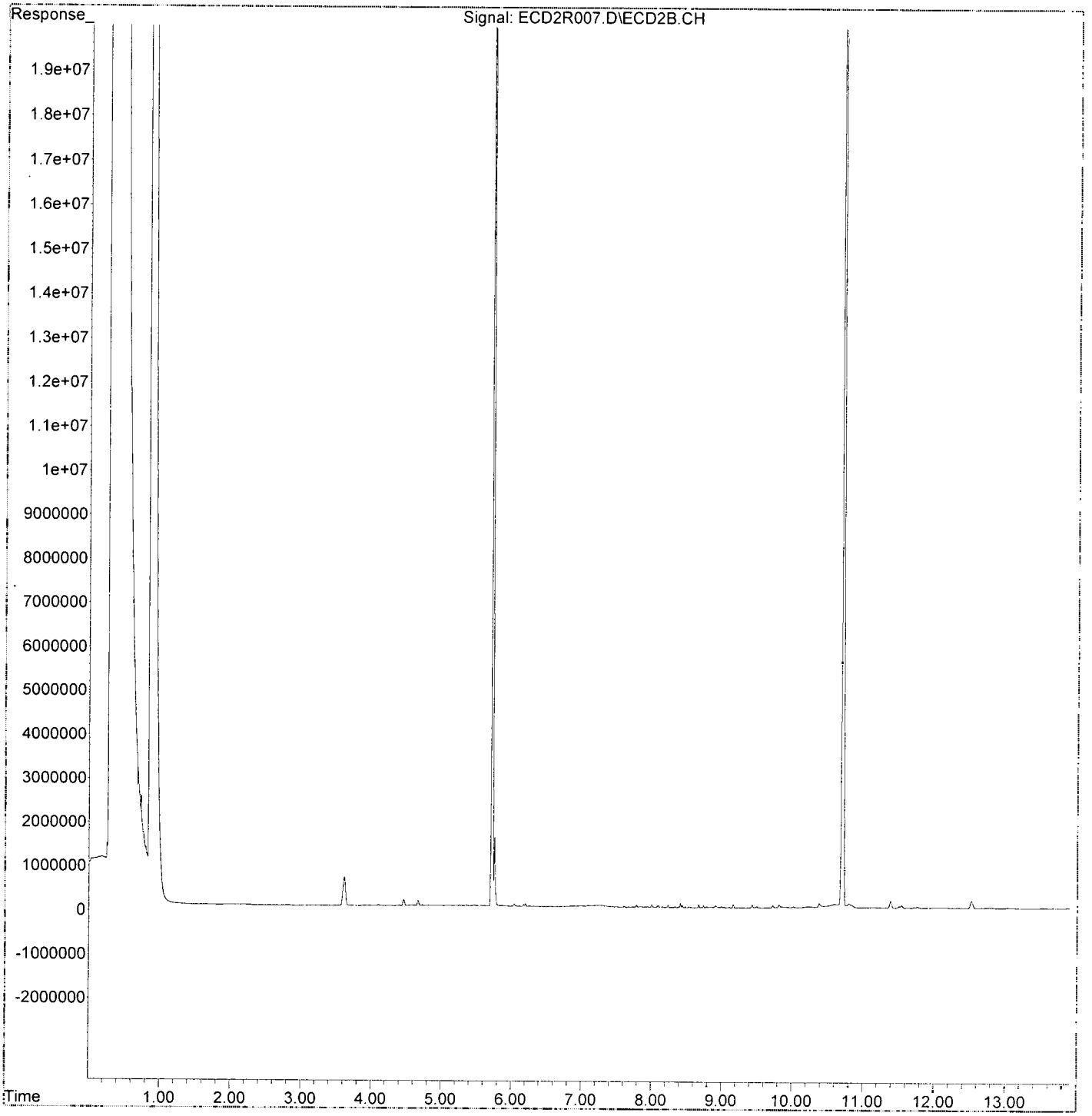
response 31694

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:30
Operator : MJB / KAK
Sample : A9K0332-08
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:25:54 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:05
Operator : MJB / KAK
Sample : A9K0332-09
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:12 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

1254 (5)
1260 (5)

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.719	44126268	168.208	ng/ml
62)	S DCBP (S)	10.704	31422358	214.063	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	13428	1.512	ng/ml
3)	Aroclor 1016 (2)	6.880	37112	2.268	ng/ml
4)	Aroclor 1016 (3)	7.009	24954	3.388	ng/ml
5)	Aroclor 1016 (4)	7.093	64229	8.613	ng/ml
6)	Aroclor 1016 (5)	7.138	43395	5.259	ng/ml
7)	Aroclor 1016 (6)	7.263	44035	5.350	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.922	14738	6.875	ng/ml
10)	Aroclor 1221 (2)	6.009f	5885	2.692	ng/ml
11)	Aroclor 1221 (3)	6.038	64307	9.090	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.038	64307	11.233	ng/ml
14)	Aroclor 1232 (2)	6.391	13428	3.863	ng/ml
15)	Aroclor 1232 (3)	6.880	37112	5.732	ng/ml
16)	Aroclor 1232 (4)	7.093	64229	26.901	ng/ml
17)	Aroclor 1232 (5)	7.138	43395	15.882	ng/ml
18)	Aroclor 1232 (6)	7.263	44035	14.846	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.391	13428	2.050	ng/ml
21)	Aroclor 1242 (2)	6.880	37112	3.137	ng/ml
22)	Aroclor 1242 (3)	7.009	24954	4.724	ng/ml
23)	Aroclor 1242 (4)	7.093	64229	12.864	ng/ml
24)	Aroclor 1242 (5)	7.138	43395	7.464	ng/ml
25)	Aroclor 1242 (6)	7.263	44035	7.108	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.852	29368	3.935	ng/ml
28)	Aroclor 1248 (2)	7.093	64229	6.880	ng/ml
29)	Aroclor 1248 (3)	7.138	43395	4.948	ng/ml
30)	Aroclor 1248 (4)	7.263	44035	4.206	ng/ml
31)	Aroclor 1248 (5)	7.630	63761	4.930	ng/ml
32)	Aroclor 1248 (6)	7.787	266685	22.617	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.606	209961	16.244	ng/ml
35)	Aroclor 1254 (2)	7.787	266685	13.171	ng/ml
36)	Aroclor 1254 (3)	8.098	303051	14.143	ng/ml
37)	Aroclor 1254 (4)	8.337	156046	9.448	ng/ml
38)	Aroclor 1254 (5)	8.672	479376 Ø	30.547	ng/ml
39)	Aroclor 1254 (6)	8.918	258988 Ø	52.961	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.234	378985 Ø	24.012	ng/ml
42)	Aroclor 1260 (2)	8.440	386960	19.769	ng/ml
43)	Aroclor 1260 (3)	8.672	479376 Ø	23.811	ng/ml
44)	Aroclor 1260 (4)	9.162	558891	18.060	ng/ml
45)	Aroclor 1260 (5)	9.430	352074	19.672	ng/ml
46)	Aroclor 1260 (6)	10.016	128863	18.680	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

13.252

19.045

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:05
Operator : MJB / KAK
Sample : A9K0332-09
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:12 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

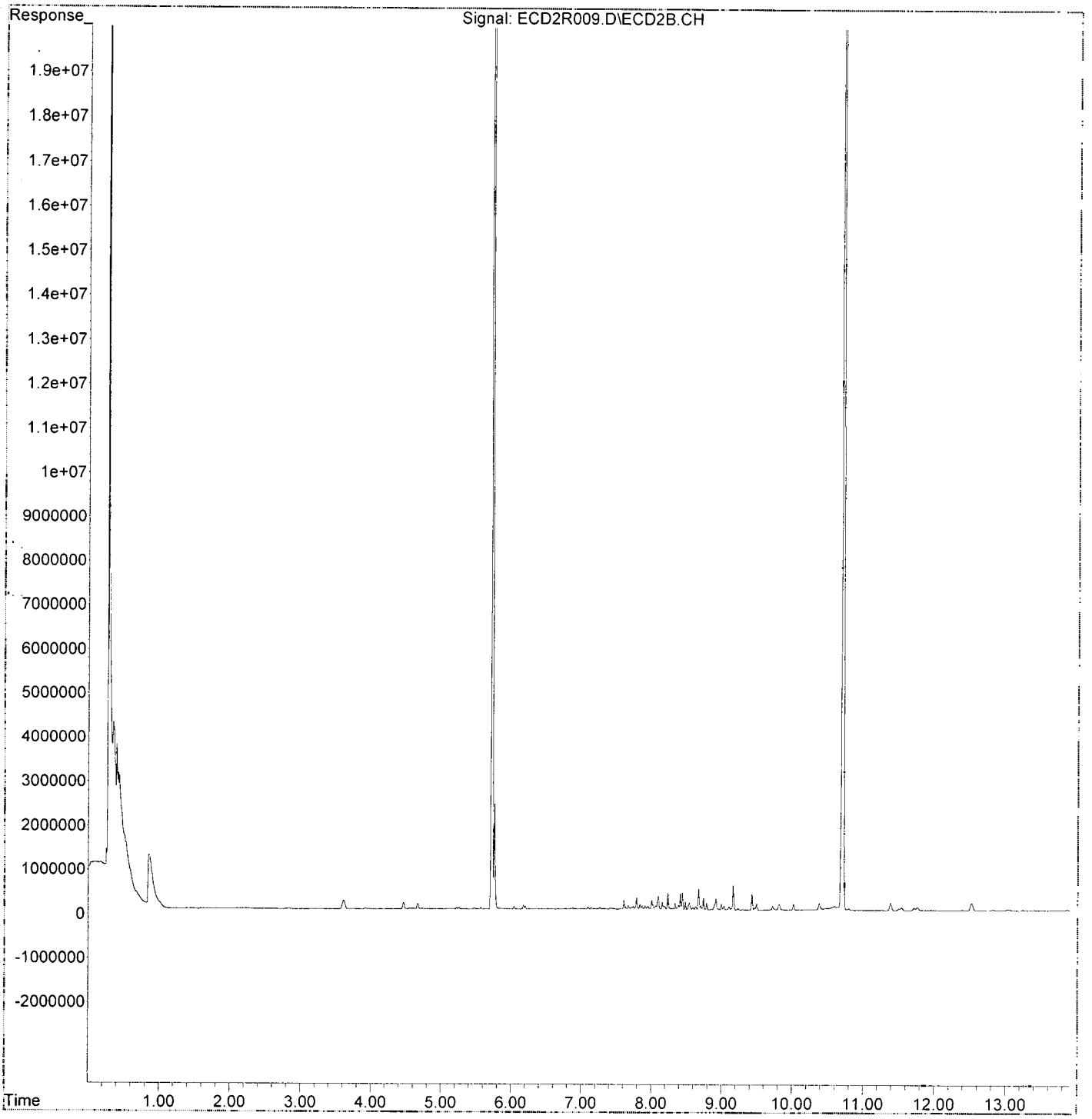
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.440	386960	25.570 ng/ml
49)	Aroclor 1262 (2)	8.740	265626	12.557 ng/ml
50)	Aroclor 1262 (3)	8.918	258988	14.826 ng/ml
51)	Aroclor 1262 (4)	9.162	558891	15.607 ng/ml
52)	Aroclor 1262 (5)	9.430	352074	16.029 ng/ml
53)	Aroclor 1262 (6)	10.016	128863	13.284 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.959	32769	3.511 ng/ml
56)	Aroclor 1268 (2)	9.430	352074	8.973 ng/ml
57)	Aroclor 1268 (3)	9.496	139906	4.438 ng/ml
58)	Aroclor 1268 (4)	9.720	86795	3.205 ng/ml
59)	Aroclor 1268 (5)	10.016	128863	12.161 ng/ml
60)	Aroclor 1268 (6)	10.381	147002	2.001 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:05
Operator : MJB / KAK
Sample : A9K0332-09
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:12 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:41
Operator : MJB / KAK
Sample : A9K0332-10
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:30 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

RR-2, RR-6, (5x)

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.719	57000650	217.285	ng/ml
62)	S DCBP (S)	10.704	30795879	209.795	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.392	26843885	3021.907	ng/ml
3)	Aroclor 1016 (2)	6.881	60321979	3686.426	ng/ml
4)	Aroclor 1016 (3)	7.008	35626580	4836.732	ng/ml
5)	Aroclor 1016 (4)	7.094	45171263	6057.310	ng/ml
6)	Aroclor 1016 (5)	7.140	37090157	4495.198	ng/ml
7)	Aroclor 1016 (6)	7.265	32388494	3934.898	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.896	4391013	2048.187	ng/ml
10)	Aroclor 1221 (2)	5.968	5739194	2625.432	ng/ml
11)	Aroclor 1221 (3)	6.055	12316182	1740.854	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.055	12316182	2151.423	ng/ml
14)	Aroclor 1232 (2)	6.392	26843885	7722.097	ng/ml
15)	Aroclor 1232 (3)	6.881	60321979	9317.211	ng/ml
16)	Aroclor 1232 (4)	7.094	45171263	18919.102	ng/ml
17)	Aroclor 1232 (5)	7.140	37090157	13574.454	ng/ml
18)	Aroclor 1232 (6)	7.265	32388494	10919.850	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.392	26843885	4097.387	ng/ml
21)	Aroclor 1242 (2)	6.881	60321979	5098.320	ng/ml
22)	Aroclor 1242 (3)	7.008	35626580	6744.328	ng/ml
23)	Aroclor 1242 (4)	7.094	45171263	9047.399	ng/ml
24)	Aroclor 1242 (5)	7.140	37090157	6379.382	ng/ml
25)	Aroclor 1242 (6)	7.265	32388494	5228.096	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.854	51146594	6853.933	ng/ml
28)	Aroclor 1248 (2)	7.094	45171263	4838.315	ng/ml
29)	Aroclor 1248 (3)	7.140	37090157	4229.410	ng/ml
30)	Aroclor 1248 (4)	7.265	32388494	3093.296	ng/ml
31)	Aroclor 1248 (5)	7.630	26876715	2078.150	ng/ml
32)	Aroclor 1248 (6)	7.788	48924983	4149.319	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.609	28591279	2212.082	ng/ml
35)	Aroclor 1254 (2)	7.788	48924983	2416.337	ng/ml
36)	Aroclor 1254 (3)	8.099	50976449	2378.998	ng/ml
37)	Aroclor 1254 (4)	8.338	43249228	2618.534	ng/ml
38)	Aroclor 1254 (5)	8.673	68123416	4340.964	ng/ml
39)	Aroclor 1254 (6)	8.902	15658714	3202.094	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.235	32311631	2047.260	ng/ml
42)	Aroclor 1260 (2)	8.441	44222310	2259.268	ng/ml
43)	Aroclor 1260 (3)	8.673	68123416	3383.809	ng/ml
44)	Aroclor 1260 (4)	9.163	31047627	1003.278	ng/ml
45)	Aroclor 1260 (5)	9.430	19862098	1109.788	ng/ml
46)	Aroclor 1260 (6)	10.015	6259911	907.425	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:41
Operator : MJB / KAK
Sample : A9K0332-10
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:30 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

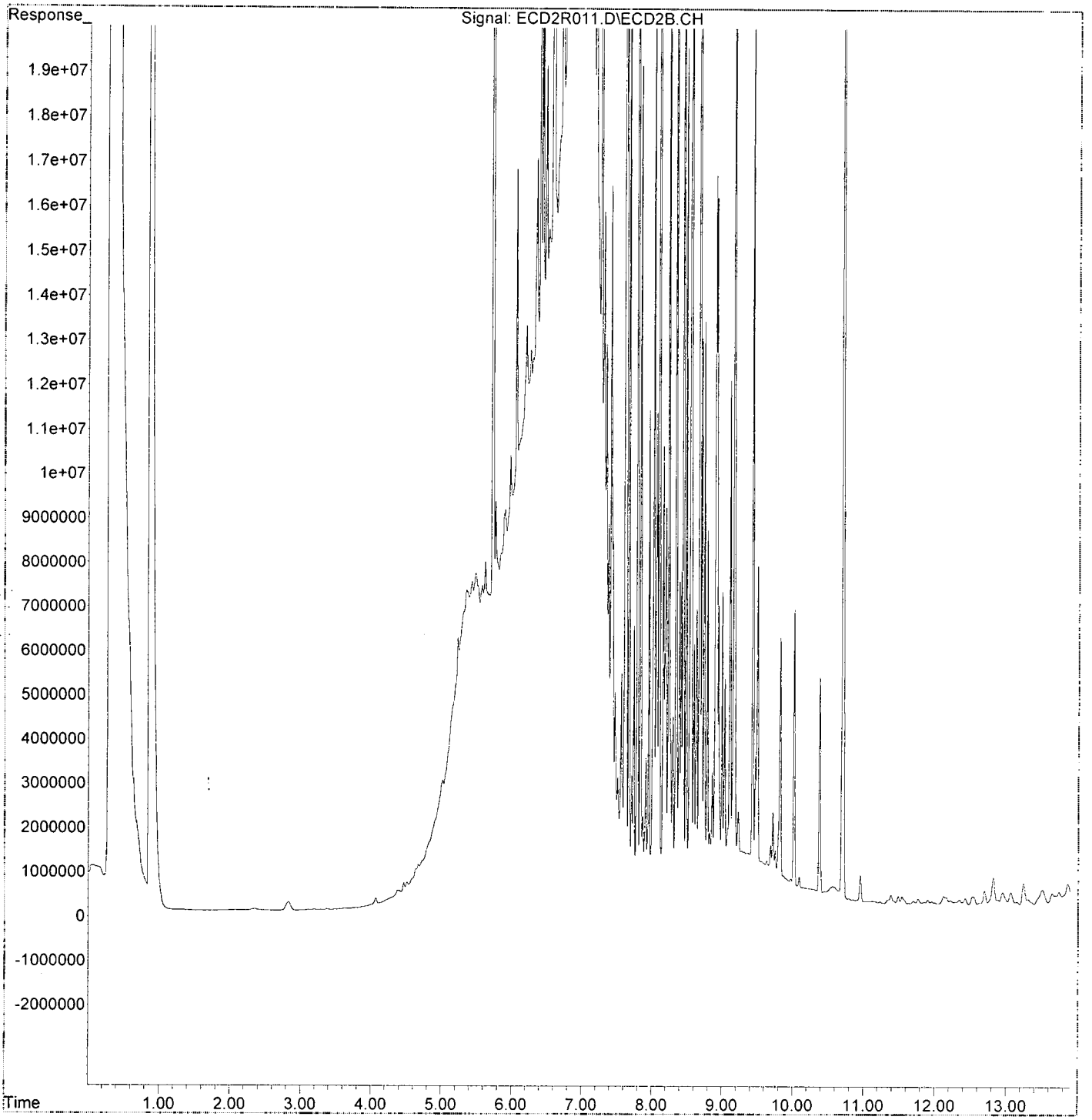
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.441	44222310	2922.144	ng/ml
49)	Aroclor 1262 (2)	8.741	12350697	583.840	ng/ml
50)	Aroclor 1262 (3)	8.918	15162673	868.012	ng/ml
51)	Aroclor 1262 (4)	9.163	31047627	867.026	ng/ml
52)	Aroclor 1262 (5)	9.430	19862098	904.269	ng/ml
53)	Aroclor 1262 (6)	10.015	6259911	645.316	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.942	6020306	645.031	ng/ml
56)	Aroclor 1268 (2)	9.430	19862098	506.219	ng/ml
57)	Aroclor 1268 (3)	9.496	7073919	224.375	ng/ml
58)	Aroclor 1268 (4)	9.718	1602744	59.174	ng/ml
59)	Aroclor 1268 (5)	10.015	6259911	590.770	ng/ml
60)	Aroclor 1268 (6)	10.378	4823940	65.649	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:41
Operator : MJB / KAK
Sample : A9K0332-10
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:30 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:49 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.718	71351228	271.988	ng/ml	
62)	S DCBP (S)	10.698	37297288	254.085	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.390	4267202	480.373	ng/ml	490.81
3)	Aroclor 1016 (2)	6.879	8353993	510.533	ng/ml	
4)	Aroclor 1016 (3)	7.006	3627085	492.420	ng/ml	
5)	Aroclor 1016 (4)	7.091	3640495	488.178	ng/ml	
6)	Aroclor 1016 (5)	7.137	3930249	476.332	ng/ml	
7)	Aroclor 1016 (6)	7.262	4091114	497.032	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.892	298025	139.014	ng/ml	
10)	Aroclor 1221 (2)	5.966	566485	259.142	ng/ml	
11)	Aroclor 1221 (3)	6.054	2666312	376.875	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.054	2666312	465.758	ng/ml	✓
14)	Aroclor 1232 (2)	6.390	4267202	1227.533	ng/ml	
15)	Aroclor 1232 (3)	6.879	8353993	1290.341	ng/ml	
16)	Aroclor 1232 (4)	7.091	3640495	1524.750	ng/ml	
17)	Aroclor 1232 (5)	7.137	3930249	1438.414	ng/ml	
18)	Aroclor 1232 (6)	7.262	4091114	1379.328	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.390	4267202	651.336	ng/ml	
21)	Aroclor 1242 (2)	6.879	8353993	706.067	ng/ml	
22)	Aroclor 1242 (3)	7.006	3627085	686.629	ng/ml	
23)	Aroclor 1242 (4)	7.091	3640495	729.158	ng/ml	
24)	Aroclor 1242 (5)	7.137	3930249	675.990	ng/ml	
25)	Aroclor 1242 (6)	7.262	4091114	660.381	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.851	6639136	889.682	ng/ml	
28)	Aroclor 1248 (2)	7.091	3640495	389.935	ng/ml	
29)	Aroclor 1248 (3)	7.137	3930249	448.168	ng/ml	
30)	Aroclor 1248 (4)	7.262	4091114	390.726	ng/ml	
31)	Aroclor 1248 (5)	7.626	870156	67.282	ng/ml	
32)	Aroclor 1248 (6)	7.785	3368675	285.697	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.604	2869810	222.035	ng/ml	
35)	Aroclor 1254 (2)	7.785	3368675	166.374	ng/ml	
36)	Aroclor 1254 (3)	8.097	1892113	88.302	ng/ml	
37)	Aroclor 1254 (4)	8.335	1301830	78.820	ng/ml	
38)	Aroclor 1254 (5)	8.670	10144202	646.409	ng/ml	
39)	Aroclor 1254 (6)	8.887	1418744	290.123	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.231	8134031	515.371	ng/ml	
42)	Aroclor 1260 (2)	8.438	10266380	524.498	ng/ml	516.23
43)	Aroclor 1260 (3)	8.670	10144202	503.880	ng/ml	
44)	Aroclor 1260 (4)	9.161	15536567	502.051	ng/ml	
45)	Aroclor 1260 (5)	9.428	9567815	534.599	ng/ml	
46)	Aroclor 1260 (6)	10.012	3566487	516.991	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:49 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

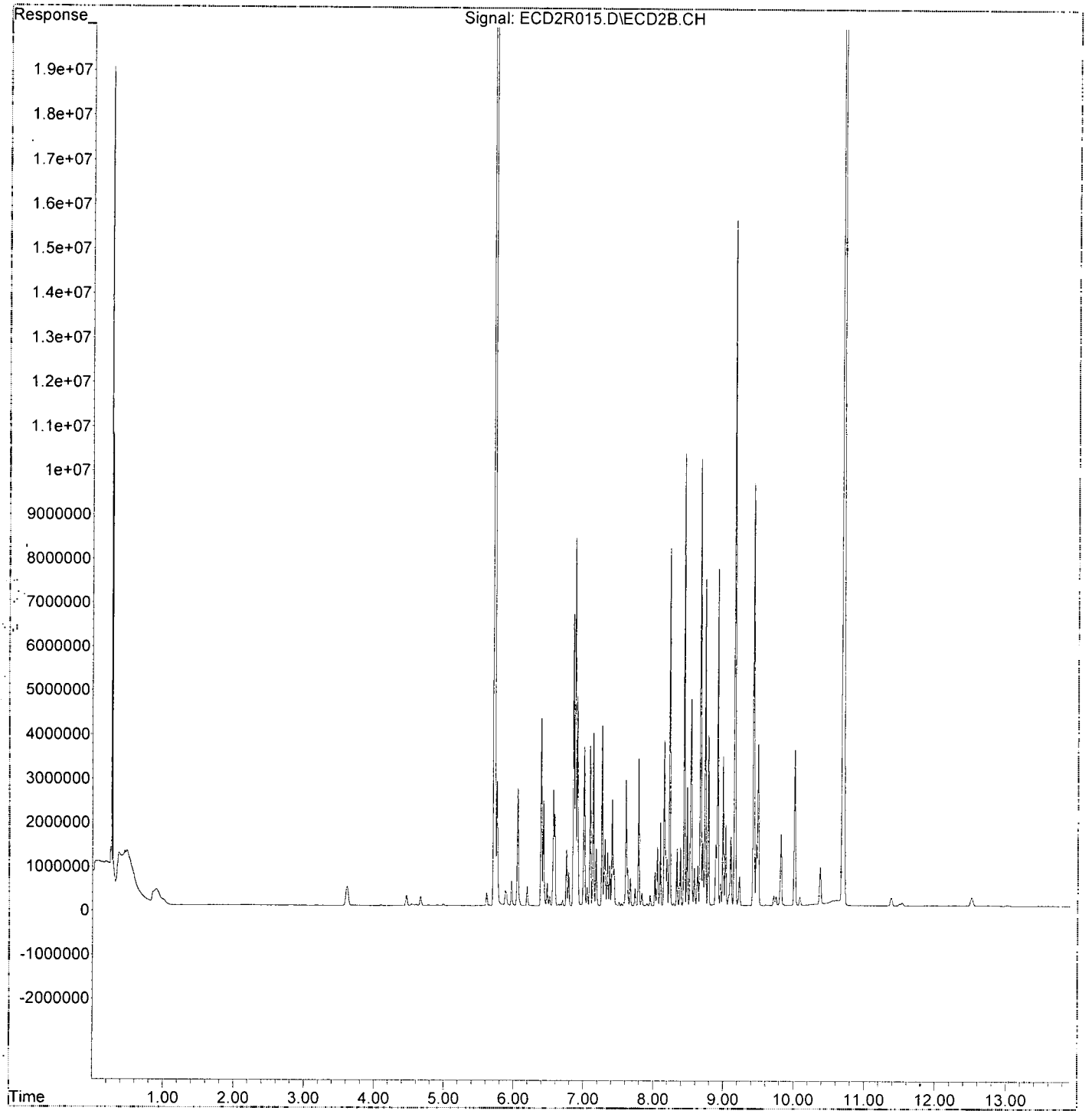
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.438	10266380	678.387	ng/ml
49)	Aroclor 1262 (2)	8.738	7423788	350.936	ng/ml
50)	Aroclor 1262 (3)	8.917	7654423	438.190	ng/ml
51)	Aroclor 1262 (4)	9.161	15536567	433.869	ng/ml
52)	Aroclor 1262 (5)	9.428	9567815	435.597	ng/ml
53)	Aroclor 1262 (6)	10.012	3566487	367.659	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.957	511192	54.770	ng/ml
56)	Aroclor 1268 (2)	9.428	9567815	243.852	ng/ml
57)	Aroclor 1268 (3)	9.493	3674178	116.540	ng/ml
58)	Aroclor 1268 (4)	9.716	225548	8.327	ng/ml
59)	Aroclor 1268 (5)	10.012	3566487	336.582	ng/ml
60)	Aroclor 1268 (6)	10.374	844238	11.489	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 15:52
Operator : MJB / KAK
Sample : 9K14010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:26:49 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K14010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:27:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19 Clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.717	27639529	105.361 ng/ml
62)	S DCBP (S)	10.700	15192877	103.500 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.402	1641	0.185 ng/ml
3)	Aroclor 1016 (2)	6.888	3941	0.241 ng/ml
4)	Aroclor 1016 (3)	7.017	2840	0.386 ng/ml
5)	Aroclor 1016 (4)	7.096	2258	0.303 ng/ml
6)	Aroclor 1016 (5)	7.144	2222	0.269 ng/ml
7)	Aroclor 1016 (6)	7.282	2984	0.363 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	6.037f	47106	21.549 ng/ml
11)	Aroclor 1221 (3)	6.067	7364	1.041 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.067	7364	1.286 ng/ml
14)	Aroclor 1232 (2)	6.402	1641	0.472 ng/ml
15)	Aroclor 1232 (3)	6.888	3941	0.609 ng/ml
16)	Aroclor 1232 (4)	7.096	2258	0.946 ng/ml
17)	Aroclor 1232 (5)	7.144	2222	0.813 ng/ml
18)	Aroclor 1232 (6)	7.282	2984	1.006 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.402	1641	0.250 ng/ml
21)	Aroclor 1242 (2)	6.888	3941	0.333 ng/ml
22)	Aroclor 1242 (3)	7.017	2840	0.538 ng/ml
23)	Aroclor 1242 (4)	7.096	2258	0.452 ng/ml
24)	Aroclor 1242 (5)	7.144	2222	0.382 ng/ml
25)	Aroclor 1242 (6)	7.282	2984	0.482 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.861	3106	0.416 ng/ml
28)	Aroclor 1248 (2)	7.096	2258	0.242 ng/ml
29)	Aroclor 1248 (3)	7.144	2222	0.253 ng/ml
30)	Aroclor 1248 (4)	7.282	2984	0.285 ng/ml
31)	Aroclor 1248 (5)	7.606	670	0.052 ng/ml
32)	Aroclor 1248 (6)	7.816	11768	0.998 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.606	670	0.052 ng/ml
35)	Aroclor 1254 (2)	7.816	11768	0.581 ng/ml
36)	Aroclor 1254 (3)	8.100	2713	0.127 ng/ml
37)	Aroclor 1254 (4)	8.341	1620	0.098 ng/ml
38)	Aroclor 1254 (5)	8.668	1528	0.097 ng/ml
39)	Aroclor 1254 (6)	8.916	2747	0.562 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.236	1678	0.106 ng/ml
42)	Aroclor 1260 (2)	8.438	1413	0.072 ng/ml
43)	Aroclor 1260 (3)	8.668	1528	0.076 ng/ml
44)	Aroclor 1260 (4)	9.161	4532	0.146 ng/ml
45)	Aroclor 1260 (5)	9.424	2802	0.157 ng/ml
46)	Aroclor 1260 (6)	9.993	925	0.134 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K14010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:27:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

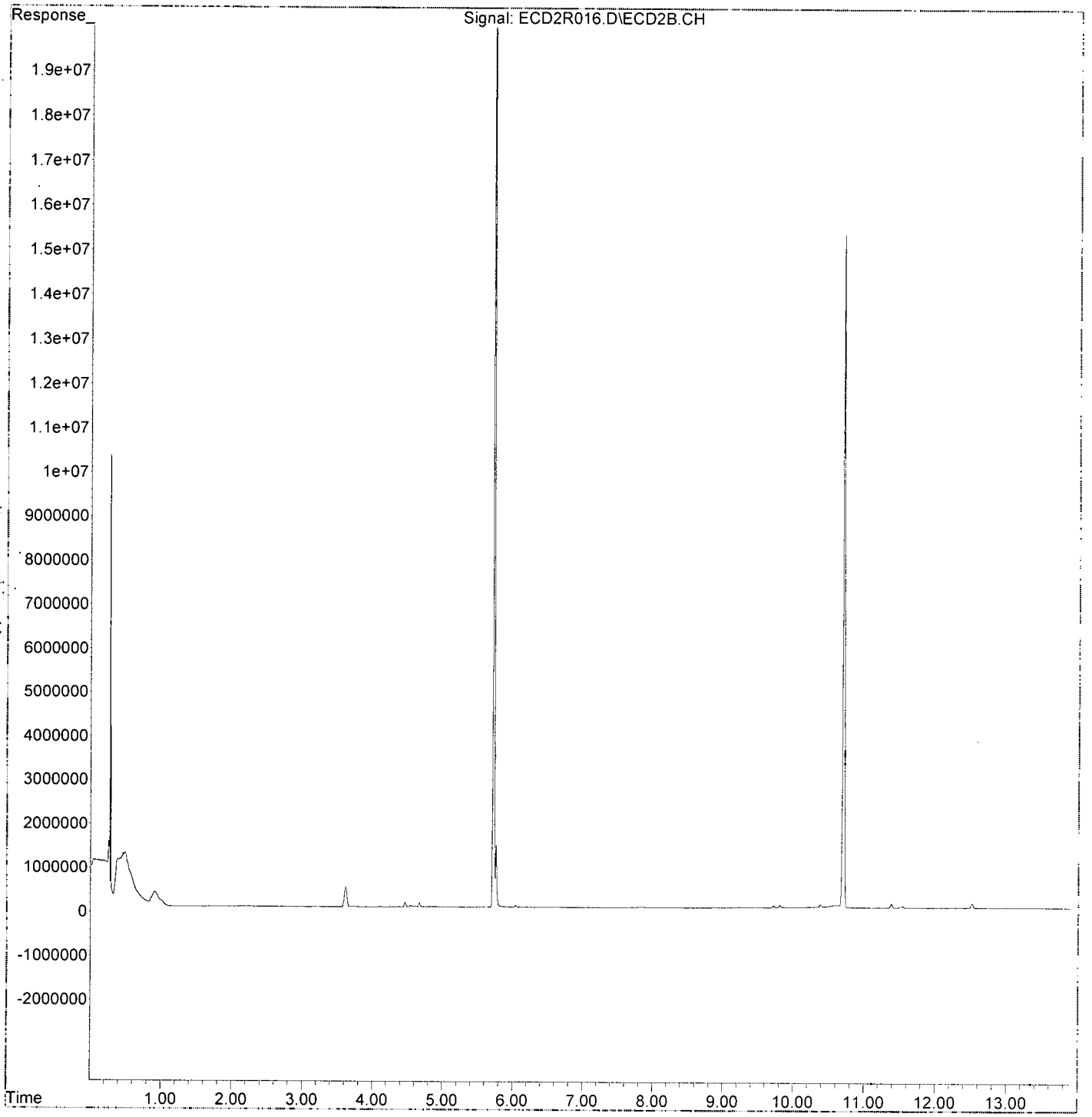
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.438	1413	0.093 ng/ml
49)	Aroclor 1262 (2)	8.764	1413	0.067 ng/ml
50)	Aroclor 1262 (3)	8.916	2747	0.157 ng/ml
51)	Aroclor 1262 (4)	9.161	4532	0.127 ng/ml
52)	Aroclor 1262 (5)	9.424	2802	0.128 ng/ml
53)	Aroclor 1262 (6)	9.993	925	0.095 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.979	3690	0.395 ng/ml
56)	Aroclor 1268 (2)	9.424	2802	0.071 ng/ml
57)	Aroclor 1268 (3)	9.504	3222	0.102 ng/ml
58)	Aroclor 1268 (4)	9.718	45186	1.668 ng/ml
59)	Aroclor 1268 (5)	10.033	850	0.080 ng/ml
60)	Aroclor 1268 (6)	10.376	52915	0.720 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K14010\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K14010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 15 07:27:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Sequence 9K18023 (A9K0332-10RE1)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K18023**	Instrument:	**DUALECD1R**
Date:	**11/18/19 07:22**	Calibration:	**A9K1502**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K18023-CCV1	Soil	QC	QC				A19J268
2	9K18023-CCB1	Soil	QC	QC				A19K026
3	A9K0447-01	ansformer (	8082 PCBs		11/18/19	9110889		
4	9K18023-IBL1	Soil	QC	QC				
5	9110889-MS1	ansformer (	QC	QC		9110889		
6	9K18023-IBL2	Soil	QC	QC				
7	A9K0332-10RE1	Soil	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	11/25/19	9110780		
8	9K18023-IBL3	Soil	QC	QC				
9	9K18023-CCV2	Soil	QC	QC				A19J268
10	9K18023-CCB2	Soil	QC	QC				A19K026

Comments:

Data Entered By: 11/18/19

Data Reviewed By: MJR 11/18/19

TOTAL AROCLOR AVERAGE RESULTS

The average result for the 1016 and 1260 selected peaks are reported here to facilitate data entry and review. Averages are done on all individual peaks and must be for matrix spikes if all peaks are not used in the average.

9K18023-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	472.89
1016 (2)	492.82
1016 (3)	484.35
1016 (4)	465.43
1016 (5)	471.83
1016 (6)	471.05
Average:	**476.40**

Aroclor 1260

Peak	Initial Res
1260 (1)	492.47
1260 (2)	485.42
1260 (3)	511.58
1260 (4)	511.17
1260 (5)	494.81
1260 (6)	486.17
Average:	**496.94**

9110889-MS1

Aroclor 1016

Peak	Initial Res
1016 (1)	145.12
1016 (2)	147.78
1016 (3)	120.24
1016 (4)	172.56
1016 (5)	172.30
1016 (6)	148.51
Average:	**151.09**

Aroclor 1260

Peak	Initial Res
1260 (1)	192.70
1260 (2)	206.00
1260 (3)	173.21
1260 (4)	211.84
1260 (5)	193.25
1260 (6)	209.32
Average:	**197.72**

TOTAL AROCLOR AVERAGE RESULTS

The average result for the 1016 and 1260 selected peaks are reported here to facilitate data entry and review. Averages are done on all individual peaks and must be for matrix spikes if all peaks are not used in the average.

9K18023-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	457.53
1016 (2)	510.24
1016 (3)	484.74
1016 (4)	476.31
1016 (5)	469.09
1016 (6)	487.68
Average:	**480.93**

Aroclor 1260

Peak	Initial Res
1260 (1)	496.80
1260 (2)	503.85
1260 (3)	510.60
1260 (4)	525.02
1260 (5)	518.48
1260 (6)	495.96
Average:	**508.45**

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:04
Operator : MJB / KAK
Sample : 9K18023-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

		Compound	R.T.	Response	Conc	Units	
		System Monitoring Compounds					
1)	S	TCMX (S)	5.770	7108206	238.737	ng/ml	
62)	S	DCBP (S)	10.842	3953213	255.722	ng/ml	
		Target Compounds					
2)		Aroclor 1016 (1)	6.446	481421	472.886	ng/ml	476.40
3)		Aroclor 1016 (2)	6.939	925730	492.824	ng/ml	
4)		Aroclor 1016 (3)	7.068	426458	484.355	ng/ml	
5)		Aroclor 1016 (4)	7.155	419300	465.434	ng/ml	
6)		Aroclor 1016 (5)	7.201	467274	471.834	ng/ml	
7)		Aroclor 1016 (6)	7.327	468521	471.048	ng/ml	
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)		Aroclor 1221 (1)	5.945	35166	138.045	ng/ml	
10)		Aroclor 1221 (2)	6.020	64951	255.958	ng/ml	
11)		Aroclor 1221 (3)	6.107	283978	338.744	ng/ml	
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)		Aroclor 1232 (1)	6.107	283978	443.806	ng/ml	
14)		Aroclor 1232 (2)	6.446	481421	1191.117	ng/ml	
15)		Aroclor 1232 (3)	6.939	925730	1213.722	ng/ml	
16)		Aroclor 1232 (4)	7.068	426458	1223.391	ng/ml	
17)		Aroclor 1232 (5)	7.155	419300	1400.333	ng/ml	
18)		Aroclor 1232 (6)	7.327	468521	1352.932	ng/ml	
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)		Aroclor 1242 (1)	6.446	481421	658.270	ng/ml	
21)		Aroclor 1242 (2)	6.939	925730	660.316	ng/ml	
22)		Aroclor 1242 (3)	7.068	426458	641.730	ng/ml	
23)		Aroclor 1242 (4)	7.155	419300	699.581	ng/ml	
24)		Aroclor 1242 (5)	7.201	467274	662.430	ng/ml	
25)		Aroclor 1242 (6)	7.327	468521	655.938	ng/ml	
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)		Aroclor 1248 (1)	6.912	749331	812.963	ng/ml	
28)		Aroclor 1248 (2)	7.155	419300	357.597	ng/ml	
29)		Aroclor 1248 (3)	7.201	467274	432.603	ng/ml	
30)		Aroclor 1248 (4)	7.327	468521	359.021	ng/ml	
31)		Aroclor 1248 (5)	7.694	112781	65.629	ng/ml	
32)		Aroclor 1248 (6)	7.855	393891	266.242	ng/ml	
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)		Aroclor 1254 (1)	7.673	346135	225.633	ng/ml	
35)		Aroclor 1254 (2)	7.855	393891	156.540	ng/ml	
36)		Aroclor 1254 (3)	8.169	225963	84.633	ng/ml	
37)		Aroclor 1254 (4)	8.409	153965	80.145	ng/ml	
38)		Aroclor 1254 (5)	8.747	1235020	635.057	ng/ml	
39)		Aroclor 1254 (6)	8.997	817273	1398.099	ng/ml	
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)		Aroclor 1260 (1)	8.305	956038	492.467	ng/ml	496.94
42)		Aroclor 1260 (2)	8.513	1150783	485.425	ng/ml	
43)		Aroclor 1260 (3)	8.747	1235020	511.577	ng/ml	
44)		Aroclor 1260 (4)	9.250	1815457	511.167	ng/ml	
45)		Aroclor 1260 (5)	9.526	1040239	494.807	ng/ml	
46)		Aroclor 1260 (6)	10.132	404748	486.170	ng/ml	
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:04
Operator : MJB / KAK
Sample : 9K18023-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

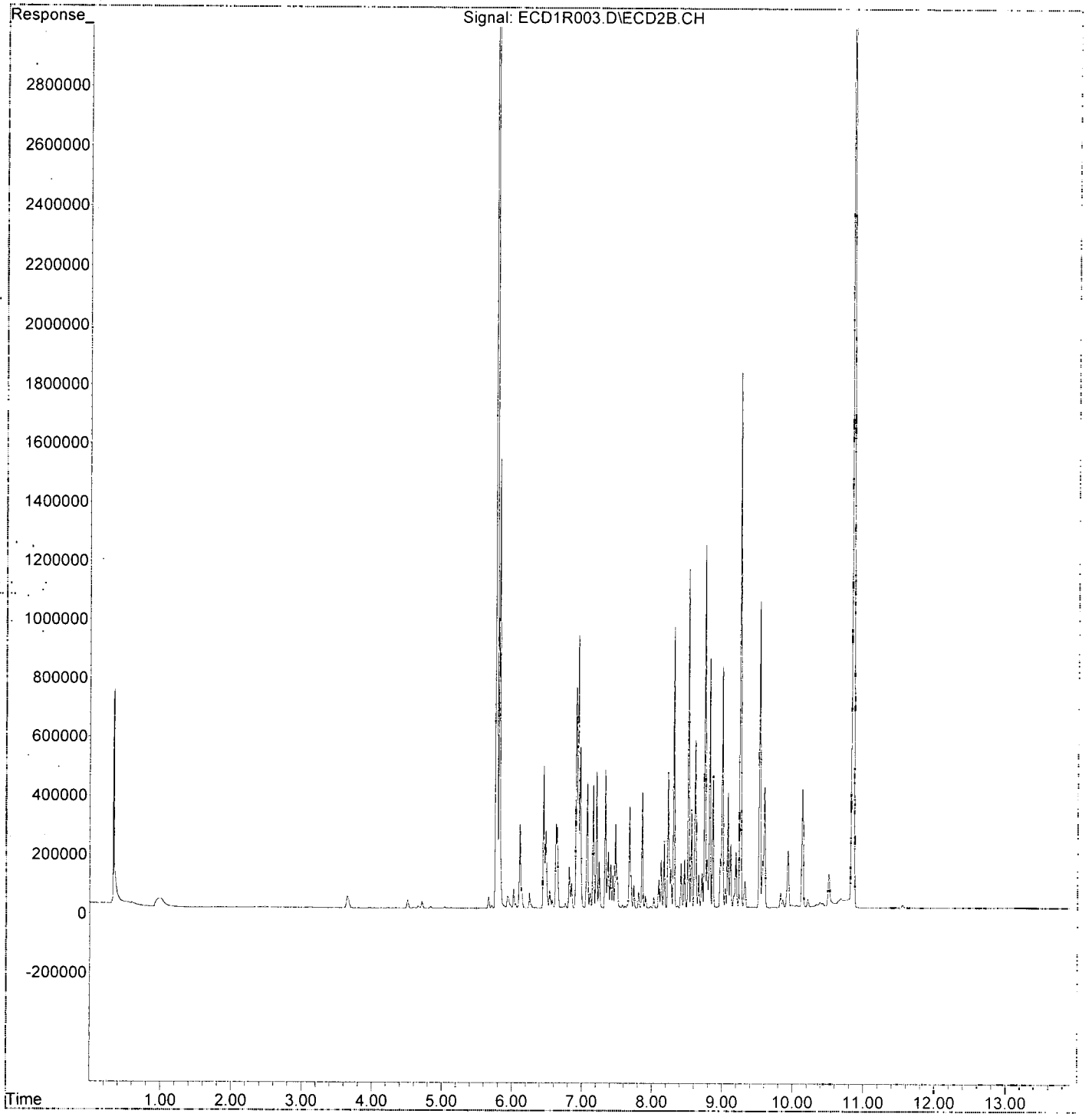
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.513	1150783	615.186	ng/ml
49)	Aroclor 1262 (2)	8.816	846984	327.789	ng/ml
50)	Aroclor 1262 (3)	8.997	817273	402.077	ng/ml
51)	Aroclor 1262 (4)	9.250	1815457	441.136	ng/ml
52)	Aroclor 1262 (5)	9.526	1040239	414.612	ng/ml
53)	Aroclor 1262 (6)	10.132	404748	358.189	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.040	65384	60.068	ng/ml
56)	Aroclor 1268 (2)	9.526	1040239	237.321	ng/ml
57)	Aroclor 1268 (3)	9.594	409904	114.217	ng/ml
58)	Aroclor 1268 (4)	9.825	51477	16.746	ng/ml
59)	Aroclor 1268 (5)	10.132	404748	328.704	ng/ml
60)	Aroclor 1268 (6)	10.507	114753	14.935	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:04
Operator : MJB / KAK
Sample : 9K18023-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K18023-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19
clear

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.772	2825724	94.905	ng/ml
62)	S	DCBP (S)	10.843	1542803	99.799	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.447	369	0.362	ng/ml
3)		Aroclor 1016 (2)	6.952	421	0.224	ng/ml
4)		Aroclor 1016 (3)	7.073	463	0.525	ng/ml
5)		Aroclor 1016 (4)	7.165	335	0.372	ng/ml
6)		Aroclor 1016 (5)	7.212	344	0.347	ng/ml
7)		Aroclor 1016 (6)	7.375f	702	0.706	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	6.001f	926	3.633	ng/ml
10)		Aroclor 1221 (2)	6.001	926	3.647	ng/ml
11)		Aroclor 1221 (3)	6.095	4864	5.802	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.095	4864	7.602	ng/ml
14)		Aroclor 1232 (2)	6.447	369	0.912	ng/ml
15)		Aroclor 1232 (3)	6.952	421	0.552	ng/ml
16)		Aroclor 1232 (4)	7.073	463	1.327	ng/ml
17)		Aroclor 1232 (5)	7.165	335	1.118	ng/ml
18)		Aroclor 1232 (6)	7.375f	702	2.027	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.447	369	0.504	ng/ml
21)		Aroclor 1242 (2)	6.952	421	0.300	ng/ml
22)		Aroclor 1242 (3)	7.073	463	0.696	ng/ml
23)		Aroclor 1242 (4)	7.165	335	0.558	ng/ml
24)		Aroclor 1242 (5)	7.212	344	0.487	ng/ml
25)		Aroclor 1242 (6)	7.375f	702	0.983	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.904	1005	1.091	ng/ml
28)		Aroclor 1248 (2)	7.165	335	0.285	ng/ml
29)		Aroclor 1248 (3)	7.212	344	0.318	ng/ml
30)		Aroclor 1248 (4)	7.282f	307	0.235	ng/ml
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/ml
32)		Aroclor 1248 (6)	7.859	2714	1.834	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	0.000	0	N.D.	ng/ml
35)		Aroclor 1254 (2)	7.859	2714	1.079	ng/ml
36)		Aroclor 1254 (3)	8.173	519	0.194	ng/ml
37)		Aroclor 1254 (4)	8.435	6076	3.163	ng/ml
38)		Aroclor 1254 (5)	8.748	533	0.274	ng/ml
39)		Aroclor 1254 (6)	8.981	605	1.034	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.307	685	0.353	ng/ml
42)		Aroclor 1260 (2)	8.513	804	0.339	ng/ml
43)		Aroclor 1260 (3)	8.748	533	0.221	ng/ml
44)		Aroclor 1260 (4)	9.254	1008	0.284	ng/ml
45)		Aroclor 1260 (5)	9.531	1073	0.510	ng/ml
46)		Aroclor 1260 (6)	10.132	2414	2.900	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K18023-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

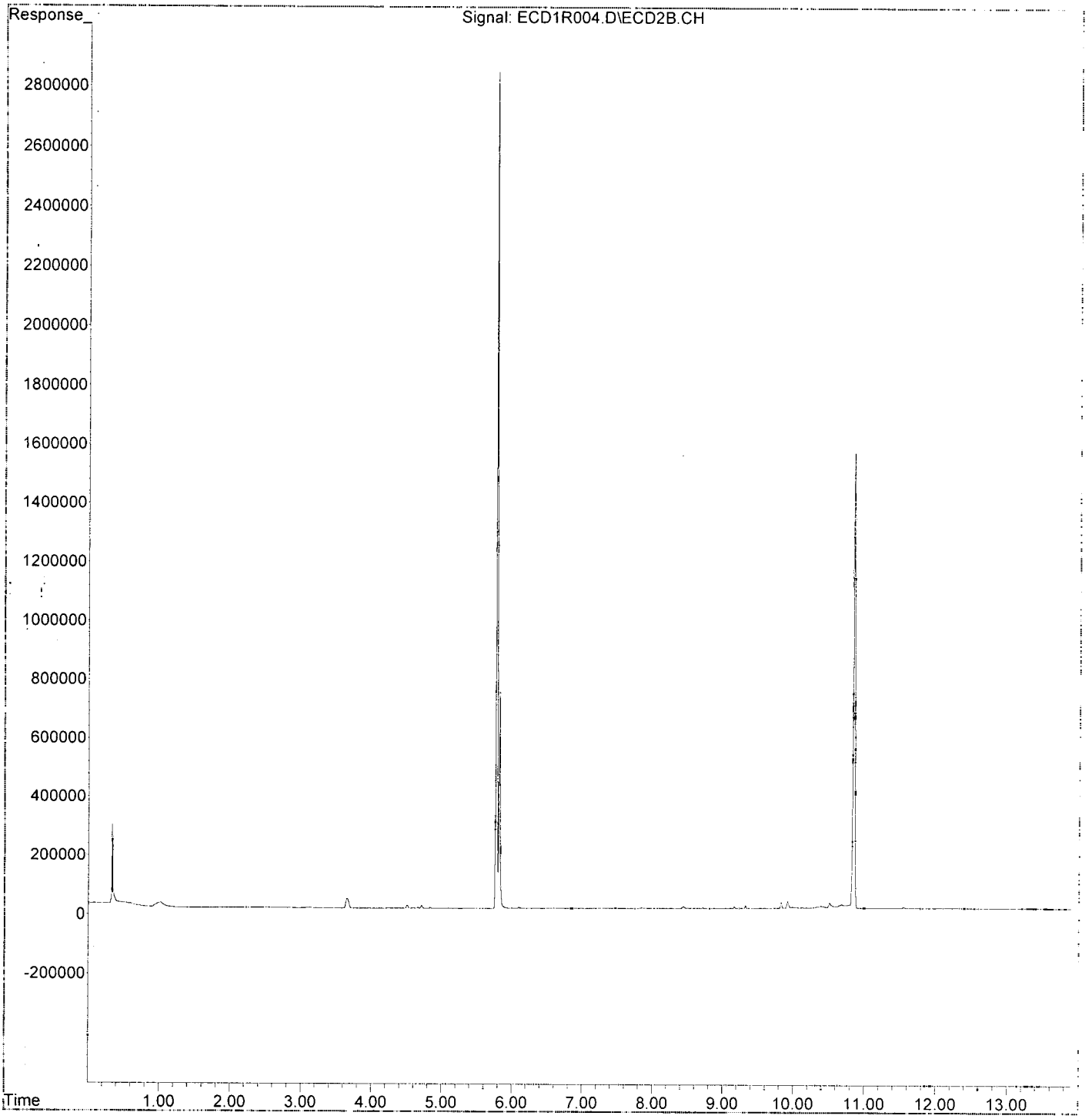
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.513	804	0.430 ng/ml
49)	Aroclor 1262 (2)	8.788	682	0.264 ng/ml
50)	Aroclor 1262 (3)	8.981	605	0.297 ng/ml
51)	Aroclor 1262 (4)	9.254	1008	0.245 ng/ml
52)	Aroclor 1262 (5)	9.531	1073	0.428 ng/ml
53)	Aroclor 1262 (6)	10.132	2414	2.137 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.043	706	0.649 ng/ml
56)	Aroclor 1268 (2)	9.531	1073	0.245 ng/ml
57)	Aroclor 1268 (3)	9.591	870	0.242 ng/ml
58)	Aroclor 1268 (4)	9.827	19903	6.475 ng/ml
59)	Aroclor 1268 (5)	10.132	2414	1.961 ng/ml
60)	Aroclor 1268 (6)	10.510	18072	2.352 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K18023-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:18:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:16
Operator : MJB / KAK
Sample : A9K0332-10RE1@5
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:32:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19
1242 P-10
1254 P-10
1262 P-10

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.772	1048025	35.199	ng/ml
62)	S	DCBP (S)	10.842	716175	46.327	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.448	341959	335.897	ng/ml
3)		Aroclor 1016 (2)	6.941	750783	399.689	ng/ml
4)		Aroclor 1016 (3)	7.070	304284	345.595	ng/ml
5)		Aroclor 1016 (4)	7.157	521162	578.503	ng/ml
6)		Aroclor 1016 (5)	7.202	420420	424.523	ng/ml
7)		Aroclor 1016 (6)	7.329	496036	498.711	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.947	14573	57.208	ng/ml
10)		Aroclor 1221 (2)	6.021	33338	131.377	ng/ml
11)		Aroclor 1221 (3)	6.109	141061	168.265	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.109	141061	220.452	ng/ml
14)		Aroclor 1232 (2)	6.448	341959	846.064	ng/ml
15)		Aroclor 1232 (3)	6.941	750783	984.350	ng/ml
16)		Aroclor 1232 (4)	7.070	304284	872.908	ng/ml
17)		Aroclor 1232 (5)	7.157	521162	1740.520	ng/ml
18)		Aroclor 1232 (6)	7.329	496036	1432.386	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.448	341959	467.577	ng/ml
21)		Aroclor 1242 (2)	6.941	750783	535.528	ng/ml
22)		Aroclor 1242 (3)	7.070	304284	457.885	ng/ml
23)		Aroclor 1242 (4)	7.157	521162	869.532	ng/ml
24)		Aroclor 1242 (5)	7.202	420420	596.008	ng/ml
25)		Aroclor 1242 (6)	7.329	496036	694.459	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.914	612313	664.309	ng/ml
28)		Aroclor 1248 (2)	7.157	521162	444.469	ng/ml
29)		Aroclor 1248 (3)	7.202	420420	389.226	ng/ml
30)		Aroclor 1248 (4)	7.329	496036	380.105	ng/ml
31)		Aroclor 1248 (5)	7.697	673775	392.081	ng/ml
32)		Aroclor 1248 (6)	7.856	1210127	817.960	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.675	790932	515.581	ng/ml
35)		Aroclor 1254 (2)	7.856	1210127	480.928	ng/ml
36)		Aroclor 1254 (3)	8.170	1185277	443.936	ng/ml
37)		Aroclor 1254 (4)	8.410	1009259	525.361	ng/ml
38)		Aroclor 1254 (5)	8.748	1516857	779.980	ng/ml
39)		Aroclor 1254 (6)	8.981	369690	632.424	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.306	750758	386.725	ng/ml
42)		Aroclor 1260 (2)	8.514	1063878	448.766	ng/ml
43)		Aroclor 1260 (3)	8.748	1516857	628.321	ng/ml
44)		Aroclor 1260 (4)	9.251	702764	197.873	ng/ml
45)		Aroclor 1260 (5)	9.528	473229	225.099	ng/ml
46)		Aroclor 1260 (6)	10.134	163103	195.914	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

486.997
491.452
206.295

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:16
Operator : MJB / KAK
Sample : A9K0332-10RE1@5
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:32:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

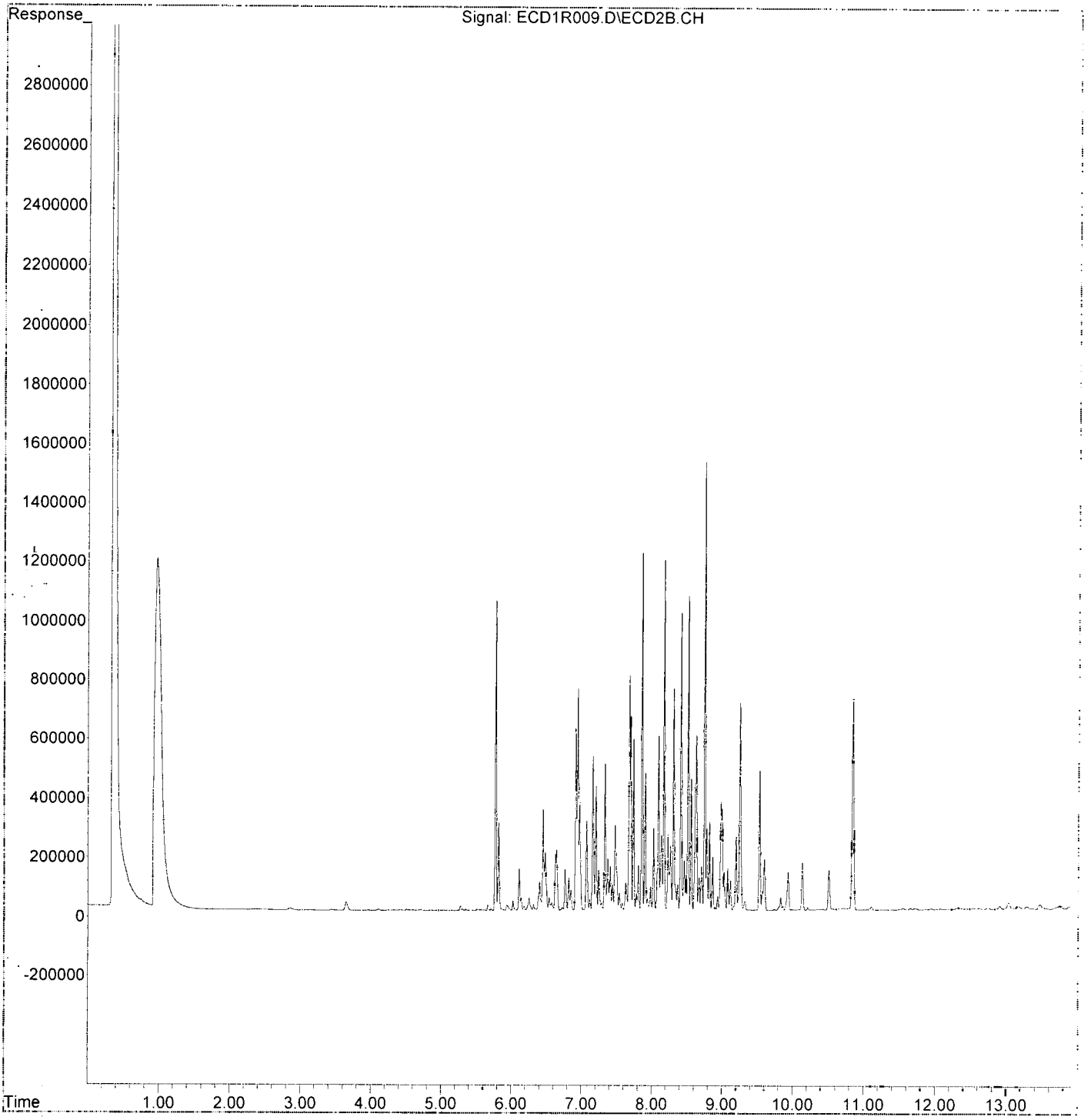
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.514	1063878	568.728	ng/ml
49)	Aroclor 1262 (2)	8.817	303691	117.531	ng/ml
50)	Aroclor 1262 (3)	8.997	345224	169.841	ng/ml
51)	Aroclor 1262 (4)	9.251	702764	170.764	ng/ml
52)	Aroclor 1262 (5)	9.528	473229	188.617	ng/ml
53)	Aroclor 1262 (6)	10.134	163103	144.341	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.024	128461	118.017	ng/ml
56)	Aroclor 1268 (2)	9.528	473229	107.963	ng/ml
57)	Aroclor 1268 (3)	9.596	173805	48.429	ng/ml
58)	Aroclor 1268 (4)	9.826	44744	14.556	ng/ml
59)	Aroclor 1268 (5)	10.134	163103	132.459	ng/ml
60)	Aroclor 1268 (6)	10.508	134640	17.523	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:16
Operator : MJB / KAK
Sample : A9K0332-10RE1@5
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 10:32:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:53
Operator : MJB / KAK
Sample : 9K18023-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:17:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.771	6722795	225.793	ng/ml
62)	S DCBP (S)	10.841	4017981	259.911	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	465790	457.532	ng/ml
3)	Aroclor 1016 (2)	6.941	958445	510.241	ng/ml
4)	Aroclor 1016 (3)	7.070	426793	484.735	ng/ml
5)	Aroclor 1016 (4)	7.156	429096	476.308	ng/ml
6)	Aroclor 1016 (5)	7.201	464560	469.094	ng/ml
7)	Aroclor 1016 (6)	7.329	485063	487.679	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.946	34447	135.224	ng/ml
10)	Aroclor 1221 (2)	6.021	63984	252.145	ng/ml
11)	Aroclor 1221 (3)	6.109	283528	338.208	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.109	283528	443.103	ng/ml
14)	Aroclor 1232 (2)	6.448	465790	1152.443	ng/ml
15)	Aroclor 1232 (3)	6.941	958445	1256.614	ng/ml
16)	Aroclor 1232 (4)	7.070	426793	1224.352	ng/ml
17)	Aroclor 1232 (5)	7.156	429096	1433.049	ng/ml
18)	Aroclor 1232 (6)	7.329	485063	1400.699	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.448	465790	636.897	ng/ml
21)	Aroclor 1242 (2)	6.941	958445	683.652	ng/ml
22)	Aroclor 1242 (3)	7.070	426793	642.234	ng/ml
23)	Aroclor 1242 (4)	7.156	429096	715.926	ng/ml
24)	Aroclor 1242 (5)	7.201	464560	658.583	ng/ml
25)	Aroclor 1242 (6)	7.329	485063	679.097	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.914	745224	808.508	ng/ml
28)	Aroclor 1248 (2)	7.156	429096	365.952	ng/ml
29)	Aroclor 1248 (3)	7.201	464560	430.091	ng/ml
30)	Aroclor 1248 (4)	7.329	485063	371.696	ng/ml
31)	Aroclor 1248 (5)	7.674	358784	208.782	ng/ml
32)	Aroclor 1248 (6)	7.855	414818	280.388	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.674	358784	233.879	ng/ml
35)	Aroclor 1254 (2)	7.855	414818	164.857	ng/ml
36)	Aroclor 1254 (3)	8.170	232167	86.956	ng/ml
37)	Aroclor 1254 (4)	8.410	164935	85.855	ng/ml
38)	Aroclor 1254 (5)	8.749	1232650	633.838	ng/ml
39)	Aroclor 1254 (6)	8.967	170654	291.936	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.306	964448	496.799	ng/ml
42)	Aroclor 1260 (2)	8.513	1194464	503.850	ng/ml
43)	Aroclor 1260 (3)	8.749	1232650	510.595	ng/ml
44)	Aroclor 1260 (4)	9.251	1864642	525.016	ng/ml
45)	Aroclor 1260 (5)	9.527	1090014	518.483	ng/ml
46)	Aroclor 1260 (6)	10.132	412900	495.962	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

480.93

508.45

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:53
Operator : MJB / KAK
Sample : 9K18023-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:17:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

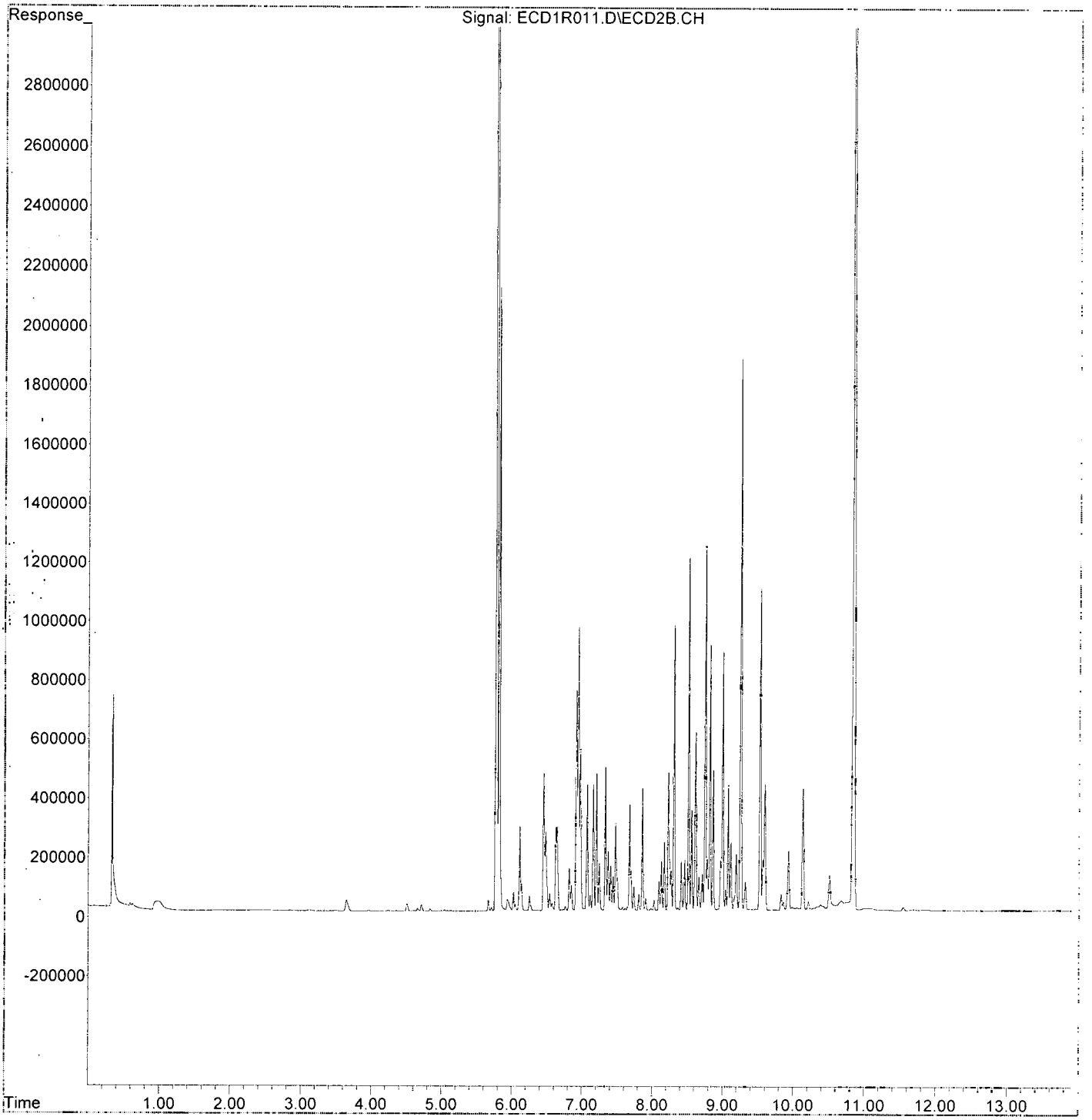
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.513	1194464	638.537	ng/ml
49)	Aroclor 1262 (2)	8.817	899532	348.125	ng/ml
50)	Aroclor 1262 (3)	8.998	874563	430.263	ng/ml
51)	Aroclor 1262 (4)	9.251	1864642	453.088	ng/ml
52)	Aroclor 1262 (5)	9.527	1090014	434.451	ng/ml
53)	Aroclor 1262 (6)	10.132	412900	365.403	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.041	72550	66.652	ng/ml
56)	Aroclor 1268 (2)	9.527	1090014	248.677	ng/ml
57)	Aroclor 1268 (3)	9.595	426321	118.791	ng/ml
58)	Aroclor 1268 (4)	9.825	55558	18.074	ng/ml
59)	Aroclor 1268 (5)	10.132	412900	335.324	ng/ml
60)	Aroclor 1268 (6)	10.508	119375	15.536	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 10:53
Operator : MJB / KAK
Sample : 9K18023-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:17:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 11:11
Operator : MJB / KAK
Sample : 9K18023-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:28:30 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/18/19
clean

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.771	2840615	95.405	ng/ml
62)	S DCBP (S)	10.843	1653216	106.942	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/ml
3)	Aroclor 1016 (2)	6.901f	860	0.458	ng/ml
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/ml
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/ml
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/ml
7)	Aroclor 1016 (6)	7.332	576	0.579	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/ml
10)	Aroclor 1221 (2)	6.094f	4747	18.705	ng/ml
11)	Aroclor 1221 (3)	6.122	1811	2.160	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.122	1811	2.831	ng/ml
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/ml
15)	Aroclor 1232 (3)	6.901f	860	1.128	ng/ml
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/ml
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/ml
18)	Aroclor 1232 (6)	7.332	576	1.664	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/ml
21)	Aroclor 1242 (2)	6.901f	860	0.614	ng/ml
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/ml
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/ml
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/ml
25)	Aroclor 1242 (6)	7.332	576	0.807	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.901	860	0.934	ng/ml
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/ml
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/ml
30)	Aroclor 1248 (4)	7.332	576	0.442	ng/ml
31)	Aroclor 1248 (5)	7.672	689	0.401	ng/ml
32)	Aroclor 1248 (6)	7.856	2691	1.819	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.672	689	0.449	ng/ml
35)	Aroclor 1254 (2)	7.856	2691	1.070	ng/ml
36)	Aroclor 1254 (3)	8.216f	710	0.266	ng/ml
37)	Aroclor 1254 (4)	8.436	5509	2.868	ng/ml
38)	Aroclor 1254 (5)	8.717	3112	1.600	ng/ml
39)	Aroclor 1254 (6)	8.979	572	0.979	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.309	596	0.307	ng/ml
42)	Aroclor 1260 (2)	8.513	625	0.263	ng/ml
43)	Aroclor 1260 (3)	8.717	3112	1.289	ng/ml
44)	Aroclor 1260 (4)	9.253	1498	0.422	ng/ml
45)	Aroclor 1260 (5)	9.527	3105	1.477	ng/ml
46)	Aroclor 1260 (6)	10.134	2159	2.593	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 11:11
Operator : MJB / KAK
Sample : 9K18023-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:28:30 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

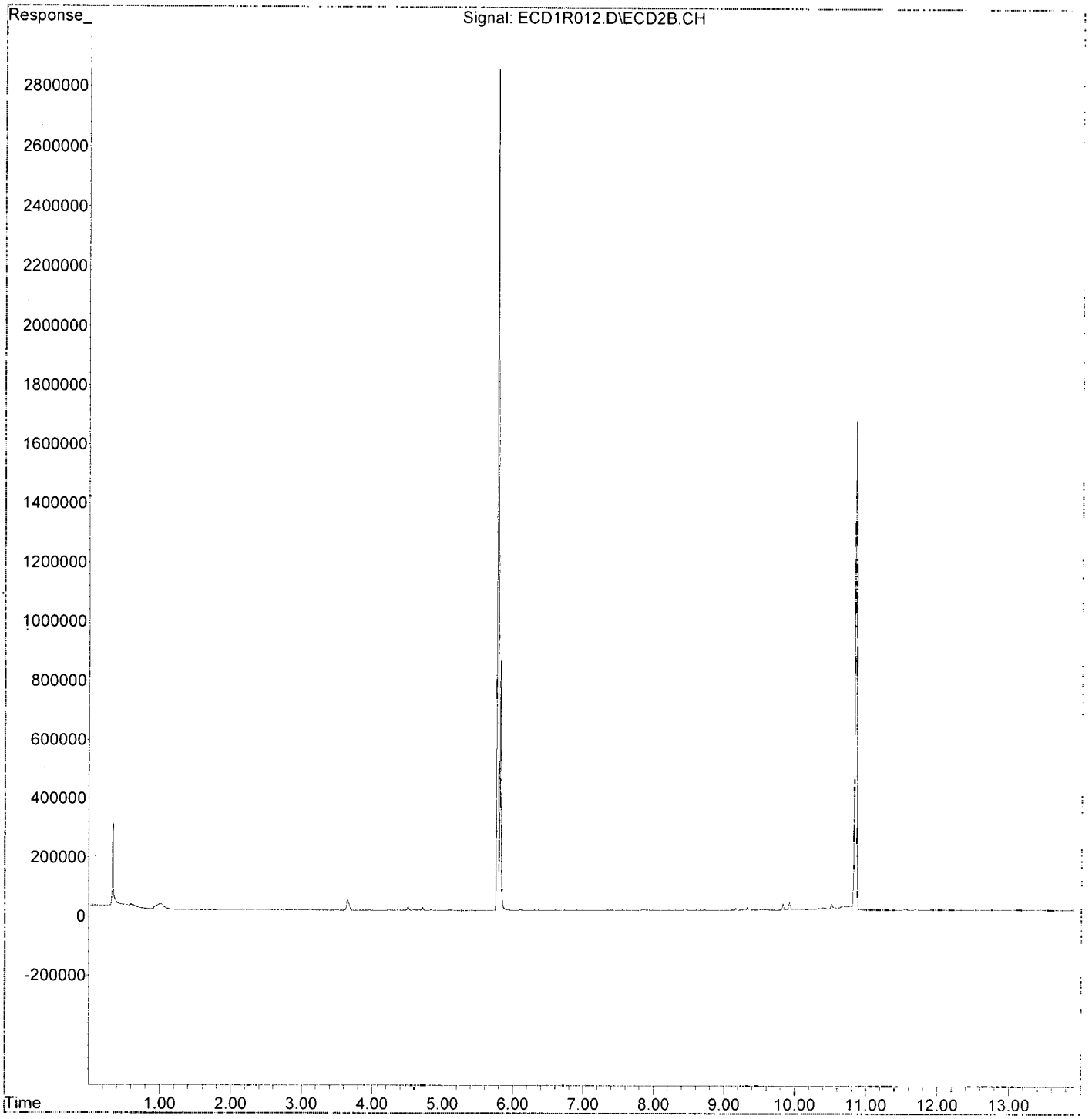
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.513	625	0.334 ng/ml
49)	Aroclor 1262 (2)	8.787	561	0.217 ng/ml
50)	Aroclor 1262 (3)	8.994	567	0.279 ng/ml
51)	Aroclor 1262 (4)	9.253	1498	0.364 ng/ml
52)	Aroclor 1262 (5)	9.527	3105	1.238 ng/ml
53)	Aroclor 1262 (6)	10.134	2159	1.910 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.042	775	0.712 ng/ml
56)	Aroclor 1268 (2)	9.527	3105	0.708 ng/ml
57)	Aroclor 1268 (3)	9.589	1966	0.548 ng/ml
58)	Aroclor 1268 (4)	9.826	20700	6.734 ng/ml
59)	Aroclor 1268 (5)	10.134	2159	1.753 ng/ml
60)	Aroclor 1268 (6)	10.510	19806	2.578 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K18023\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 18 Nov 2019 11:11
Operator : MJB / KAK
Sample : 9K18023-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 18 11:28:30 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Batch 9110782
Sequence 9K15010 (A9K0332-01,02)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 19 2019

BATCH #: 9110782 (Water)

Prep Method: EPA 3510C (Neutral pH)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9110782-BLK1		QC	11/14/19 08:15	1100	2				100					
	9110782-BSD1		QC	11/14/19 08:15	1000	2	A19K051		100	100					
	9110782-BS1		QC	11/14/19 08:15	1000	2	A19K051		100	100					
	A9K0332-01	F	8082 PCBs - Low Level (2mL FV)	11/14/19 08:15	1040	2				100	PDI-FB-1911121146				
	A9K0332-02	F	8082 PCBs - Low Level (2mL FV)	11/14/19 08:15	1060	2				100	PDI-RB-1911120944				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19C104	09/03/23	Florisil Lot 817211-CM
A19G280	01/18/20	Sulfuric Acid
A19H411	08/31/21	n-Hexane Lot# 192712
A19I211	05/07/22	Copper, Granular Lot# J260003
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K051	02/28/20	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19K052	04/17/20	8082 PCB Surrogate Spike

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: _____ 11/15/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110782 (Water)

Prep Method: EPA 3510C (Neutral pH)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9110782-BLK1		QC	11/14/19 08:15	1000 1100	2				100				6	
2	9110782-BSD1		QC	11/14/19 08:15	1000	2	A19K051		100	100				6	
3	9110782-BS1		QC	11/14/19 08:15	1000	2	A19K051		100	100				6	
4	A9K0332-01	F	8082 PCBs - Low Level (2mL FV)	11/14/19 08:15	1000 1040	2				100	PDI-FB-1911121 146			6	
5	A9K0332-02	F	8082 PCBs - Low Level (2mL FV)	11/14/19 08:15	1000 1060	2				100	PDI-RB-1911120 944			6	

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
~~A18H290~~	01/01/21	Copper, Granular Lot# J260003
A18K311	12/31/20	Glass Wool
A19C104	09/03/23	Florisil Lot 817211-CM
A19G280	01/18/20	Sulfuric Acid
A19H411	08/31/21	n-Hexane Lot# 192712
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19K051	02/28/20	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19K052	04/17/20	8082 PCB Surrogate Spike

Witness: 11/14/19

Bottle Check: 11/14/19

AJJ 11-14-19
Prepared By: Date

Reviewed By: 11/15/19
Date

Printed: 11/14/2019 8:16:34AM

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K15010**	Instrument:	**DUALECD6R**
Date:	**11/15/19 07:13**	Calibration:	**A9G2702**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K15010-CCV1	Water	QC	QC				A19J268
2	9K15010-CCB1	Water	QC	QC				A19K026
3	9110782-BLK1	Water	QC	QC		9110782		
4	9110782-BS1	Water	QC	QC		9110782		
5	9110782-BSD1	Water	QC	QC		9110782		
6	A9K0332-01	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/25/19	9110782		
7	A9K0332-02	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/25/19	9110782		
8	9K15010-CCV2	Water	QC	QC				A19J268
9	9K15010-CCB2	Water	QC	QC				A19K026
10	A9K0266-04RE2	Water	8082 PCBs		11/15/19	9110689		
11	9K15010-IBL1	Water	QC	QC				
12	9K15010-CCV3	Water	QC	QC				A19J268
13	9K15010-CCB3	Water	QC	QC				A19K026

Comments:

Data Entered By: 11/15/19

Data Reviewed By: MKT 11/15/19

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R003.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:19
Operator : MJB/KAK
Sample : 9K15010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.891	32755608	231.468	ng/ml	
62) S	DCBP (S)	10.993	17075322	253.667	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.561	1920530	449.504	ng/ml	470.75
3)	Aroclor 1016 (2)	7.048	3525541	461.826	ng/ml	
4)	Aroclor 1016 (3)	7.176	1703388	455.616	ng/ml	
5)	Aroclor 1016 (4)	7.262	1720107	481.853	ng/ml	
6)	Aroclor 1016 (5)	7.307	1961119	491.893	ng/ml	
7)	Aroclor 1016 (6)	7.433	1912829	483.795	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	6.050	160280	153.548	ng/ml	
10)	Aroclor 1221 (2)	6.138	249441	240.632	ng/ml	
11)	Aroclor 1221 (3)	6.225	1137014	324.874	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.225	1137014	393.233	ng/ml	
14)	Aroclor 1232 (2)	6.561	1920530	1039.258	ng/ml	
15)	Aroclor 1232 (3)	7.048	3525541	1078.996	ng/ml	
16)	Aroclor 1232 (4)	7.262	1720107	1421.075	ng/ml	
17)	Aroclor 1232 (5)	7.307	1961119	1366.027	ng/ml	
18)	Aroclor 1232 (6)	7.433	1912829	1282.939	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.561	1920530	566.511	ng/ml	
21)	Aroclor 1242 (2)	7.048	3525541	568.078	ng/ml	
22)	Aroclor 1242 (3)	7.176	1703388	592.466	ng/ml	
23)	Aroclor 1242 (4)	7.262	1720107	671.626	ng/ml	
24)	Aroclor 1242 (5)	7.307	1961119	648.915	ng/ml	
25)	Aroclor 1242 (6)	7.433	1912829	608.000	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	7.020	3085617	829.939	ng/ml	
28)	Aroclor 1248 (2)	7.262	1720107	373.836	ng/ml	
29)	Aroclor 1248 (3)	7.307	1961119	449.044	ng/ml	
30)	Aroclor 1248 (4)	7.433	1912829	373.994	ng/ml	
31)	Aroclor 1248 (5)	7.776	1439427	226.345	ng/ml	
32)	Aroclor 1248 (6)	7.955	1518156	272.653	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.776	1439427	212.558	ng/ml	
35)	Aroclor 1254 (2)	7.955	1518156	151.673	ng/ml	
36)	Aroclor 1254 (3)	8.267	841074	77.132	ng/ml	
37)	Aroclor 1254 (4)	8.505	565170	71.448	ng/ml	
38)	Aroclor 1254 (5)	8.841	4954003	612.500	ng/ml	
39)	Aroclor 1254 (6)	9.062	690730	297.711	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.404	3734896	489.982	ng/ml	519.40
42)	Aroclor 1260 (2)	8.607	4791592	518.775	ng/ml	
43)	Aroclor 1260 (3)	8.841	4954003	527.825	ng/ml	
44)	Aroclor 1260 (4)	9.351	7337259	541.395	ng/ml	
45)	Aroclor 1260 (5)	9.636	4102207	523.655	ng/ml	
46)	Aroclor 1260 (6)	10.256	1595624	514.782	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R003.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:19
Operator : MJB/KAK
Sample : 9K15010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

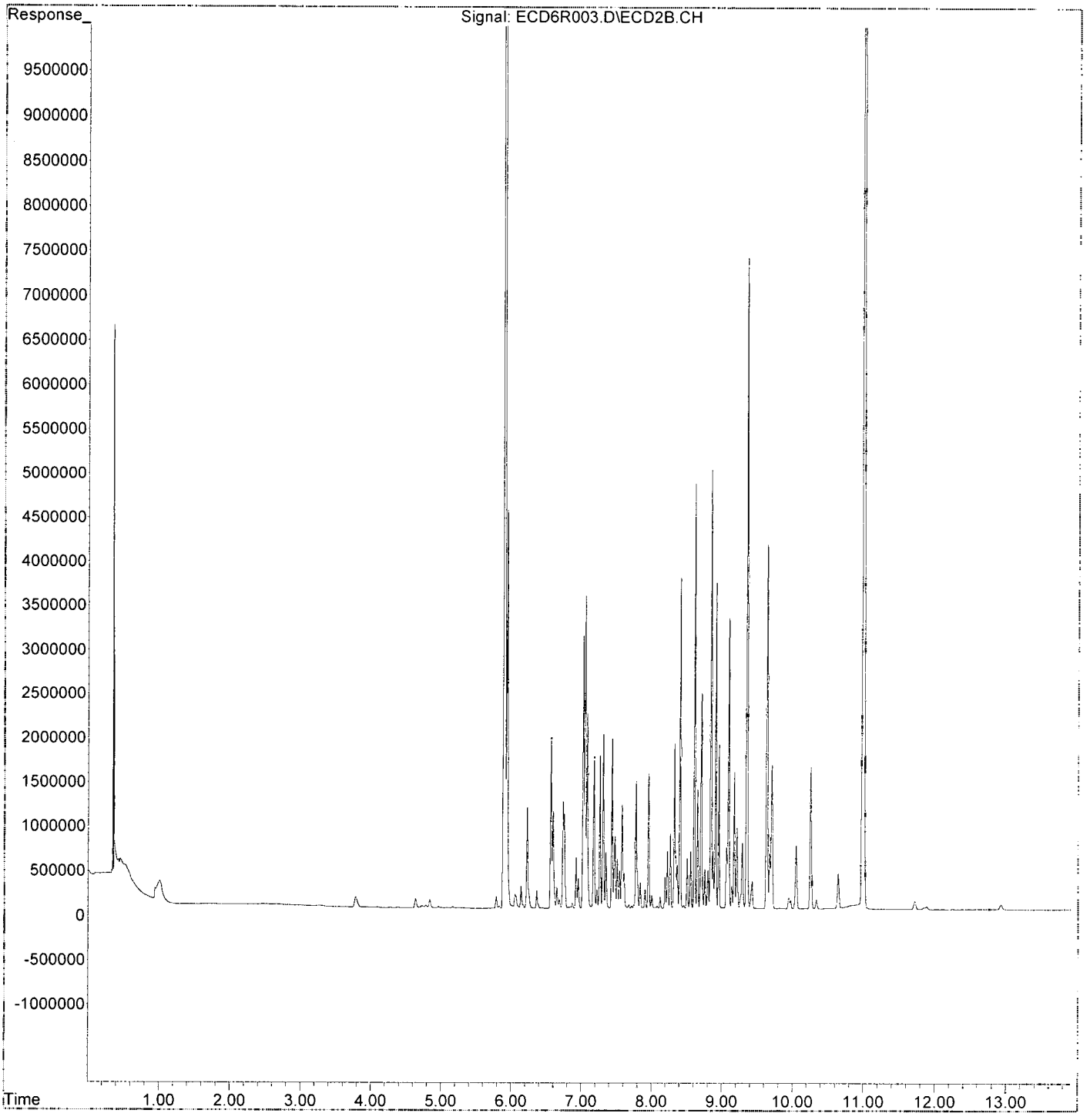
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.607	4791592	653.044	ng/ml
49)	Aroclor 1262 (2)	8.910	3678385	366.362	ng/ml
50)	Aroclor 1262 (3)	9.094	3278170	442.453	ng/ml
51)	Aroclor 1262 (4)	9.351	7337259	453.916	ng/ml
52)	Aroclor 1262 (5)	9.636	4102207	425.584	ng/ml
53)	Aroclor 1262 (6)	10.256	1595624	374.945	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.140	253864	60.899	ng/ml
56)	Aroclor 1268 (2)	9.636	4102207	229.930	ng/ml
57)	Aroclor 1268 (3)	9.706	1615107	104.673	ng/ml
58)	Aroclor 1268 (4)	9.945	122464	9.739	ng/ml
59)	Aroclor 1268 (5)	10.256	1595624	329.870	ng/ml
60)	Aroclor 1268 (6)	10.644	393926	11.581	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R003.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:19
Operator : MJB/KAK
Sample : 9K15010-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R004.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:37
Operator : MJB/KAK
Sample : 9K15010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19
clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.892	13713160	96.904 ng/ml
62) S	DCBP (S)	10.994	6874623	102.128 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.558	2119	0.496 ng/ml
3)	Aroclor 1016 (2)	7.059	6389	0.837 ng/ml
4)	Aroclor 1016 (3)	7.167	3008	0.804 ng/ml
5)	Aroclor 1016 (4)	7.265	3129	0.876 ng/ml
6)	Aroclor 1016 (5)	7.309	3110	0.780 ng/ml
7)	Aroclor 1016 (6)	7.436	3137	0.793 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	6.163	4316	4.164 ng/ml
11)	Aroclor 1221 (3)	6.212	20557	5.874 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.212	20557	7.110 ng/ml
14)	Aroclor 1232 (2)	6.558	2119	1.147 ng/ml
15)	Aroclor 1232 (3)	7.059	6389	1.955 ng/ml
16)	Aroclor 1232 (4)	7.265	3129	2.585 ng/ml
17)	Aroclor 1232 (5)	7.309	3110	2.166 ng/ml
18)	Aroclor 1232 (6)	7.436	3137	2.104 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.558	2119	0.625 ng/ml
21)	Aroclor 1242 (2)	7.059	6389	1.029 ng/ml
22)	Aroclor 1242 (3)	7.167	3008	1.046 ng/ml
23)	Aroclor 1242 (4)	7.265	3129	1.222 ng/ml
24)	Aroclor 1242 (5)	7.309	3110	1.029 ng/ml
25)	Aroclor 1242 (6)	7.436	3137	0.997 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.007	2633	0.708 ng/ml
28)	Aroclor 1248 (2)	7.265	3129	0.680 ng/ml
29)	Aroclor 1248 (3)	7.309	3110	0.712 ng/ml
30)	Aroclor 1248 (4)	7.436	3137	0.613 ng/ml
31)	Aroclor 1248 (5)	7.803	3848	0.605 ng/ml
32)	Aroclor 1248 (6)	7.963	10396	1.867 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.768	2519	0.372 ng/ml
35)	Aroclor 1254 (2)	7.963	10396	1.039 ng/ml
36)	Aroclor 1254 (3)	8.267	6435	0.590 ng/ml
37)	Aroclor 1254 (4)	8.507	5574	0.705 ng/ml
38)	Aroclor 1254 (5)	8.839	5040	0.623 ng/ml
39)	Aroclor 1254 (6)	9.066	3289	1.417 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.402	6623	0.869 ng/ml
42)	Aroclor 1260 (2)	8.608	6206	0.672 ng/ml
43)	Aroclor 1260 (3)	8.839	5040	0.537 ng/ml
44)	Aroclor 1260 (4)	9.350	2874	0.212 ng/ml
45)	Aroclor 1260 (5)	9.637	2031	0.259 ng/ml
46)	Aroclor 1260 (6)	10.250	721	0.233 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R004.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:37
Operator : MJB/KAK
Sample : 9K15010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

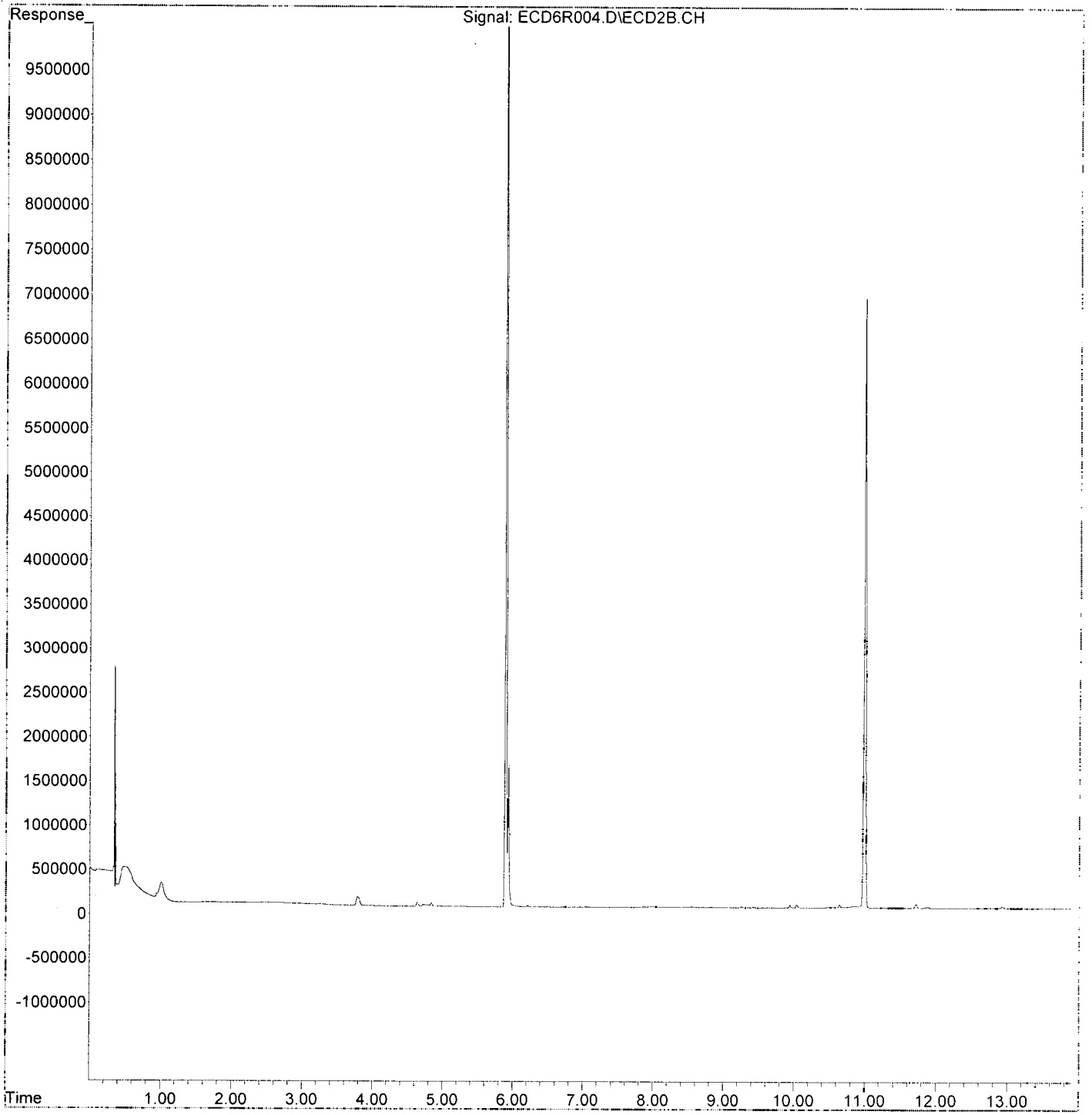
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.608	6206	0.846 ng/ml
49)	Aroclor 1262 (2)	8.908	4037	0.402 ng/ml
50)	Aroclor 1262 (3)	9.090	3058	0.413 ng/ml
51)	Aroclor 1262 (4)	9.350	2874	0.178 ng/ml
52)	Aroclor 1262 (5)	9.637	2031	0.211 ng/ml
53)	Aroclor 1262 (6)	10.250	721	0.169 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.135	2140	0.513 ng/ml
56)	Aroclor 1268 (2)	9.637	2031	0.114 ng/ml
57)	Aroclor 1268 (3)	9.707	1378	0.089 ng/ml
58)	Aroclor 1268 (4)	9.946	34210	2.720 ng/ml
59)	Aroclor 1268 (5)	10.250	721	0.149 ng/ml
60)	Aroclor 1268 (6)	10.646	34919	1.027 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R004.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:37
Operator : MJB/KAK
Sample : 9K15010-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R005.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:58
Operator : MJB/KAK
Sample : 9110782-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.891	13469384	95.181 ng/ml
62)	S DCBP (S)	10.995	12662324	188.109 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.561	3469	0.812 ng/ml
3)	Aroclor 1016 (2)	7.047	4708	0.617 ng/ml
4)	Aroclor 1016 (3)	7.179	2993	0.800 ng/ml
5)	Aroclor 1016 (4)	7.263	4551	1.275 ng/ml
6)	Aroclor 1016 (5)	7.308	3392	0.851 ng/ml
7)	Aroclor 1016 (6)	7.434	3845	0.972 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	6.141	4659	4.494 ng/ml
11)	Aroclor 1221 (3)	6.210	20937	5.982 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.210	20937	7.241 ng/ml
14)	Aroclor 1232 (2)	6.561	3469	1.877 ng/ml
15)	Aroclor 1232 (3)	7.047	4708	1.441 ng/ml
16)	Aroclor 1232 (4)	7.263	4551	3.760 ng/ml
17)	Aroclor 1232 (5)	7.308	3392	2.363 ng/ml
18)	Aroclor 1232 (6)	7.434	3845	2.579 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.561	3469	1.023 ng/ml
21)	Aroclor 1242 (2)	7.047	4708	0.759 ng/ml
22)	Aroclor 1242 (3)	7.179	2993	1.041 ng/ml
23)	Aroclor 1242 (4)	7.263	4551	1.777 ng/ml
24)	Aroclor 1242 (5)	7.308	3392	1.122 ng/ml
25)	Aroclor 1242 (6)	7.434	3845	1.222 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.026	4909	1.320 ng/ml
28)	Aroclor 1248 (2)	7.263	4551	0.989 ng/ml
29)	Aroclor 1248 (3)	7.308	3392	0.777 ng/ml
30)	Aroclor 1248 (4)	7.434	3845	0.752 ng/ml
31)	Aroclor 1248 (5)	7.797	4836	0.760 ng/ml
32)	Aroclor 1248 (6)	7.957	20544	3.690 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.776	5990	0.885 ng/ml
35)	Aroclor 1254 (2)	7.957	20544	2.052 ng/ml
36)	Aroclor 1254 (3)	8.267	16129	1.479 ng/ml
37)	Aroclor 1254 (4)	8.504	13253	1.675 ng/ml
38)	Aroclor 1254 (5)	8.840	14966	1.850 ng/ml
39)	Aroclor 1254 (6)	9.077	4108	1.770 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.403	11606	1.523 ng/ml
42)	Aroclor 1260 (2)	8.608	12924	1.399 ng/ml
43)	Aroclor 1260 (3)	8.840	14966	1.595 ng/ml
44)	Aroclor 1260 (4)	9.351	5762	0.425 ng/ml
45)	Aroclor 1260 (5)	9.638	4894	0.625 ng/ml
46)	Aroclor 1260 (6)	10.254	1944	0.627 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R005.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:58
Operator : MJB/KAK
Sample : 9110782-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

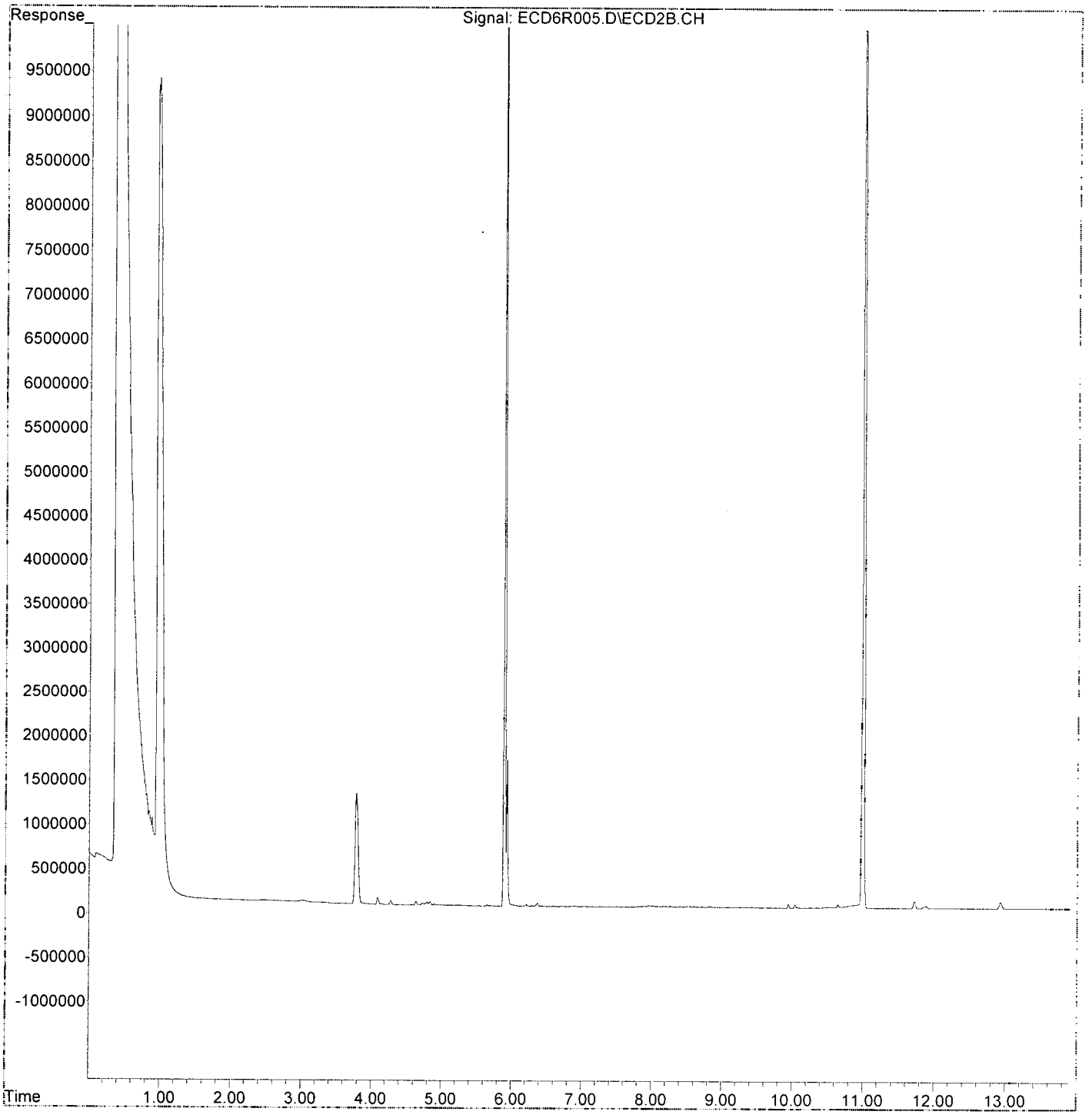
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.608	12924	1.761 ng/ml
49)	Aroclor 1262 (2)	8.910	5775	0.575 ng/ml
50)	Aroclor 1262 (3)	9.094	3714	0.501 ng/ml
51)	Aroclor 1262 (4)	9.351	5762	0.356 ng/ml
52)	Aroclor 1262 (5)	9.638	4894	0.508 ng/ml
53)	Aroclor 1262 (6)	10.254	1944	0.457 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.143	1399	0.336 ng/ml
56)	Aroclor 1268 (2)	9.638	4894	0.274 ng/ml
57)	Aroclor 1268 (3)	9.706	3055	0.198 ng/ml
58)	Aroclor 1268 (4)	9.947	41322	3.286 ng/ml
59)	Aroclor 1268 (5)	10.254	1944	0.402 ng/ml
60)	Aroclor 1268 (6)	10.647	31963	0.940 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R005.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 8:58
Operator : MJB/KAK
Sample : 9110782-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:13:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R006.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:15
Operator : MJB/KAK
Sample : 9110782-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.891	12494258	88.291	ng/ml
62)	S	DCBP (S)	10.994	11836970	175.848	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.561	2716881	635.892	ng/ml
3)		Aroclor 1016 (2)	7.047	5634790	738.126	ng/ml
4)		Aroclor 1016 (3)	7.175	2441260	652.980	ng/ml
5)		Aroclor 1016 (4)	7.261	2781934	779.303	ng/ml
6)		Aroclor 1016 (5)	7.306	3022356	758.075	ng/ml
7)		Aroclor 1016 (6)	7.433	2952298	746.699	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	6.050	192960	184.855	ng/ml
10)		Aroclor 1221 (2)	6.138	325289	313.802	ng/ml
11)		Aroclor 1221 (3)	6.225	1575819	450.252	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.225	1575819	544.993	ng/ml
14)		Aroclor 1232 (2)	6.561	2716881	1470.188	ng/ml
15)		Aroclor 1232 (3)	7.047	5634790	1724.534	ng/ml
16)		Aroclor 1232 (4)	7.261	2781934	2298.309	ng/ml
17)		Aroclor 1232 (5)	7.306	3022356	2105.237	ng/ml
18)		Aroclor 1232 (6)	7.433	2952298	1980.114	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.561	2716881	801.415	ng/ml
21)		Aroclor 1242 (2)	7.047	5634790	907.947	ng/ml
22)		Aroclor 1242 (3)	7.175	2441260	849.110	ng/ml
23)		Aroclor 1242 (4)	7.261	2781934	1086.222	ng/ml
24)		Aroclor 1242 (5)	7.306	3022356	1000.068	ng/ml
25)		Aroclor 1242 (6)	7.433	2952298	938.400	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	7.020	4953744	1332.409	ng/ml
28)		Aroclor 1248 (2)	7.261	2781934	604.606	ng/ml
29)		Aroclor 1248 (3)	7.306	3022356	692.038	ng/ml
30)		Aroclor 1248 (4)	7.433	2952298	577.230	ng/ml
31)		Aroclor 1248 (5)	7.794	686811	107.999	ng/ml
32)		Aroclor 1248 (6)	7.955	2556737	459.177	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.775	2224707	328.519	ng/ml
35)		Aroclor 1254 (2)	7.955	2556737	255.433	ng/ml
36)		Aroclor 1254 (3)	8.266	1324851	121.498	ng/ml
37)		Aroclor 1254 (4)	8.504	904422	114.335	ng/ml
38)		Aroclor 1254 (5)	8.840	7638898	944.453	ng/ml
39)		Aroclor 1254 (6)	9.063	1091786	470.570	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.402	6340907	831.865	ng/ml
42)		Aroclor 1260 (2)	8.607	8052671	871.845	ng/ml
43)		Aroclor 1260 (3)	8.840	7638898	813.887	ng/ml
44)		Aroclor 1260 (4)	9.351	11901750	878.195	ng/ml
45)		Aroclor 1260 (5)	9.635	6447278	823.008	ng/ml
46)		Aroclor 1260 (6)	10.256	2601630	839.342	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

718.51

842.07
843.03
11/15/19

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R006.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:15
Operator : MJB/KAK
Sample : 9110782-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

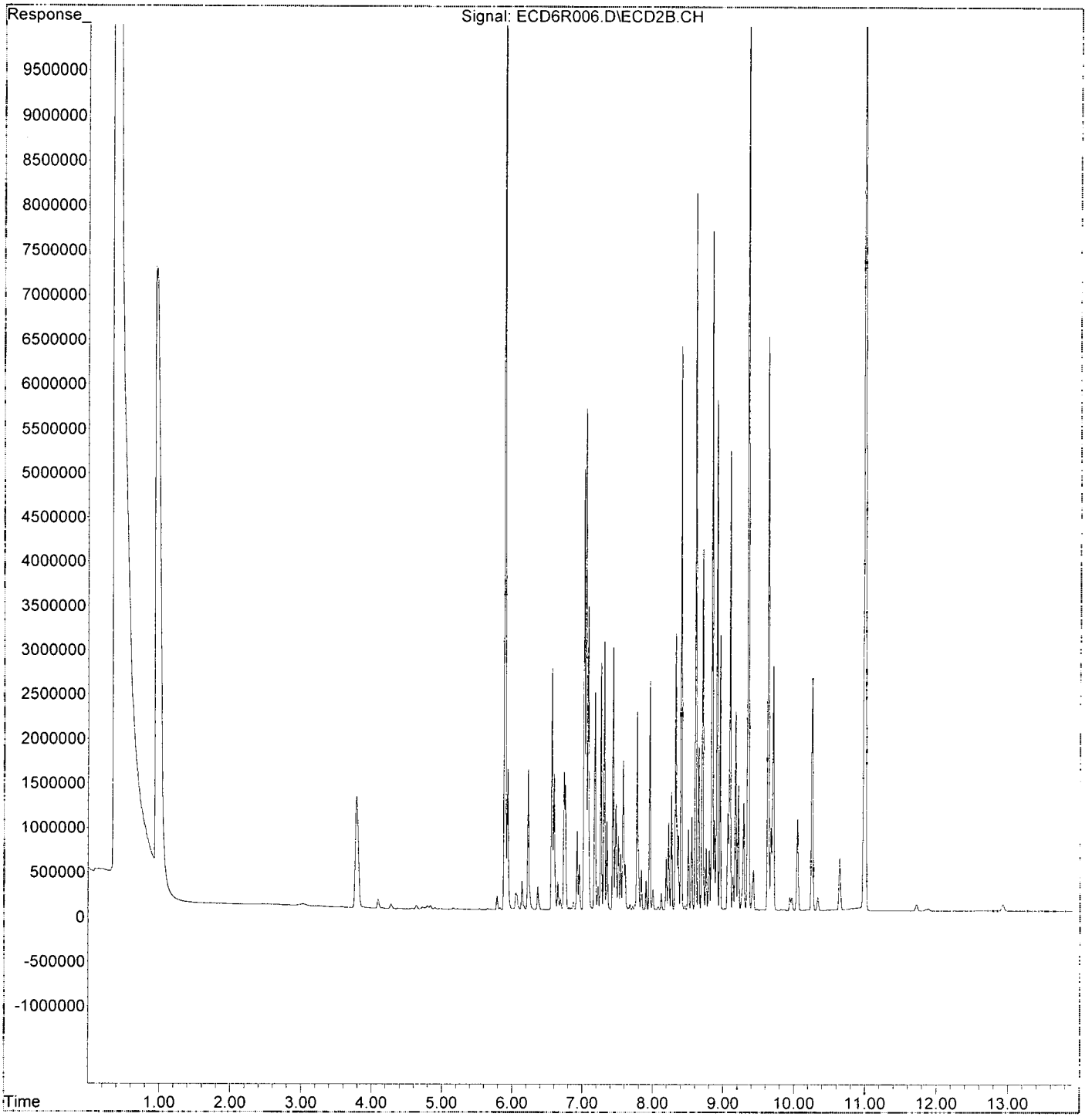
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.607	8052671	1097.495	ng/ml
49)	Aroclor 1262 (2)	8.909	5728389	570.540	ng/ml
50)	Aroclor 1262 (3)	9.094	5170834	697.905	ng/ml
51)	Aroclor 1262 (4)	9.351	11901750	736.296	ng/ml
52)	Aroclor 1262 (5)	9.635	6447278	668.873	ng/ml
53)	Aroclor 1262 (6)	10.256	2601630	611.340	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.139	386527	92.724	ng/ml
56)	Aroclor 1268 (2)	9.635	6447278	361.371	ng/ml
57)	Aroclor 1268 (3)	9.705	2748632	178.135	ng/ml
58)	Aroclor 1268 (4)	9.945	148375	11.799	ng/ml
59)	Aroclor 1268 (5)	10.256	2601630	537.846	ng/ml
60)	Aroclor 1268 (6)	10.645	584797	17.193	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R006.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:15
Operator : MJB/KAK
Sample : 9110782-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R007.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:33
Operator : MJB/KAK
Sample : 9110782-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19
Q-19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.892	12837487	90.716	ng/ml
62) S	DCBP (S)	10.994	12103303	179.804	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.561	2531334	592.464	ng/ml
3)	Aroclor 1016 (2)	7.048	5577298	730.594	ng/ml
4)	Aroclor 1016 (3)	7.176	2333843	624.248	ng/ml
5)	Aroclor 1016 (4)	7.262	2645285	741.024	ng/ml
6)	Aroclor 1016 (5)	7.308	3021164	757.776	ng/ml
7)	Aroclor 1016 (6)	7.433	2814574	711.866	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	6.051	178911	171.396	ng/ml
10)	Aroclor 1221 (2)	6.139	304112	293.373	ng/ml
11)	Aroclor 1221 (3)	6.226	1494691	427.072	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.226	1494691	516.935	ng/ml
14)	Aroclor 1232 (2)	6.561	2531334	1369.783	ng/ml
15)	Aroclor 1232 (3)	7.048	5577298	1706.939	ng/ml
16)	Aroclor 1232 (4)	7.262	2645285	2185.416	ng/ml
17)	Aroclor 1232 (5)	7.308	3021164	2104.407	ng/ml
18)	Aroclor 1232 (6)	7.433	2814574	1887.742	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.561	2531334	746.683	ng/ml
21)	Aroclor 1242 (2)	7.048	5577298	898.683	ng/ml
22)	Aroclor 1242 (3)	7.176	2333843	811.748	ng/ml
23)	Aroclor 1242 (4)	7.262	2645285	1032.867	ng/ml
24)	Aroclor 1242 (5)	7.308	3021164	999.674	ng/ml
25)	Aroclor 1242 (6)	7.433	2814574	894.624	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	7.021	4770707	1283.178	ng/ml
28)	Aroclor 1248 (2)	7.262	2645285	574.907	ng/ml
29)	Aroclor 1248 (3)	7.308	3021164	691.765	ng/ml
30)	Aroclor 1248 (4)	7.433	2814574	550.303	ng/ml
31)	Aroclor 1248 (5)	7.776	2232161	351.000	ng/ml
32)	Aroclor 1248 (6)	7.956	2593074	465.703	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.776	2232161	329.619	ng/ml
35)	Aroclor 1254 (2)	7.956	2593074	259.064	ng/ml
36)	Aroclor 1254 (3)	8.266	1306724	119.836	ng/ml
37)	Aroclor 1254 (4)	8.505	902153	114.048	ng/ml
38)	Aroclor 1254 (5)	8.841	7829551	968.025	ng/ml
39)	Aroclor 1254 (6)	9.063	1101240	474.644	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.403	6458377	847.276	ng/ml
42)	Aroclor 1260 (2)	8.608	8155190	882.945	ng/ml
43)	Aroclor 1260 (3)	8.841	7829551	834.200	ng/ml
44)	Aroclor 1260 (4)	9.351	12137574	895.596	ng/ml
45)	Aroclor 1260 (5)	9.636	6499565	829.683	ng/ml
46)	Aroclor 1260 (6)	10.256	2624215	846.628	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

592 11/15/19
693.00

856.056 11/15/19

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R007.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:33
Operator : MJB/KAK
Sample : 9110782-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

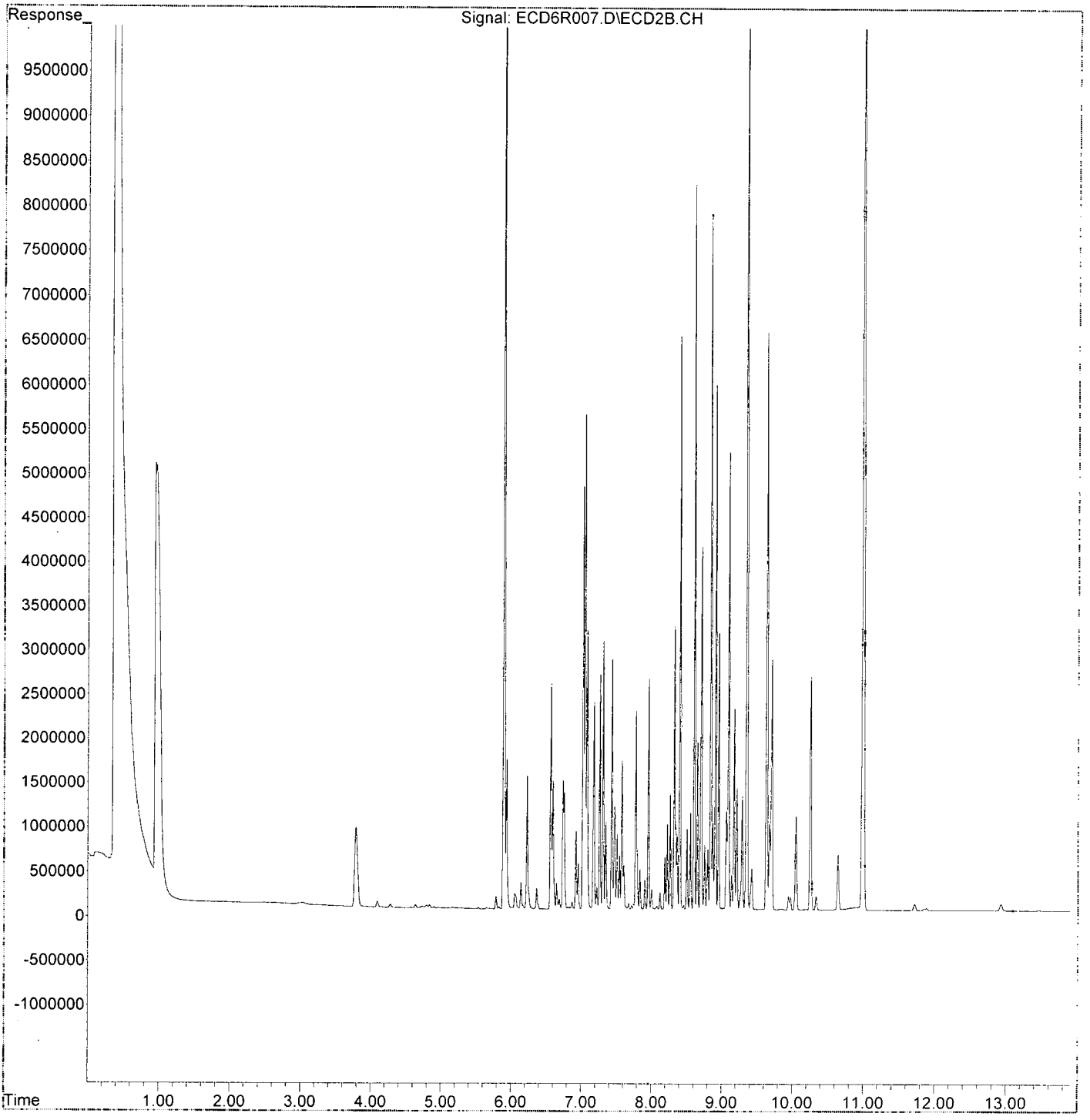
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.608	8155190	1111.468	ng/ml
49)	Aroclor 1262 (2)	8.910	5914915	589.118	ng/ml
50)	Aroclor 1262 (3)	9.095	5171406	697.982	ng/ml
51)	Aroclor 1262 (4)	9.351	12137574	750.885	ng/ml
52)	Aroclor 1262 (5)	9.636	6499565	674.298	ng/ml
53)	Aroclor 1262 (6)	10.256	2624215	616.647	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.139	397083	95.256	ng/ml
56)	Aroclor 1268 (2)	9.636	6499565	364.302	ng/ml
57)	Aroclor 1268 (3)	9.706	2821059	182.828	ng/ml
58)	Aroclor 1268 (4)	9.945	150965	12.005	ng/ml
59)	Aroclor 1268 (5)	10.256	2624215	542.515	ng/ml
60)	Aroclor 1268 (6)	10.644	614928	18.079	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R007.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:33
Operator : MJB/KAK
Sample : 9110782-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R008.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:51
Operator : MJB/KAK
Sample : A9K0332-01
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.892	21079541	148.959 ng/ml
62) S	DCBP (S)	10.994	10822670	160.779 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.563	2960	0.693 ng/ml
3)	Aroclor 1016 (2)	7.057	9551	1.251 ng/ml
4)	Aroclor 1016 (3)	7.184	3589	0.960 ng/ml
5)	Aroclor 1016 (4)	7.265	4049	1.134 ng/ml
6)	Aroclor 1016 (5)	7.310	3026	0.759 ng/ml
7)	Aroclor 1016 (6)	7.435	3191	0.807 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	6.014	19085	18.284 ng/ml
10)	Aroclor 1221 (2)	6.144	4973	4.798 ng/ml
11)	Aroclor 1221 (3)	6.211	26995	7.713 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.211	26995	9.336 ng/ml
14)	Aroclor 1232 (2)	6.563	2960	1.602 ng/ml
15)	Aroclor 1232 (3)	7.057	9551	2.923 ng/ml
16)	Aroclor 1232 (4)	7.265	4049	3.345 ng/ml
17)	Aroclor 1232 (5)	7.310	3026	2.108 ng/ml
18)	Aroclor 1232 (6)	7.435	3191	2.140 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.563	2960	0.873 ng/ml
21)	Aroclor 1242 (2)	7.057	9551	1.539 ng/ml
22)	Aroclor 1242 (3)	7.184	3589	1.248 ng/ml
23)	Aroclor 1242 (4)	7.265	4049	1.581 ng/ml
24)	Aroclor 1242 (5)	7.310	3026	1.001 ng/ml
25)	Aroclor 1242 (6)	7.435	3191	1.014 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.030	8191	2.203 ng/ml
28)	Aroclor 1248 (2)	7.265	4049	0.880 ng/ml
29)	Aroclor 1248 (3)	7.310	3026	0.693 ng/ml
30)	Aroclor 1248 (4)	7.435	3191	0.624 ng/ml
31)	Aroclor 1248 (5)	7.797	3708	0.583 ng/ml
32)	Aroclor 1248 (6)	7.957	16430	2.951 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.777	5530	0.817 ng/ml
35)	Aroclor 1254 (2)	7.957	16430	1.641 ng/ml
36)	Aroclor 1254 (3)	8.267	14159	1.298 ng/ml
37)	Aroclor 1254 (4)	8.504	12543	1.586 ng/ml
38)	Aroclor 1254 (5)	8.840	16437	2.032 ng/ml
39)	Aroclor 1254 (6)	9.077	3897	1.680 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.403	10578	1.388 ng/ml
42)	Aroclor 1260 (2)	8.608	14178	1.535 ng/ml
43)	Aroclor 1260 (3)	8.840	16437	1.751 ng/ml
44)	Aroclor 1260 (4)	9.350	8728	0.644 ng/ml
45)	Aroclor 1260 (5)	9.636	6059	0.773 ng/ml
46)	Aroclor 1260 (6)	10.256	2439	0.787 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R008.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:51
Operator : MJB/KAK
Sample : A9K0332-01
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

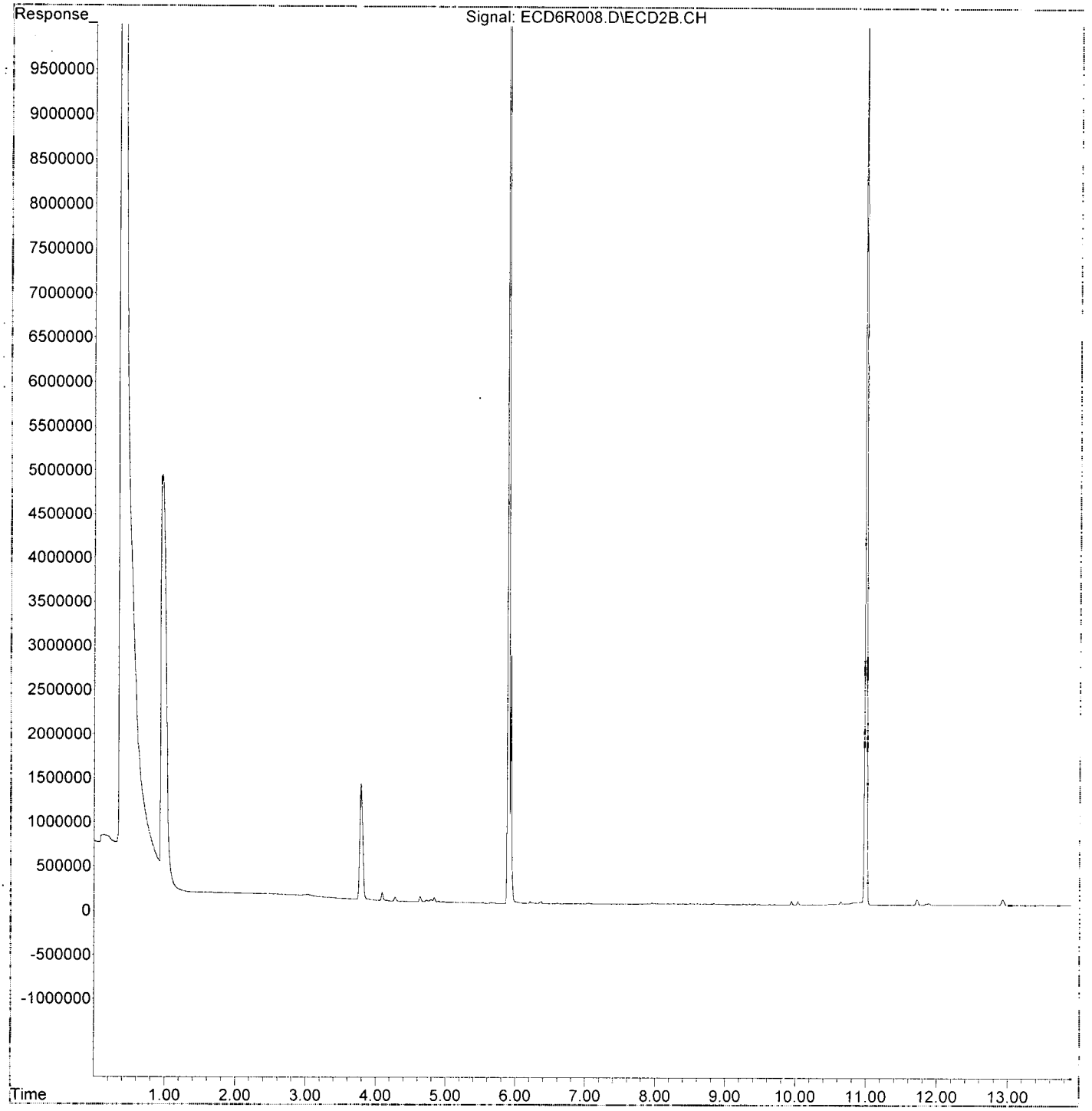
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.608	14178	1.932 ng/ml
49)	Aroclor 1262 (2)	8.910	6035	0.601 ng/ml
50)	Aroclor 1262 (3)	9.093	4216	0.569 ng/ml
51)	Aroclor 1262 (4)	9.350	8728	0.540 ng/ml
52)	Aroclor 1262 (5)	9.636	6059	0.629 ng/ml
53)	Aroclor 1262 (6)	10.256	2439	0.573 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.142	1177	0.282 ng/ml
56)	Aroclor 1268 (2)	9.636	6059	0.340 ng/ml
57)	Aroclor 1268 (3)	9.707	3470	0.225 ng/ml
58)	Aroclor 1268 (4)	9.946	40093	3.188 ng/ml
59)	Aroclor 1268 (5)	10.256	2439	0.504 ng/ml
60)	Aroclor 1268 (6)	10.646	30234	0.889 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R008.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 9:51
Operator : MJB/KAK
Sample : A9K0332-01
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 10:14:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R009.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:09
Operator : MJB/KAK
Sample : A9K0332-02
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:29:34 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
1)	S	TCMX (S)	5.891	19650720	138.862	ng/ml
62)	S	DCBP (S)	10.993	9272532	137.751	ng/ml
Target Compounds						
2)		Aroclor 1016 (1)	6.562	3112	0.728	ng/ml
3)		Aroclor 1016 (2)	7.056	6451	0.845	ng/ml
4)		Aroclor 1016 (3)	7.182	3152	0.843	ng/ml
5)		Aroclor 1016 (4)	7.263	4103	1.149	ng/ml
6)		Aroclor 1016 (5)	7.308	2779	0.697	ng/ml
7)		Aroclor 1016 (6)	7.433	3000	0.759	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/ml
10)		Aroclor 1221 (2)	6.144	5004	4.827	ng/ml
11)		Aroclor 1221 (3)	6.211	26501	7.572	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.211	26501	9.165	ng/ml
14)		Aroclor 1232 (2)	6.562	3112	1.684	ng/ml
15)		Aroclor 1232 (3)	7.056	6451	1.974	ng/ml
16)		Aroclor 1232 (4)	7.263	4103	3.390	ng/ml
17)		Aroclor 1232 (5)	7.308	2779	1.935	ng/ml
18)		Aroclor 1232 (6)	7.433	3000	2.012	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.562	3112	0.918	ng/ml
21)		Aroclor 1242 (2)	7.056	6451	1.040	ng/ml
22)		Aroclor 1242 (3)	7.182	3152	1.096	ng/ml
23)		Aroclor 1242 (4)	7.263	4103	1.602	ng/ml
24)		Aroclor 1242 (5)	7.308	2779	0.919	ng/ml
25)		Aroclor 1242 (6)	7.433	3000	0.954	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	7.029	5863	1.577	ng/ml
28)		Aroclor 1248 (2)	7.263	4103	0.892	ng/ml
29)		Aroclor 1248 (3)	7.308	2779	0.636	ng/ml
30)		Aroclor 1248 (4)	7.433	3000	0.587	ng/ml
31)		Aroclor 1248 (5)	7.797	3994	0.628	ng/ml
32)		Aroclor 1248 (6)	7.956	15457	2.776	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.776	5701	0.842	ng/ml
35)		Aroclor 1254 (2)	7.956	15457	1.544	ng/ml
36)		Aroclor 1254 (3)	8.266	12973	1.190	ng/ml
37)		Aroclor 1254 (4)	8.503	11494	1.453	ng/ml
38)		Aroclor 1254 (5)	8.839	14805	1.830	ng/ml
39)		Aroclor 1254 (6)	9.074	3958	1.706	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.403	9672	1.269	ng/ml
42)		Aroclor 1260 (2)	8.607	12575	1.361	ng/ml
43)		Aroclor 1260 (3)	8.839	14805	1.577	ng/ml
44)		Aroclor 1260 (4)	9.350	7449	0.550	ng/ml
45)		Aroclor 1260 (5)	9.635	6209	0.793	ng/ml
46)		Aroclor 1260 (6)	10.254	4253	1.372	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R009.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:09
Operator : MJB/KAK
Sample : A9K0332-02
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:29:34 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

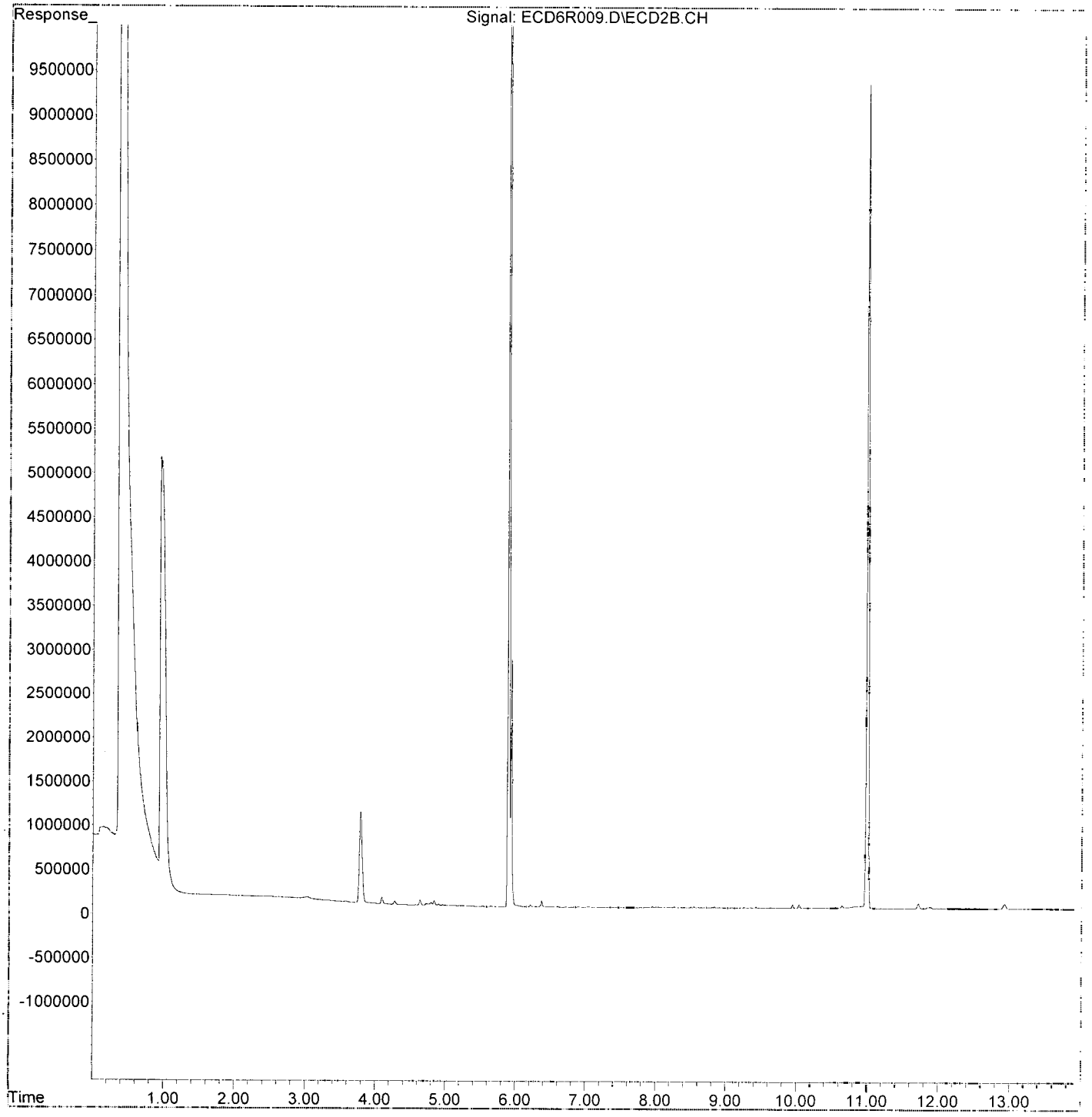
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.607	12575	1.714 ng/ml
49)	Aroclor 1262 (2)	8.910	5890	0.587 ng/ml
50)	Aroclor 1262 (3)	9.092	4528	0.611 ng/ml
51)	Aroclor 1262 (4)	9.350	7449	0.461 ng/ml
52)	Aroclor 1262 (5)	9.635	6209	0.644 ng/ml
53)	Aroclor 1262 (6)	10.254	4253	0.999 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.139	2020	0.485 ng/ml
56)	Aroclor 1268 (2)	9.635	6209	0.348 ng/ml
57)	Aroclor 1268 (3)	9.705	4079	0.264 ng/ml
58)	Aroclor 1268 (4)	9.945	42106	3.348 ng/ml
59)	Aroclor 1268 (5)	10.254	4253	0.879 ng/ml
60)	Aroclor 1268 (6)	10.644	28690	0.843 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R009.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:09
Operator : MJB/KAK
Sample : A9K0332-02
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:29:34 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R010.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:26
Operator : MJB/KAK
Sample : 9K15010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.892	34952909	246.995	ng/ml
62)	S DCBP (S)	10.994	17467214	259.489	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.561	2065403	483.412	ng/ml
3)	Aroclor 1016 (2)	7.048	3640539	476.890	ng/ml
4)	Aroclor 1016 (3)	7.176	1842977	492.953	ng/ml
5)	Aroclor 1016 (4)	7.262	1883512	527.628	ng/ml
6)	Aroclor 1016 (5)	7.307	2086569	523.358	ng/ml
7)	Aroclor 1016 (6)	7.433	2033584	514.337	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	6.051	166341	159.354	ng/ml
10)	Aroclor 1221 (2)	6.139	262885	253.602	ng/ml
11)	Aroclor 1221 (3)	6.226	1241617	354.762	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.226	1241617	429.410	ng/ml
14)	Aroclor 1232 (2)	6.561	2065403	1117.653	ng/ml
15)	Aroclor 1232 (3)	7.048	3640539	1114.191	ng/ml
16)	Aroclor 1232 (4)	7.262	1883512	1556.073	ng/ml
17)	Aroclor 1232 (5)	7.307	2086569	1453.410	ng/ml
18)	Aroclor 1232 (6)	7.433	2033584	1363.930	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.561	2065403	609.245	ng/ml
21)	Aroclor 1242 (2)	7.048	3640539	586.608	ng/ml
22)	Aroclor 1242 (3)	7.176	1842977	641.017	ng/ml
23)	Aroclor 1242 (4)	7.262	1883512	735.428	ng/ml
24)	Aroclor 1242 (5)	7.307	2086569	690.425	ng/ml
25)	Aroclor 1242 (6)	7.433	2033584	646.383	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	7.021	3262379	877.482	ng/ml
28)	Aroclor 1248 (2)	7.262	1883512	409.349	ng/ml
29)	Aroclor 1248 (3)	7.307	2086569	477.768	ng/ml
30)	Aroclor 1248 (4)	7.433	2033584	397.604	ng/ml
31)	Aroclor 1248 (5)	7.776	1524140	239.666	ng/ml
32)	Aroclor 1248 (6)	7.955	1614522	289.960	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.776	1524140	225.067	ng/ml
35)	Aroclor 1254 (2)	7.955	1614522	161.300	ng/ml
36)	Aroclor 1254 (3)	8.267	962760	88.292	ng/ml
37)	Aroclor 1254 (4)	8.505	616568	77.945	ng/ml
38)	Aroclor 1254 (5)	8.840	5013590	619.867	ng/ml
39)	Aroclor 1254 (6)	9.063	717343	309.182	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.403	4210609	552.391	ng/ml
42)	Aroclor 1260 (2)	8.607	4978694	539.032	ng/ml
43)	Aroclor 1260 (3)	8.840	5013590	534.174	ng/ml
44)	Aroclor 1260 (4)	9.351	7404312	546.343	ng/ml
45)	Aroclor 1260 (5)	9.635	4241739	541.467	ng/ml
46)	Aroclor 1260 (6)	10.256	1701675	548.997	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

503.10

543.73

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R010.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:26
Operator : MJB/KAK
Sample : 9K15010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

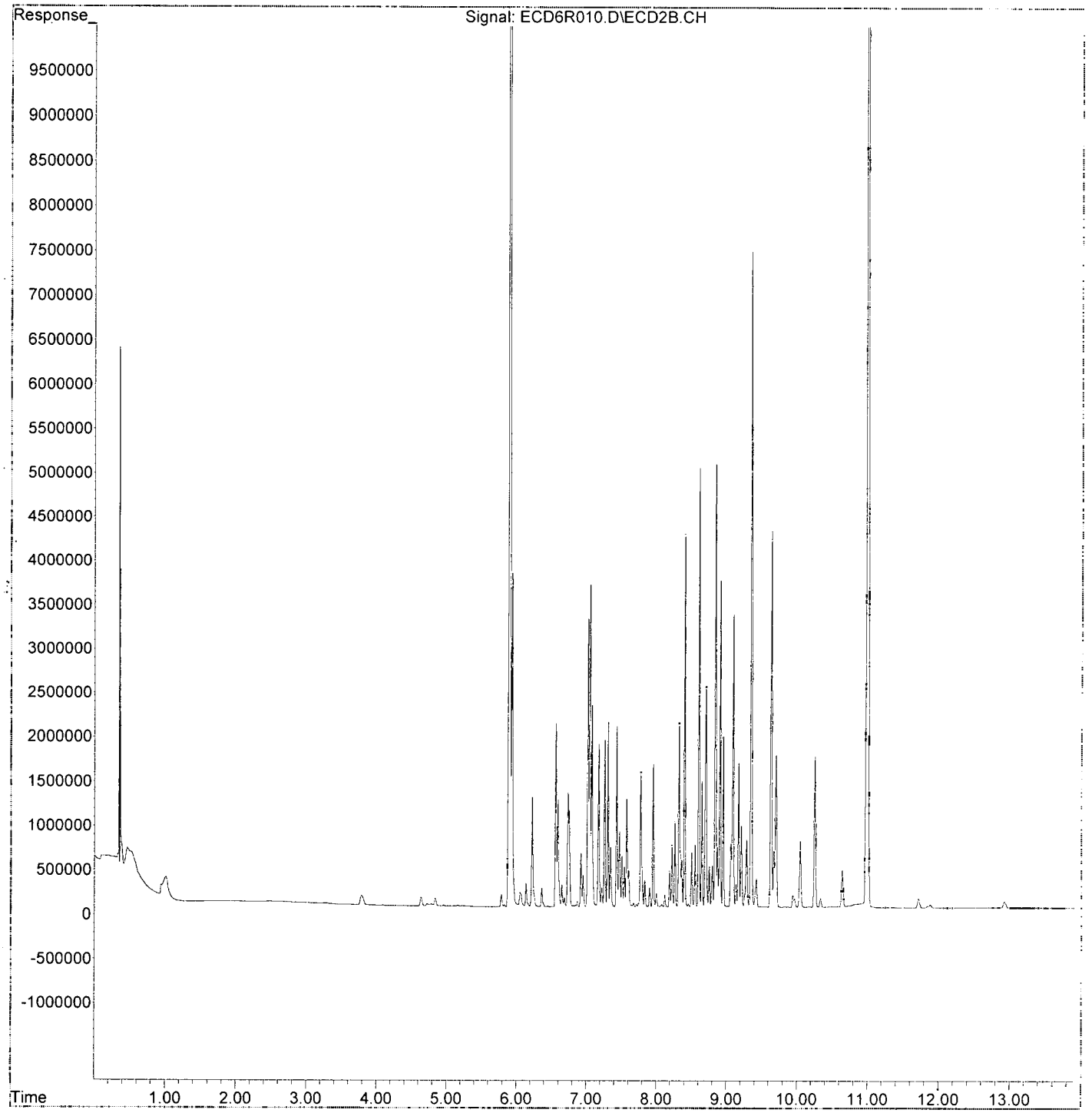
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.607	4978694	678.544 ng/ml
49)	Aroclor 1262 (2)	8.910	3693144	367.832 ng/ml
50)	Aroclor 1262 (3)	9.094	3306882	446.328 ng/ml
51)	Aroclor 1262 (4)	9.351	7404312	458.064 ng/ml
52)	Aroclor 1262 (5)	9.635	4241739	440.060 ng/ml
53)	Aroclor 1262 (6)	10.256	1701675	399.865 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.139	264928	63.554 ng/ml
56)	Aroclor 1268 (2)	9.635	4241739	237.750 ng/ml
57)	Aroclor 1268 (3)	9.706	1716428	111.239 ng/ml
58)	Aroclor 1268 (4)	9.946	137727	10.952 ng/ml
59)	Aroclor 1268 (5)	10.256	1701675	351.794 ng/ml
60)	Aroclor 1268 (6)	10.644	413975	12.171 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R010.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:26
Operator : MJB/KAK
Sample : 9K15010-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R011.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:44
Operator : MJB/KAK
Sample : 9K15010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19 clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.891	13606819	96.153 ng/ml
62)	S DCBP (S)	10.991	7083144	105.226 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.556	1527	0.358 ng/ml
3)	Aroclor 1016 (2)	7.059	7217	0.945 ng/ml
4)	Aroclor 1016 (3)	7.165	2677	0.716 ng/ml
5)	Aroclor 1016 (4)	7.269	3207	0.898 ng/ml
6)	Aroclor 1016 (5)	7.309	3258	0.817 ng/ml
7)	Aroclor 1016 (6)	7.442	3338	0.844 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	6.066	12446	11.924 ng/ml
10)	Aroclor 1221 (2)	6.139	4883	4.711 ng/ml
11)	Aroclor 1221 (3)	6.212	19723	5.635 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.212	19723	6.821 ng/ml
14)	Aroclor 1232 (2)	6.556	1527	0.827 ng/ml
15)	Aroclor 1232 (3)	7.059	7217	2.209 ng/ml
16)	Aroclor 1232 (4)	7.269	3207	2.650 ng/ml
17)	Aroclor 1232 (5)	7.309	3258	2.269 ng/ml
18)	Aroclor 1232 (6)	7.442	3338	2.239 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.556	1527	0.451 ng/ml
21)	Aroclor 1242 (2)	7.059	7217	1.163 ng/ml
22)	Aroclor 1242 (3)	7.165	2677	0.931 ng/ml
23)	Aroclor 1242 (4)	7.269	3207	1.252 ng/ml
24)	Aroclor 1242 (5)	7.309	3258	1.078 ng/ml
25)	Aroclor 1242 (6)	7.442	3338	1.061 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.031	6375	1.715 ng/ml
28)	Aroclor 1248 (2)	7.269	3207	0.697 ng/ml
29)	Aroclor 1248 (3)	7.309	3258	0.746 ng/ml
30)	Aroclor 1248 (4)	7.442	3338	0.653 ng/ml
31)	Aroclor 1248 (5)	7.781	3306	0.520 ng/ml
32)	Aroclor 1248 (6)	7.967	12598	2.263 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.775	3309	0.489 ng/ml
35)	Aroclor 1254 (2)	7.967	12598	1.259 ng/ml
36)	Aroclor 1254 (3)	8.268	8108	0.744 ng/ml
37)	Aroclor 1254 (4)	8.507	7392	0.935 ng/ml
38)	Aroclor 1254 (5)	8.839	6325	0.782 ng/ml
39)	Aroclor 1254 (6)	9.061	3505	1.511 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.402	8365	1.097 ng/ml
42)	Aroclor 1260 (2)	8.609	7823	0.847 ng/ml
43)	Aroclor 1260 (3)	8.839	6325	0.674 ng/ml
44)	Aroclor 1260 (4)	9.351	3127	0.231 ng/ml
45)	Aroclor 1260 (5)	9.634	2228	0.284 ng/ml
46)	Aroclor 1260 (6)	10.255	1074	0.346 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R011.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:44
Operator : MJB/KAK
Sample : 9K15010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

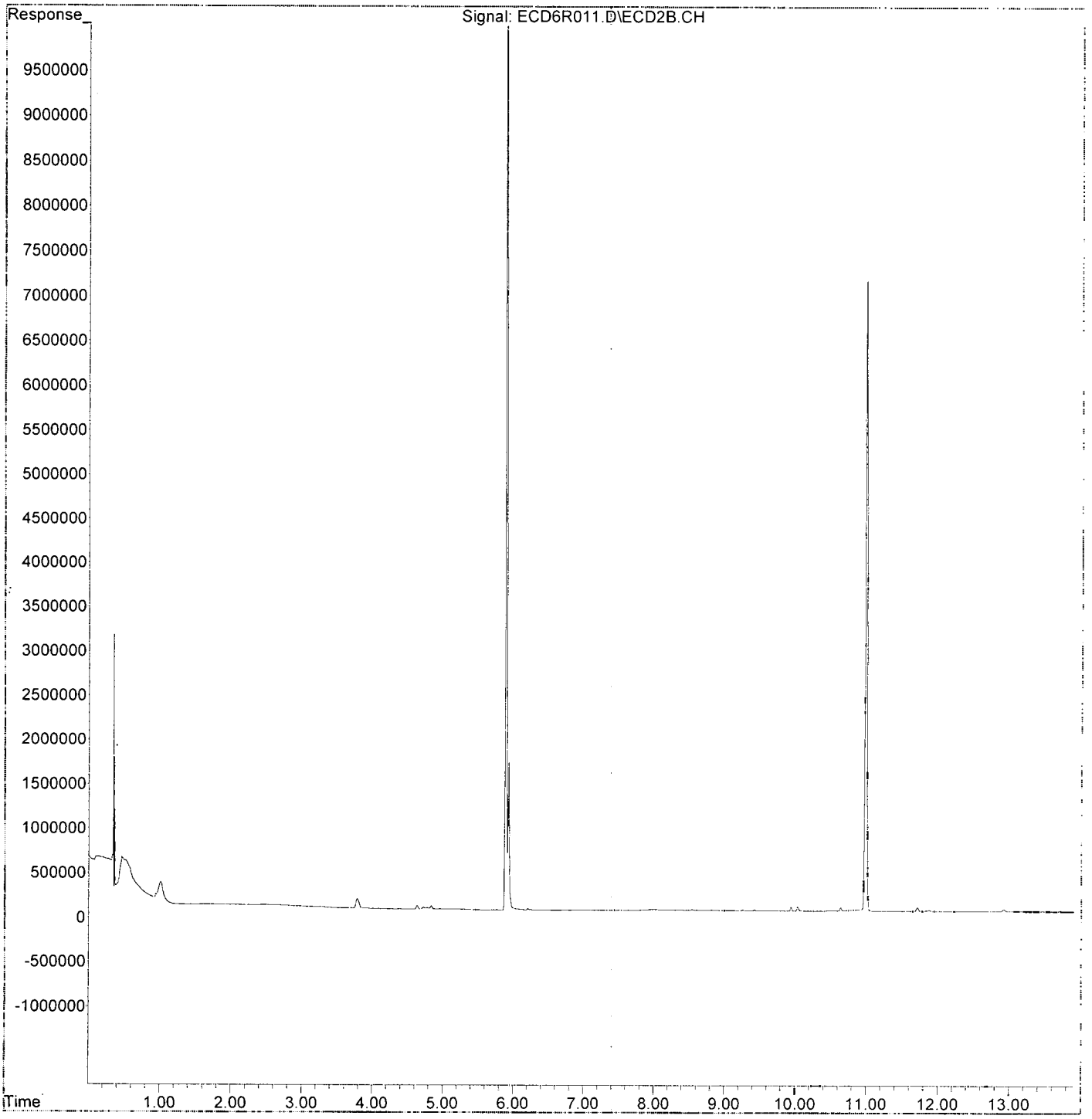
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.609	7823	1.066 ng/ml
49)	Aroclor 1262 (2)	8.910	5131	0.511 ng/ml
50)	Aroclor 1262 (3)	9.084	3838	0.518 ng/ml
51)	Aroclor 1262 (4)	9.351	3127	0.193 ng/ml
52)	Aroclor 1262 (5)	9.634	2228	0.231 ng/ml
53)	Aroclor 1262 (6)	10.255	1074	0.252 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.136	2706	0.649 ng/ml
56)	Aroclor 1268 (2)	9.634	2228	0.125 ng/ml
57)	Aroclor 1268 (3)	9.708	1499	0.097 ng/ml
58)	Aroclor 1268 (4)	9.944	45036	3.581 ng/ml
59)	Aroclor 1268 (5)	10.255	1074	0.222 ng/ml
60)	Aroclor 1268 (6)	10.644	38563	1.134 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R011.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 10:44
Operator : MJB/KAK
Sample : 9K15010-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:00:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R014.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:37
Operator : MJB/KAK
Sample : 9K15010-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:54:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.891	34136203	241.224	ng/ml
62)	S	DCBP (S)	10.991	16901797	251.090	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.560	1996583	467.304	ng/ml
3)		Aroclor 1016 (2)	7.047	3684481	482.646	ng/ml
4)		Aroclor 1016 (3)	7.175	1743540	466.356	ng/ml
5)		Aroclor 1016 (4)	7.261	1766921	494.967	ng/ml
6)		Aroclor 1016 (5)	7.307	1878367	471.137	ng/ml
7)		Aroclor 1016 (6)	7.432	1934246	489.212	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	6.050	154350	147.867	ng/ml
10)		Aroclor 1221 (2)	6.137	252814	243.887	ng/ml
11)		Aroclor 1221 (3)	6.224	1185459	338.717	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.224	1185459	409.988	ng/ml
14)		Aroclor 1232 (2)	6.560	1996583	1080.412	ng/ml
15)		Aroclor 1232 (3)	7.047	3684481	1127.640	ng/ml
16)		Aroclor 1232 (4)	7.261	1766921	1459.751	ng/ml
17)		Aroclor 1232 (5)	7.307	1878367	1308.386	ng/ml
18)		Aroclor 1232 (6)	7.432	1934246	1297.304	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.560	1996583	588.944	ng/ml
21)		Aroclor 1242 (2)	7.047	3684481	593.689	ng/ml
22)		Aroclor 1242 (3)	7.175	1743540	606.431	ng/ml
23)		Aroclor 1242 (4)	7.261	1766921	689.904	ng/ml
24)		Aroclor 1242 (5)	7.307	1878367	621.533	ng/ml
25)		Aroclor 1242 (6)	7.432	1934246	614.808	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	7.020	3031587	815.406	ng/ml
28)		Aroclor 1248 (2)	7.261	1766921	384.010	ng/ml
29)		Aroclor 1248 (3)	7.307	1878367	430.096	ng/ml
30)		Aroclor 1248 (4)	7.432	1934246	378.182	ng/ml
31)		Aroclor 1248 (5)	7.775	1407091	221.261	ng/ml
32)		Aroclor 1248 (6)	7.954	1547875	277.991	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.775	1407091	207.783	ng/ml
35)		Aroclor 1254 (2)	7.954	1547875	154.642	ng/ml
36)		Aroclor 1254 (3)	8.266	847811	77.750	ng/ml
37)		Aroclor 1254 (4)	8.504	561415	70.973	ng/ml
38)		Aroclor 1254 (5)	8.839	4844322	598.939	ng/ml
39)		Aroclor 1254 (6)	9.062	666454	287.248	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.402	3768778	494.427	ng/ml
42)		Aroclor 1260 (2)	8.606	4719065	510.923	ng/ml
43)		Aroclor 1260 (3)	8.839	4844322	516.139	ng/ml
44)		Aroclor 1260 (4)	9.350	7292130	538.065	ng/ml
45)		Aroclor 1260 (5)	9.634	4192984	535.243	ng/ml
46)		Aroclor 1260 (6)	10.254	1553450	501.176	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

478.00 11/15/19

516.00

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R014.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:37
Operator : MJB/KAK
Sample : 9K15010-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:54:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

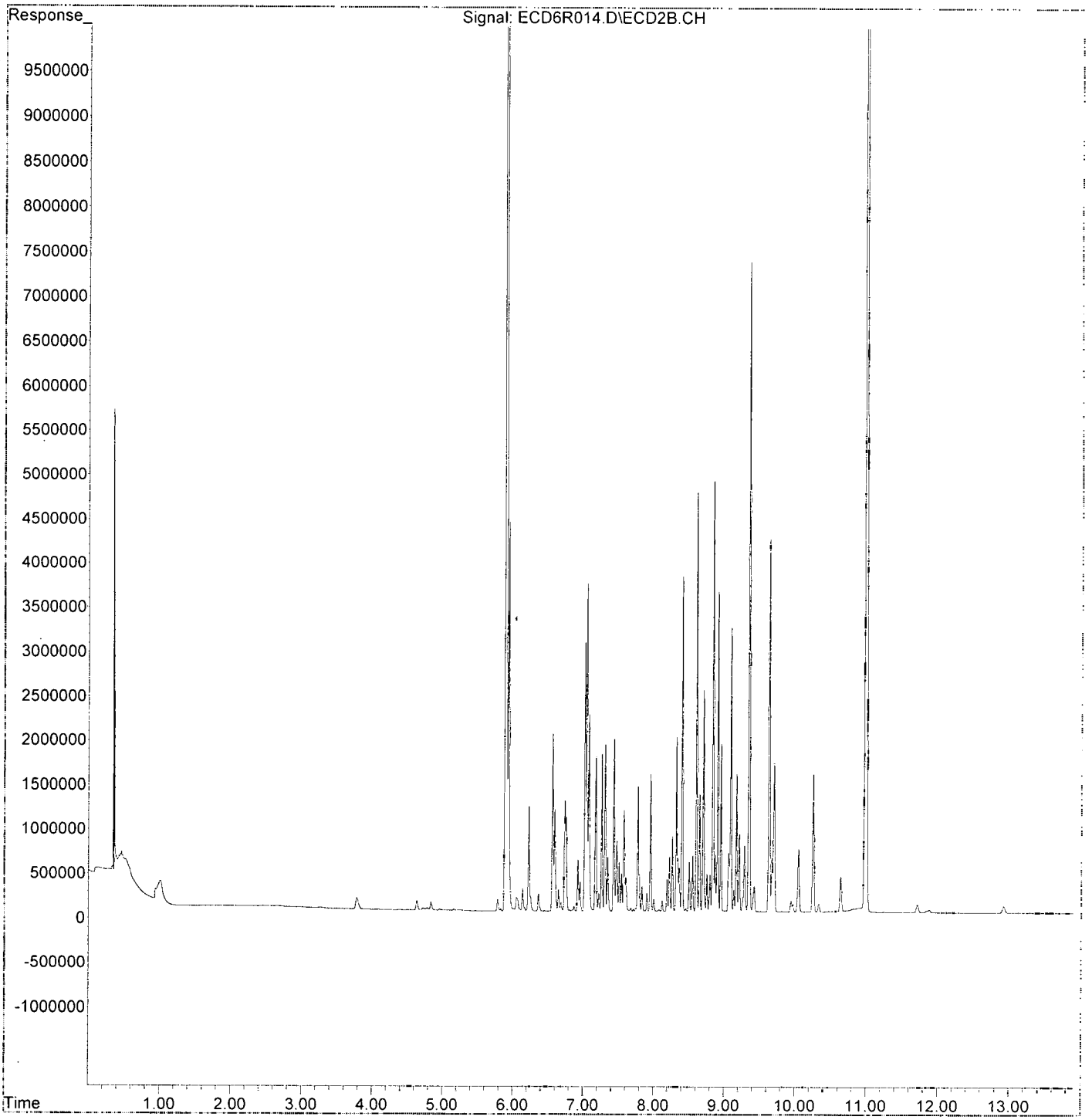
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.606	4719065	643.159 ng/ml
49)	Aroclor 1262 (2)	8.909	3594962	358.054 ng/ml
50)	Aroclor 1262 (3)	9.093	3191547	430.762 ng/ml
51)	Aroclor 1262 (4)	9.350	7292130	451.124 ng/ml
52)	Aroclor 1262 (5)	9.634	4192984	435.001 ng/ml
53)	Aroclor 1262 (6)	10.254	1553450	365.035 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.138	249465	59.844 ng/ml
56)	Aroclor 1268 (2)	9.634	4192984	235.018 ng/ml
57)	Aroclor 1268 (3)	9.704	1660886	107.639 ng/ml
58)	Aroclor 1268 (4)	9.944	120558	9.587 ng/ml
59)	Aroclor 1268 (5)	10.254	1553450	321.151 ng/ml
60)	Aroclor 1268 (6)	10.642	391409	11.507 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R014.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:37
Operator : MJB/KAK
Sample : 9K15010-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 11:54:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R015.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:55
Operator : MJB/KAK
Sample : 9K15010-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 12:38:30 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.891	14052610	99.303	ng/ml
62)	S	DCBP (S)	10.991	6977266	103.653	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.562	1216	0.285	ng/ml
3)		Aroclor 1016 (2)	7.058	5125	0.671	ng/ml
4)		Aroclor 1016 (3)	7.169	1806	0.483	ng/ml
5)		Aroclor 1016 (4)	7.269	1861	0.521	ng/ml
6)		Aroclor 1016 (5)	7.316	1713	0.430	ng/ml
7)		Aroclor 1016 (6)	7.445	1329	0.336	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	6.027	15639	14.982	ng/ml
10)		Aroclor 1221 (2)	6.141	4256	4.105	ng/ml
11)		Aroclor 1221 (3)	6.211	20098	5.743	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.211	20098	6.951	ng/ml
14)		Aroclor 1232 (2)	6.562	1216	0.658	ng/ml
15)		Aroclor 1232 (3)	7.058	5125	1.568	ng/ml
16)		Aroclor 1232 (4)	7.269	1861	1.538	ng/ml
17)		Aroclor 1232 (5)	7.316	1713	1.193	ng/ml
18)		Aroclor 1232 (6)	7.445	1329	0.891	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.562	1216	0.359	ng/ml
21)		Aroclor 1242 (2)	7.058	5125	0.826	ng/ml
22)		Aroclor 1242 (3)	7.169	1806	0.628	ng/ml
23)		Aroclor 1242 (4)	7.269	1861	0.727	ng/ml
24)		Aroclor 1242 (5)	7.316	1713	0.567	ng/ml
25)		Aroclor 1242 (6)	7.445	1329	0.422	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	7.032	4830	1.299	ng/ml
28)		Aroclor 1248 (2)	7.269	1861	0.404	ng/ml
29)		Aroclor 1248 (3)	7.316	1713	0.392	ng/ml
30)		Aroclor 1248 (4)	7.445	1329	0.260	ng/ml
31)		Aroclor 1248 (5)	7.784	905	0.142	ng/ml
32)		Aroclor 1248 (6)	7.958	7489	1.345	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.778	1018	0.150	ng/ml
35)		Aroclor 1254 (2)	7.958	7489	0.748	ng/ml
36)		Aroclor 1254 (3)	8.269	4035	0.370	ng/ml
37)		Aroclor 1254 (4)	8.506	3335	0.422	ng/ml
38)		Aroclor 1254 (5)	8.837	3911	0.484	ng/ml
39)		Aroclor 1254 (6)	9.079	2539	1.094	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.404	4329	0.568	ng/ml
42)		Aroclor 1260 (2)	8.606	4461	0.483	ng/ml
43)		Aroclor 1260 (3)	8.837	3911	0.417	ng/ml
44)		Aroclor 1260 (4)	9.352	2326	0.172	ng/ml
45)		Aroclor 1260 (5)	9.635	1682	0.215	ng/ml
46)		Aroclor 1260 (6)	10.258	625	0.201	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R015.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:55
Operator : MJB/KAK
Sample : 9K15010-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 12:38:30 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

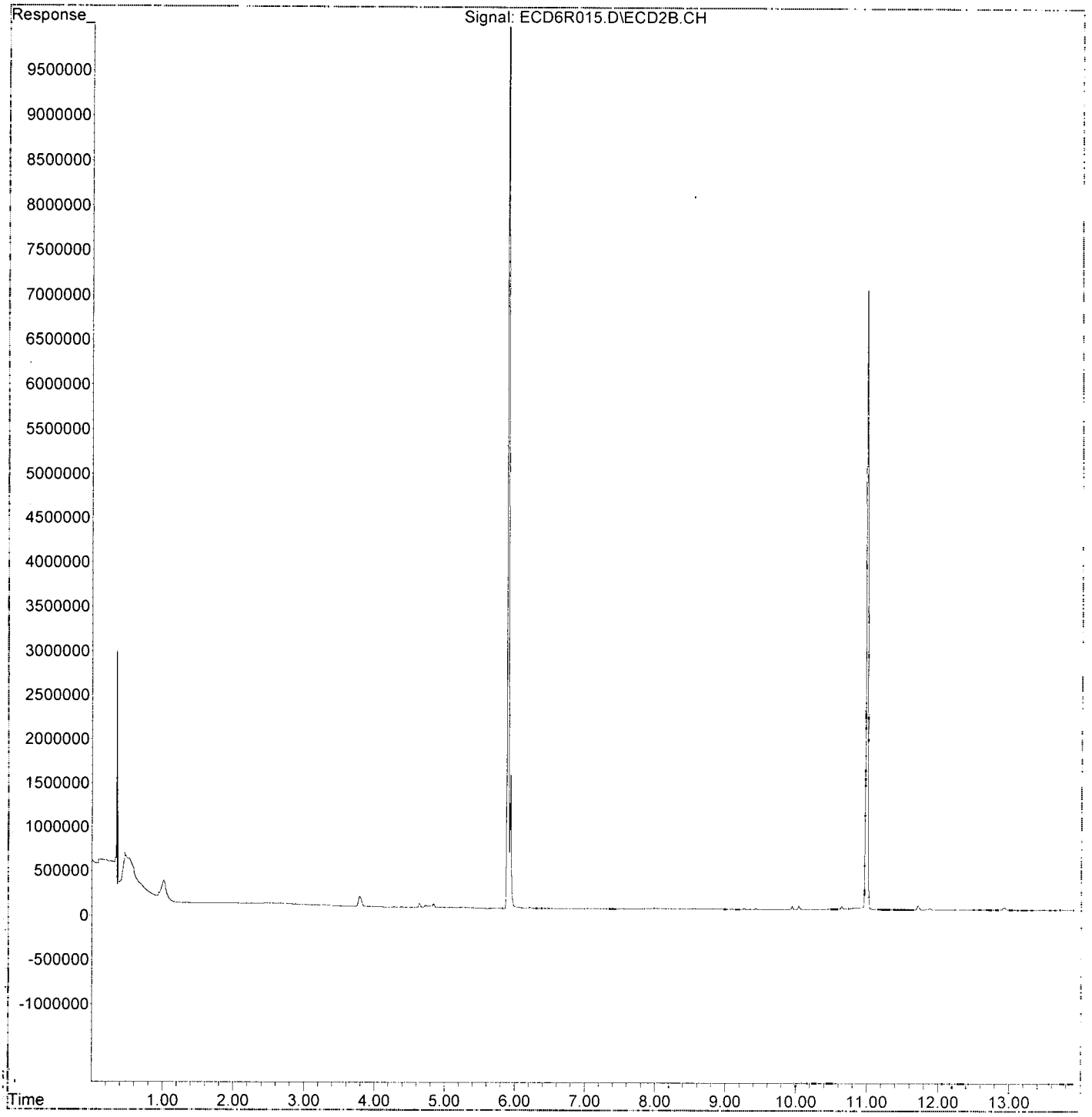
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.606	4461	0.608 ng/ml
49)	Aroclor 1262 (2)	8.908	3012	0.300 ng/ml
50)	Aroclor 1262 (3)	9.093	2442	0.330 ng/ml
51)	Aroclor 1262 (4)	9.352	2326	0.144 ng/ml
52)	Aroclor 1262 (5)	9.635	1682	0.175 ng/ml
53)	Aroclor 1262 (6)	10.258	625	0.147 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.138	1643	0.394 ng/ml
56)	Aroclor 1268 (2)	9.635	1682	0.094 ng/ml
57)	Aroclor 1268 (3)	9.704	1033	0.067 ng/ml
58)	Aroclor 1268 (4)	9.945	37272	2.964 ng/ml
59)	Aroclor 1268 (5)	10.258	625	0.129 ng/ml
60)	Aroclor 1268 (6)	10.645	32846	0.966 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9K15010\
Data File : ECD6R015.D
Signal(s) : ECD2B.CH
Acq On : 15 Nov 2019 11:55
Operator : MJB/KAK
Sample : 9K15010-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 12:38:30 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723RT4.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9G23022 (Cal ID A9G2702) DUALECD6R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9G23022**	Instrument:	**DUALECD6R**
Date:	**07/23/19 07:17**	Calibration:	**A9G2702**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9G23022-ICB1	Water	QC	QC				A19G011
2	9G23022-CAL1	Water	QC	QC				A19F250
3	9G23022-CAL2	Water	QC	QC				A19F251
4	9G23022-CAL3	Water	QC	QC				A19F252
5	9G23022-CAL4	Water	QC	QC				A19F253
6	9G23022-CAL5	Water	QC	QC				A19F247
7	9G23022-CAL6	Water	QC	QC				A19F248
8	9G23022-CAL7	Water	QC	QC				A19F249
9	9G23022-IBL1	Water	QC	QC				
10	9G23022-ICV1	Water	QC	QC				A19F266
11	9G23022-CAL8	Water	QC	QC				A19F256
12	9G23022-CAL9	Water	QC	QC				A19F257
13	9G23022-CALA	Water	QC	QC				A19F258
14	9G23022-CALB	Water	QC	QC				A19F261
15	9G23022-CALC	Water	QC	QC				A19F262
16	9G23022-CALD	Water	QC	QC				A19F263
17	9G23022-CALE	Water	QC	QC				A19F264
18	9G23022-ICV2	Water	QC	QC				A19B137
19	9G23022-ICV3	Water	QC	QC				A19D327
20	9G23022-ICV4	Water	QC	QC				A19B138
21	9G23022-ICV5	Water	QC	QC				A19E303

Comments:

Data Entered By: 7/27/19

Data Reviewed By: 7/29/19

Calibration Status Report HP G1530A

Method Path : T:\METHODS\
Method File : RECD6_QUANTPCB_190723.M
Title : PCB Data Analysis
Last Update : Sat Jul 27 14:00:12 2019
Response Via : Initial Calibration

A9G2702 7/27/19

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	S:\DATA\9G23022\ECD6R022.D
2	2	25	0	S:\DATA\9G23022\ECD6R023.D
3	3	50	0	S:\DATA\9G23022\ECD6R024.D
4	4	100	0	S:\DATA\9G23022\ECD6R025.D
5	5	250	0	S:\DATA\9G23022\ECD6R037.D
6	6	500	0	S:\DATA\9G23022\ECD6R027.D
7	7	800	0	S:\DATA\9G23022\ECD6R028.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jul 27 13:57 2019	Jul 27 13:41 2019	23 Jul 2019 17:16
2	2	Jul 27 13:57 2019	Jul 27 13:42 2019	23 Jul 2019 17:34
3	3	Jul 27 13:57 2019	Jul 27 13:42 2019	23 Jul 2019 17:52
4	4	Jul 27 13:57 2019	Jul 27 13:43 2019	23 Jul 2019 18:10
5	5	Jul 27 14:00 2019	Jul 27 13:56 2019	23 Jul 2019 21:42
6	6	Jul 27 13:58 2019	Jul 27 13:44 2019	23 Jul 2019 18:45
7	7	Jul 27 13:58 2019	Jul 27 13:45 2019	23 Jul 2019 19:03

RECD6_QUANTPCB_190723.M Sat Jul 27 14:39:56 2019

Response Factor Report HP G1530A

Method Path : T:\METHODS\
Method File : RECD6_QUANTPCB_190723.M
Title : PCB Data Analysis
Last Update : Sat Jul 27 14:00:12 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD6R022.D 2 =ECD6R023.D 3 =ECD6R024.D
4 =ECD6R025.D 5 =ECD6R037.D 6 =ECD6R027.D

7/27/19

		Compound	1	2	3	4	5	6	Avg		%RSD	
1)	S	TCMX (S)	1.360	1.355	1.384	1.348	1.506	1.430	1.415	E5	5.20	✓
2)		Aroclor 1016 ...	5.165	4.640	4.262	4.055	4.072	3.776	4.273	E3	11.22	✓
3)		Aroclor 1016 ...	8.287	7.986	7.573	7.267	7.512	7.181	7.634	E3	5.10	✓
4)		Aroclor 1016 ...	4.465	4.041	3.670	3.521	3.584	3.447	3.739	E3	10.17	✓
5)		Aroclor 1016 ...	4.562	3.958	3.487	3.289	3.287	3.143	3.570	E3	14.37	✓
6)		Aroclor 1016 ...	5.028	4.313	3.930	3.722	3.682	3.586	3.987	E3	13.08	✓
7)		Aroclor 1016 (6)	4.771	4.267	3.942	3.669	3.686	3.617	3.954	E3	10.75	✓
8)		Aroclor 1016 ...							0.000		-1.00	
9)		Aroclor 1221 (1)					1.044		1.044	E3	0.00	
10)		Aroclor 1221 (2)					1.037		1.037	E3	0.00	
11)		Aroclor 1221 (3)					3.500		3.500	E3	0.00	
12)		Aroclor 1221 ...							0.000		-1.00	
13)		Aroclor 1232 (1)					2.891		2.891	E3	0.00	
14)		Aroclor 1232 (2)					1.848		1.848	E3	0.00	
15)		Aroclor 1232 (3)					3.267		3.267	E3	0.00	
16)		Aroclor 1232 (4)					1.210		1.210	E3	0.00	
17)		Aroclor 1232 (5)					1.436		1.436	E3	0.00	
18)		Aroclor 1232 (6)					1.491		1.491	E3	0.00	
19)		Aroclor 1232 ...							0.000		-1.00	
20)		Aroclor 1242 ...					3.390		3.390	E3	0.00	
21)		Aroclor 1242 ...					6.206		6.206	E3	0.00	
22)		Aroclor 1242 ...					2.875		2.875	E3	0.00	
23)		Aroclor 1242 ...					2.561		2.561	E3	0.00	
24)		Aroclor 1242 ...					3.022		3.022	E3	0.00	
25)		Aroclor 1242 (6)					3.146		3.146	E3	0.00	
26)		Aroclor 1242 ...							0.000		-1.00	
27)		Aroclor 1248 ...					3.718		3.718	E3	0.00	
28)		Aroclor 1248 ...					4.601		4.601	E3	0.00	
29)		Aroclor 1248 ...					4.367		4.367	E3	0.00	
30)		Aroclor 1248 ...					5.115		5.115	E3	0.00	
31)		Aroclor 1248 ...					6.359		6.359	E3	0.00	
32)		Aroclor 1248 (6)					5.568		5.568	E3	0.00	
33)		Aroclor 1248 ...							0.000		-1.00	
34)		Aroclor 1254 ...					6.772		6.772	E3	0.00	
35)		Aroclor 1254 ...					1.001		1.001	E4	0.00	
36)		Aroclor 1254 ...					1.090		1.090	E4	0.00	
37)		Aroclor 1254 ...					7.910		7.910	E3	0.00	
38)		Aroclor 1254 ...					8.088		8.088	E3	0.00	
39)		Aroclor 1254 (6)					2.320		2.320	E3	0.00	
40)		Aroclor 1254 ...							0.000		-1.00	
41)		Aroclor 1260 ...	8.764	7.969	7.495	7.149	7.267	7.214	7.623	E3	7.52	✓
42)		Aroclor 1260 ...	1.024	0.975	0.910	0.868	0.898	0.882	0.924	E4	6.00	✓
43)		Aroclor 1260 (3)	9.972	9.593	9.186	8.729	9.431	9.177	9.386	E3	4.25	✓
44)		Aroclor 1260 (4)	1.386	1.371	1.296	1.293	1.362	1.349	1.355	E4	3.61	✓
45)		Aroclor 1260 (5)	8.148	8.029	7.648	7.285	7.911	7.696	7.834	E3	3.97	✓
46)		Aroclor 1260 (6)	3.333	3.282	2.997	2.989	2.977	2.965	3.100	E3	5.04	✓
47)		Aroclor 1260 ...							0.000		-1.00	
48)		Aroclor 1262 (1)					7.337		7.337	E3	0.00	
49)		Aroclor 1262 (2)					1.004		1.004	E4	0.00	
50)		Aroclor 1262 (3)					7.409		7.409	E3	0.00	
51)		Aroclor 1262 (4)					1.616		1.616	E4	0.00	
52)		Aroclor 1262 (5)					9.639		9.639	E3	0.00	
53)		Aroclor 1262 (6)					4.256		4.256	E3	0.00	
54)		Aroclor 1262 ...							0.000		-1.00	
55)		Aroclor 1268 (1)					4.169		4.169	E3	0.00	
56)		Aroclor 1268 (2)					1.784		1.784	E4	0.00	
57)		Aroclor 1268 (3)					1.543		1.543	E4	0.00	
58)		Aroclor 1268 (4)					1.258		1.258	E4	0.00	
59)		Aroclor 1268 (5)					4.837		4.837	E3	0.00	
60)		Aroclor 1268 (6)					3.401		3.401	E4	0.00	

Method Path : T:\METHODS\
Method File : RECD6_QUANTPCB_190723.M
Title : PCB Data Analysis
Last Update : Sat Jul 27 14:00:12 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD6R022.D 2 =ECD6R023.D 3 =ECD6R024.D
4 =ECD6R025.D 5 =ECD6R037.D 6 =ECD6R027.D

		Compound	1	2	3	4	5	6	Avg	%RSD
61)		Aroclor 1268 ...							0.000	-1.00
62)	S	DCBP (S)	6.534	6.332	6.209	6.390	7.066	6.778	6.731 E4	8.29

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : T:\METHODS\
Method File : RECD6_QUANTPCB_190723.M
Title : PCB Data Analysis
Last Update : Sat Jul 27 14:00:12 2019
Response Via : Initial Calibration

7/27/19

Total Cpnds : 62

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	5.958	1.000	A	H	L
2		Aroclor 1016 (1)	6.628	1.000	A	H	R
3		Aroclor 1016 (2)	7.114	1.000	A	H	R
4		Aroclor 1016 (3)	7.243	1.000	A	H	R
5		Aroclor 1016 (4)	7.329	1.000	A	H	R
6		Aroclor 1016 (5)	7.375	1.000	A	H	R
7		Aroclor 1016 (6)	7.501	1.000	A	H	R
8		Aroclor 1016 - AVE	2.949	1.000	A	H	R
9		Aroclor 1221 (1)	6.133	1.000	A	H	R
10		Aroclor 1221 (2)	6.205	1.000	A	H	R
11		Aroclor 1221 (3)	6.292	1.000	A	H	R
12		Aroclor 1221 - AVE	2.949	1.000	A	H	R
13		Aroclor 1232 (1)	6.292	1.000	A	H	R
14		Aroclor 1232 (2)	6.628	1.000	A	H	R
15		Aroclor 1232 (3)	7.115	1.000	A	H	R
16		Aroclor 1232 (4)	7.329	1.000	A	H	R
17		Aroclor 1232 (5)	7.375	1.000	A	H	R
18		Aroclor 1232 (6)	7.501	1.000	A	H	R
19		Aroclor 1232 - AVE	2.949	1.000	A	H	R
20		Aroclor 1242 (1)	6.628	1.000	A	H	R
21		Aroclor 1242 (2)	7.115	1.000	A	H	R
22		Aroclor 1242 (3)	7.242	1.000	A	H	R
23		Aroclor 1242 (4)	7.329	1.000	A	H	R
24		Aroclor 1242 (5)	7.375	1.000	A	H	R
25		Aroclor 1242 (6)	7.501	1.000	A	H	R
26		Aroclor 1242 - AVE	2.949	1.000	A	H	R
27		Aroclor 1248 (1)	7.087	1.000	A	H	R
28		Aroclor 1248 (2)	7.329	1.000	A	H	R
29		Aroclor 1248 (3)	7.375	1.000	A	H	R
30		Aroclor 1248 (4)	7.501	1.000	A	H	R
31		Aroclor 1248 (5)	7.864	1.000	A	H	R
32		Aroclor 1248 (6)	8.024	1.000	A	H	R
33		Aroclor 1248 - AVE	2.949	1.000	A	H	R
34		Aroclor 1254 (1)	7.844	1.000	A	H	R
35		Aroclor 1254 (2)	8.024	1.000	A	H	R
36		Aroclor 1254 (3)	8.336	1.000	A	H	R
37		Aroclor 1254 (4)	8.572	1.000	A	H	R
38		Aroclor 1254 (5)	8.909	1.000	A	H	R
39		Aroclor 1254 (6)	9.151	1.000	A	H	R
40		Aroclor 1254 - AVE	2.949	1.000	A	H	R
41		Aroclor 1260 (1)	8.473	1.000	A	H	R
42		Aroclor 1260 (2)	8.677	1.000	A	H	R
43		Aroclor 1260 (3)	8.911	1.000	A	H	R
44		Aroclor 1260 (4)	9.434	1.000	A	H	R
45		Aroclor 1260 (5)	9.727	1.000	A	H	R
46		Aroclor 1260 (6)	10.367	1.000	A	H	R
47		Aroclor 1260 - AVE	2.949	1.000	A	H	R
48		Aroclor 1262 (1)	8.676	1.000	A	H	R
49		Aroclor 1262 (2)	8.981	1.000	A	H	R
50		Aroclor 1262 (3)	9.172	1.000	A	H	R
51		Aroclor 1262 (4)	9.434	1.000	A	H	R
52		Aroclor 1262 (5)	9.727	1.000	A	H	R
53		Aroclor 1262 (6)	10.365	1.000	A	H	R
54		Aroclor 1262 - AVE	2.960	1.000	A	H	R
55		Aroclor 1268 (1)	9.219	1.000	A	H	R
56		Aroclor 1268 (2)	9.736	1.000	A	H	R

57		Aroclor 1268 (3)	9.803	1.000	A	H	R
58		Aroclor 1268 (4)	10.048	1.000	A	H	R
59		Aroclor 1268 (5)	10.365	1.000	A	H	R
60		Aroclor 1268 (6)	10.769	1.000	A	H	R
61		Aroclor 1268 - AVE	2.949	1.000	A	H	R
62	S	DCBP (S)	11.133	1.000	A	H	R

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

RECD6_QUANTPCB_190723.M Sat Jul 27 14:39:47 2019

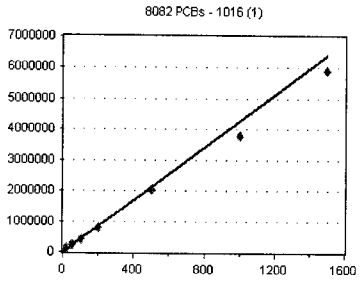
Element Calibration Review Sheet

Calibration ID: **A9G2702** Instrument: **DUALECD6R** Calibration Date: **07/27/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD6_QUANTPCB_19072**

1016 (1)

Curve Fit: **AVERAGE RF**

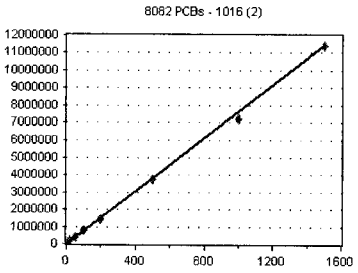


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	103306	5165.300	6.63
9G23022-CAL2	50	231997	4639.940	6.63
9G23022-CAL3	100	426219	4262.190	6.63
9G23022-CAL4	200	811049	4055.245	6.63
9G23022-CAL5	500	2036225	4072.450	6.63
9G23022-CAL6	1000	3776021	3776.021	6.63
9G23022-CAL7	1500	5905075	3936.717	6.63

AVE RF **4272.552** RF RSD **11.22** AVE RT **6.63**

1016 (2)

Curve Fit: **AVERAGE RF**

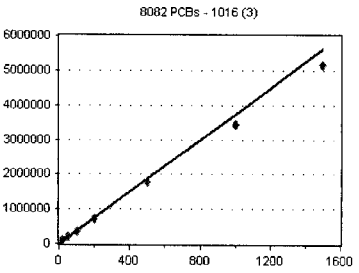


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	165745	8287.250	7.12
9G23022-CAL2	50	399308	7986.160	7.12
9G23022-CAL3	100	757333	7573.330	7.12
9G23022-CAL4	200	1453494	7267.470	7.12
9G23022-CAL5	500	3755979	7511.958	7.12
9G23022-CAL6	1000	7181462	7181.462	7.12
9G23022-CAL7	1500	144473E+07	7629.820	7.12

AVE RF **7633.921** RF RSD **5.10** AVE RT **7.12**

1016 (3)

Curve Fit: **AVERAGE RF**

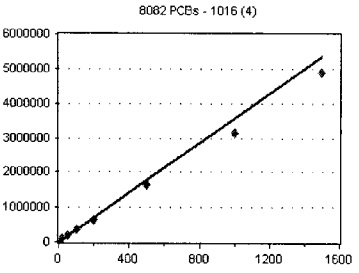


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	89292	4464.600	7.25
9G23022-CAL2	50	202047	4040.940	7.24
9G23022-CAL3	100	366955	3669.550	7.24
9G23022-CAL4	200	704258	3521.290	7.24
9G23022-CAL5	500	1792186	3584.372	7.24
9G23022-CAL6	1000	3446934	3446.934	7.24
9G23022-CAL7	1500	5164294	3442.863	7.24

AVE RF **3738.650** RF RSD **10.17** AVE RT **7.24**

1016 (4)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	91249	4562.450	7.33
9G23022-CAL2	50	197891	3957.820	7.33
9G23022-CAL3	100	348746	3487.460	7.33
9G23022-CAL4	200	657786	3288.930	7.33
9G23022-CAL5	500	1643709	3287.418	7.33
9G23022-CAL6	1000	3142909	3142.909	7.33
9G23022-CAL7	1500	4892125	3261.417	7.33

AVE RF **3569.772** RF RSD **14.37** AVE RT **7.33**

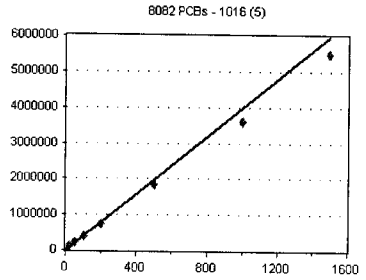
Element Calibration Review Sheet

Calibration ID: **A9G2702** Instrument: **DUALECD6R** Calibration Date: **07/27/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD6_QUANTPCB_19072**

1016 (5)

Curve Fit: **AVERAGE RF**

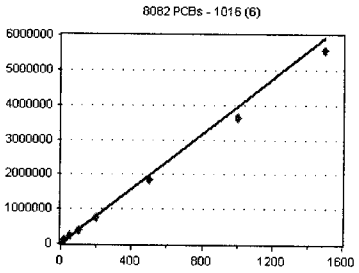


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	100556	5027.800	7.38
9G23022-CAL2	50	215663	4313.260	7.38
9G23022-CAL3	100	392974	3929.740	7.38
9G23022-CAL4	200	744464	3722.320	7.38
9G23022-CAL5	500	1841055	3682.110	7.38
9G23022-CAL6	1000	3585981	3585.981	7.38
9G23022-CAL7	1500	5470473	3646.982	7.38

AVE RF **3986.885** RF RSD **13.08** AVE RT **7.38**

1016 (6)

Curve Fit: **AVERAGE RF**

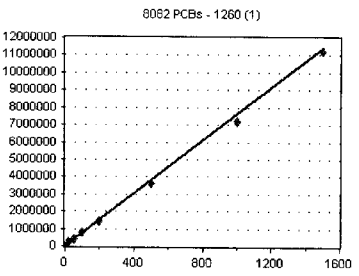


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	95416	4770.800	7.50
9G23022-CAL2	50	213346	4266.920	7.50
9G23022-CAL3	100	394197	3941.970	7.50
9G23022-CAL4	200	733850	3669.250	7.50
9G23022-CAL5	500	1843066	3686.132	7.50
9G23022-CAL6	1000	3616773	3616.773	7.50
9G23022-CAL7	1500	5587140	3724.760	7.50

AVE RF **3953.801** RF RSD **10.75** AVE RT **7.50**

1260 (1)

Curve Fit: **AVERAGE RF**

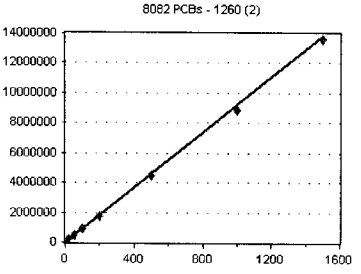


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	175285	8764.250	8.48
9G23022-CAL2	50	398462	7969.240	8.48
9G23022-CAL3	100	749483	7494.830	8.47
9G23022-CAL4	200	1429782	7148.910	8.47
9G23022-CAL5	500	3633732	7267.464	8.47
9G23022-CAL6	1000	7213909	7213.909	8.47
9G23022-CAL7	1500	124853E+07	7499.020	8.47

AVE RF **7622.518** RF RSD **7.52** AVE RT **8.47**

1260 (2)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	204724	10236.200	8.68
9G23022-CAL2	50	487272	9745.440	8.68
9G23022-CAL3	100	910167	9101.670	8.68
9G23022-CAL4	200	1736681	8683.405	8.68
9G23022-CAL5	500	4491636	8983.272	8.68
9G23022-CAL6	1000	8817712	8817.712	8.68
9G23022-CAL7	1500	363018E+07	9086.787	8.68

AVE RF **9236.355** RF RSD **6.00** AVE RT **8.68**

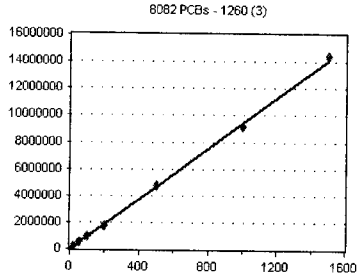
Element Calibration Review Sheet

Calibration ID: **A9G2702** Instrument: **DUALECD6R** Calibration Date: **07/27/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD6_QUANTPCB_19072**

1260 (3)

Curve Fit: **AVERAGE RF**

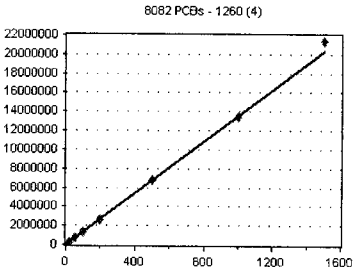


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	199444	9972.200	8.91
9G23022-CAL2	50	479640	9592.800	8.91
9G23022-CAL3	100	918575	9185.750	8.91
9G23022-CAL4	200	1745851	8729.255	8.91
9G23022-CAL5	500	4715739	9431.478	8.91
9G23022-CAL6	1000	9177024	9177.024	8.91
9G23022-CAL7	1500	441706E+07	9611.373	8.91

AVE RF **9385.697** RF RSD **4.25** AVE RT **8.91**

1260 (4)

Curve Fit: **AVERAGE RF**

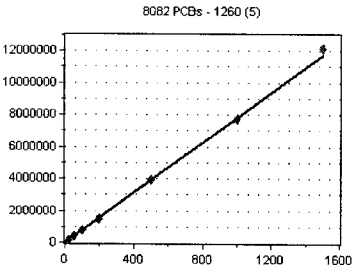


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	277128	13856.400	9.44
9G23022-CAL2	50	685457	13709.140	9.44
9G23022-CAL3	100	1296307	12963.070	9.44
9G23022-CAL4	200	2585035	12925.170	9.44
9G23022-CAL5	500	6807898	13615.800	9.44
9G23022-CAL6	1000	349098E+07	13490.980	9.44
9G23022-CAL7	1500	146044E+07	14306.960	9.44

AVE RF **13552.500** RF RSD **3.61** AVE RT **9.44**

1260 (5)

Curve Fit: **AVERAGE RF**

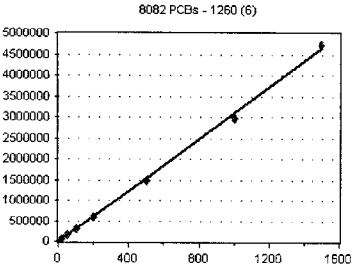


Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	162964	8148.200	9.73
9G23022-CAL2	50	401465	8029.300	9.73
9G23022-CAL3	100	764760	7647.600	9.73
9G23022-CAL4	200	1456967	7284.835	9.73
9G23022-CAL5	500	3955443	7910.886	9.73
9G23022-CAL6	1000	7695998	7695.998	9.73
9G23022-CAL7	1500	217966E+07	8119.773	9.73

AVE RF **7833.799** RF RSD **3.97** AVE RT **9.73**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	20	66652	3332.600	10.37
9G23022-CAL2	50	164111	3282.220	10.37
9G23022-CAL3	100	299665	2996.650	10.37
9G23022-CAL4	200	597884	2989.420	10.37
9G23022-CAL5	500	1488704	2977.408	10.37
9G23022-CAL6	1000	2965288	2965.288	10.37
9G23022-CAL7	1500	4730507	3153.671	10.37

AVE RF **3099.608** RF RSD **5.04** AVE RT **10.37**

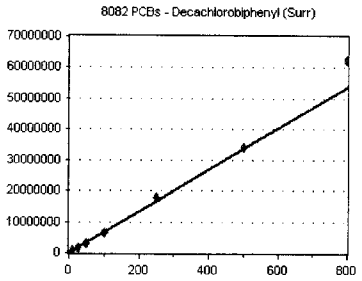
Element Calibration Review Sheet

Calibration ID: **A9G2702** Instrument: **DUALECD6R** Calibration Date: **07/27/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD6_QUANTPCB_19072**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9G23022-CAL1	10	653354	65335.400	11.13
9G23022-CAL2	25	1583071	63322.840	11.14
9G23022-CAL3	50	3104483	62089.660	11.13
9G23022-CAL4	100	6390068	63900.680	11.13
9G23022-CAL5	250	766388E+07	70655.520	11.13
9G23022-CAL6	500	389104E+07	67782.080	11.13
9G23022-CAL7	800	248847E+07	78110.590	11.14

AVE RF **67313.820** RF RSD **8.29** AVE RT **11.13**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9G23022

Analysis Included

1311/8082 TCLP PCBs
608 PCBs
608 PCBs - LL (1000/1mL) +1262/68
8082 PCBs
8082 PCBs - Low Level (2mL FV)
8082 PCBs - Low Level (2mL FV) +1262/68
8082 PCBs - Low Level (1000/1mL)
8082 PCBs - Low Level (1000/1mL) +1262/68
8082 PCBs - Low Level (30g/2mL)
8082 PCBs + 1262/1268
8082 PCBs in Trans. Oil - LL

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9G23022-ICB1	Initial Cal Blank	Water	A19G011		7/23/2019 4:59:00PM
9G23022-CAL1	Cal Standard	Water	A19F250	"	7/23/2019 5:16:00PM
9G23022-CAL2	Cal Standard	Water	A19F251	"	7/23/2019 5:34:00PM
9G23022-CAL3	Cal Standard	Water	A19F252	"	7/23/2019 5:52:00PM
9G23022-CAL4	Cal Standard	Water	A19F253	"	7/23/2019 6:10:00PM
9G23022-CAL5	Cal Standard	Water	A19F247	"	7/23/2019 6:27:00PM
9G23022-CAL6	Cal Standard	Water	A19F248	"	7/23/2019 6:45:00PM
9G23022-CAL7	Cal Standard	Water	A19F249	"	7/23/2019 7:03:00PM
9G23022-ICV1	Initial Cal Check	Water	A19F266	"	7/23/2019 7:38:00PM
9G23022-CAL8	Cal Standard	Water	A19F256	"	7/23/2019 7:56:00PM
9G23022-CAL9	Cal Standard	Water	A19F257	"	7/23/2019 8:14:00PM
9G23022-CALA	Cal Standard	Water	A19F258	"	7/23/2019 8:31:00PM
9G23022-CALB	Cal Standard	Water	A19F261	"	7/23/2019 8:49:00PM
9G23022-CALC	Cal Standard	Water	A19F262	"	7/23/2019 9:07:00PM
9G23022-CALD	Cal Standard	Water	A19F263	"	7/23/2019 9:24:00PM
9G23022-CALE	Cal Standard	Water	A19F264	"	7/23/2019 9:42:00PM
9G23022-ICV2	Initial Cal Check	Water	A19B137	"	7/23/2019 10:00:00PM
9G23022-ICV3	Initial Cal Check	Water	A19D327	"	7/23/2019 10:17:00PM
9G23022-ICV4	Initial Cal Check	Water	A19B138	"	7/23/2019 10:35:00PM
9G23022-ICV5	Initial Cal Check	Water	A19E303	"	7/23/2019 10:53:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9G2702** Instrument: **DUALECD6R**

1311/8082 TCLP PCBs Sequence: **9G23022** Matrix: **Water**

9G23022-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	

9G23022-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9G23022

Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	
9G23022-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
9G23022-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
9G23022-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
9G23022-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1000	0	
Aroclor 1260	800.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
9G23022-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1500	0	
Aroclor 1260	800.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
9G23022-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1221	0.0000	0.00	500	0	
Aroclor 1221	0.0000	0.00	500	0	
9G23022-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1232	0.0000	0.00	500	0	
Aroclor 1232	0.0000	0.00	500	0	
9G23022-CALA	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1242	0.0000	0.00	500	0	
Aroclor 1242	0.0000	0.00	500	0	
9G23022-CALB	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1248	0.0000	0.00	500	0	
Aroclor 1248	0.0000	0.00	500	0	
9G23022-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1254	0.0000	0.00	500	0	
Aroclor 1254	0.0000	0.00	500	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9G23022

9G23022-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1262	0.0000	0.00	500	0	
Aroclor 1262	0.0000	0.00	500	0	

9G23022-CALE	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1268	0.0000	0.00	500	0	
Aroclor 1268	0.0000	0.00	500	0	

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: **A9G2702** Instrument: **DUALECD6R**

608 PCBs - LL (1000/1mL) +1 Sequence: **9G23022** Matrix: **Water**

9G23022-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	**350.93**	70	
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	**350.93**	70	
1260 (6)		500	350.93	70	
1260 (6)		500	350.93	70	
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	350.93	70	
1260 (6)	20	500	350.93	70	

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.

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R021.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 16:59
Operator : MJB/KAK
Sample : 9G23022-ICB1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19
clear

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.959	13703054	96.833 ng/ml
62) S	DCBP (S)	11.136	6318094	93.860 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.636	2850	0.667 ng/ml
3)	Aroclor 1016 (2)	7.105	10191	1.335 ng/ml
4)	Aroclor 1016 (3)	7.253	10422	2.788 ng/ml
5)	Aroclor 1016 (4)	7.328	12432	3.482 ng/ml
6)	Aroclor 1016 (5)	7.366	13395	3.360 ng/ml
7)	Aroclor 1016 (6)	7.500	9214	2.330 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	6.135	2494	2.390 ng/ml
10)	Aroclor 1221 (2)	6.200	3319	3.201 ng/ml
11)	Aroclor 1221 (3)	6.278	26544	7.584 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.278	26544	9.180 ng/ml
14)	Aroclor 1232 (2)	6.636	2850	1.542 ng/ml
15)	Aroclor 1232 (3)	7.105	10191	3.119 ng/ml
16)	Aroclor 1232 (4)	7.328	12432	10.270 ng/ml
17)	Aroclor 1232 (5)	7.366	13395	9.330 ng/ml
18)	Aroclor 1232 (6)	7.500	9214	6.180 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.636	2850	0.841 ng/ml
21)	Aroclor 1242 (2)	7.105	10191	1.642 ng/ml
22)	Aroclor 1242 (3)	7.253	10422	3.625 ng/ml
23)	Aroclor 1242 (4)	7.328	12432	4.854 ng/ml
24)	Aroclor 1242 (5)	7.366	13395	4.432 ng/ml
25)	Aroclor 1242 (6)	7.500	9214	2.929 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.105	10191	2.741 ng/ml
28)	Aroclor 1248 (2)	7.328	12432	2.702 ng/ml
29)	Aroclor 1248 (3)	7.366	13395	3.067 ng/ml
30)	Aroclor 1248 (4)	7.500	9214	1.802 ng/ml
31)	Aroclor 1248 (5)	7.875	13434	2.112 ng/ml
32)	Aroclor 1248 (6)	8.015	16391	2.944 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.836	23249	3.433 ng/ml
35)	Aroclor 1254 (2)	8.015	16391	1.638 ng/ml
36)	Aroclor 1254 (3)	8.338	10970	1.006 ng/ml
37)	Aroclor 1254 (4)	8.581	10191	1.288 ng/ml
38)	Aroclor 1254 (5)	8.909	5573	0.689 ng/ml
39)	Aroclor 1254 (6)	9.152	7600	3.276 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.462	10567	1.386 ng/ml
42)	Aroclor 1260 (2)	8.683	7915	0.857 ng/ml
43)	Aroclor 1260 (3)	8.909	5573	0.594 ng/ml
44)	Aroclor 1260 (4)	9.438	2282	0.168 ng/ml
45)	Aroclor 1260 (5)	9.730	1528	0.195 ng/ml
46)	Aroclor 1260 (6)	10.365	1874	0.604 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R021.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 16:59
Operator : MJB/KAK
Sample : 9G23022-ICB1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

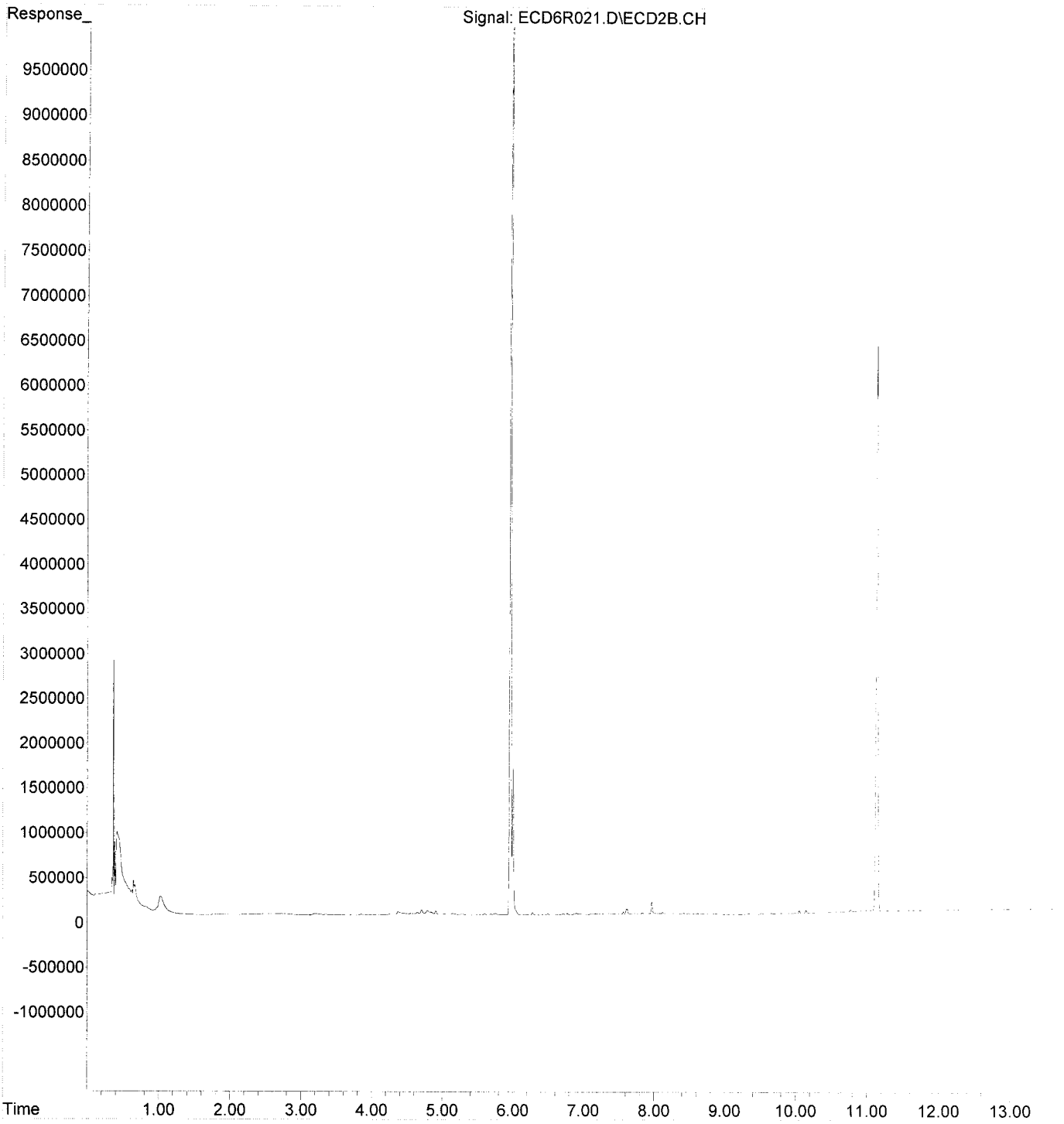
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.683	7915	1.079 ng/ml
49)	Aroclor 1262 (2)	8.985	3312	0.330 ng/ml
50)	Aroclor 1262 (3)	9.181	2958	0.399 ng/ml
51)	Aroclor 1262 (4)	9.438	2282	0.141 ng/ml
52)	Aroclor 1262 (5)	9.730	1528	0.159 ng/ml
53)	Aroclor 1262 (6)	10.365	1874	0.440 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.225	2418	0.580 ng/ml
56)	Aroclor 1268 (2)	9.730	1528	0.086 ng/ml
57)	Aroclor 1268 (3)	9.788	3807	0.247 ng/ml
58)	Aroclor 1268 (4)	10.052	25683	2.042 ng/ml
59)	Aroclor 1268 (5)	10.365	1874	0.387 ng/ml
60)	Aroclor 1268 (6)	10.774	24188	0.711 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R021.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 16:59
Operator : MJB/KAK
Sample : 9G23022-ICB1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R029.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:21
Operator : MJB/KAK
Sample : 9G23022-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19
No carryover
Clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	6.001f	14887	0.105 ng/ml
62) S	DCBP (S)	11.130	22900	0.340 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.624	2542	0.595 ng/ml
3)	Aroclor 1016 (2)	7.105	10489	1.374 ng/ml
4)	Aroclor 1016 (3)	7.255	11637	3.113 ng/ml
5)	Aroclor 1016 (4)	7.336	13589	3.807 ng/ml
6)	Aroclor 1016 (5)	7.375	12872	3.229 ng/ml
7)	Aroclor 1016 (6)	7.505	10537	2.665 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	6.129	1488	1.425 ng/ml
10)	Aroclor 1221 (2)	6.199	2594	2.502 ng/ml
11)	Aroclor 1221 (3)	6.275	11282	3.224 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.275	11282	3.902 ng/ml
14)	Aroclor 1232 (2)	6.624	2542	1.376 ng/ml
15)	Aroclor 1232 (3)	7.105	10489	3.210 ng/ml
16)	Aroclor 1232 (4)	7.336	13589	11.227 ng/ml
17)	Aroclor 1232 (5)	7.375	12872	8.966 ng/ml
18)	Aroclor 1232 (6)	7.505	10537	7.067 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.624	2542	0.750 ng/ml
21)	Aroclor 1242 (2)	7.105	10489	1.690 ng/ml
22)	Aroclor 1242 (3)	7.255	11637	4.048 ng/ml
23)	Aroclor 1242 (4)	7.336	13589	5.306 ng/ml
24)	Aroclor 1242 (5)	7.375	12872	4.259 ng/ml
25)	Aroclor 1242 (6)	7.505	10537	3.349 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.105	10489	2.821 ng/ml
28)	Aroclor 1248 (2)	7.321	12981	2.821 ng/ml
29)	Aroclor 1248 (3)	7.375	12872	2.947 ng/ml
30)	Aroclor 1248 (4)	7.505	10537	2.060 ng/ml
31)	Aroclor 1248 (5)	7.871	13502	2.123 ng/ml
32)	Aroclor 1248 (6)	8.025	16731	3.005 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.834	20401	3.013 ng/ml
35)	Aroclor 1254 (2)	8.025	16731	1.672 ng/ml
36)	Aroclor 1254 (3)	8.335	10839	0.994 ng/ml
37)	Aroclor 1254 (4)	8.579	8227	1.040 ng/ml
38)	Aroclor 1254 (5)	8.911	7326	0.906 ng/ml
39)	Aroclor 1254 (6)	9.154	1802	0.777 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.472	10854	1.424 ng/ml
42)	Aroclor 1260 (2)	8.679	9926	1.075 ng/ml
43)	Aroclor 1260 (3)	8.911	7326	0.781 ng/ml
44)	Aroclor 1260 (4)	9.435	6493	0.479 ng/ml
45)	Aroclor 1260 (5)	9.727	3548	0.453 ng/ml
46)	Aroclor 1260 (6)	10.367	2450	0.791 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R029.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:21
Operator : MJB/KAK
Sample : 9G23022-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

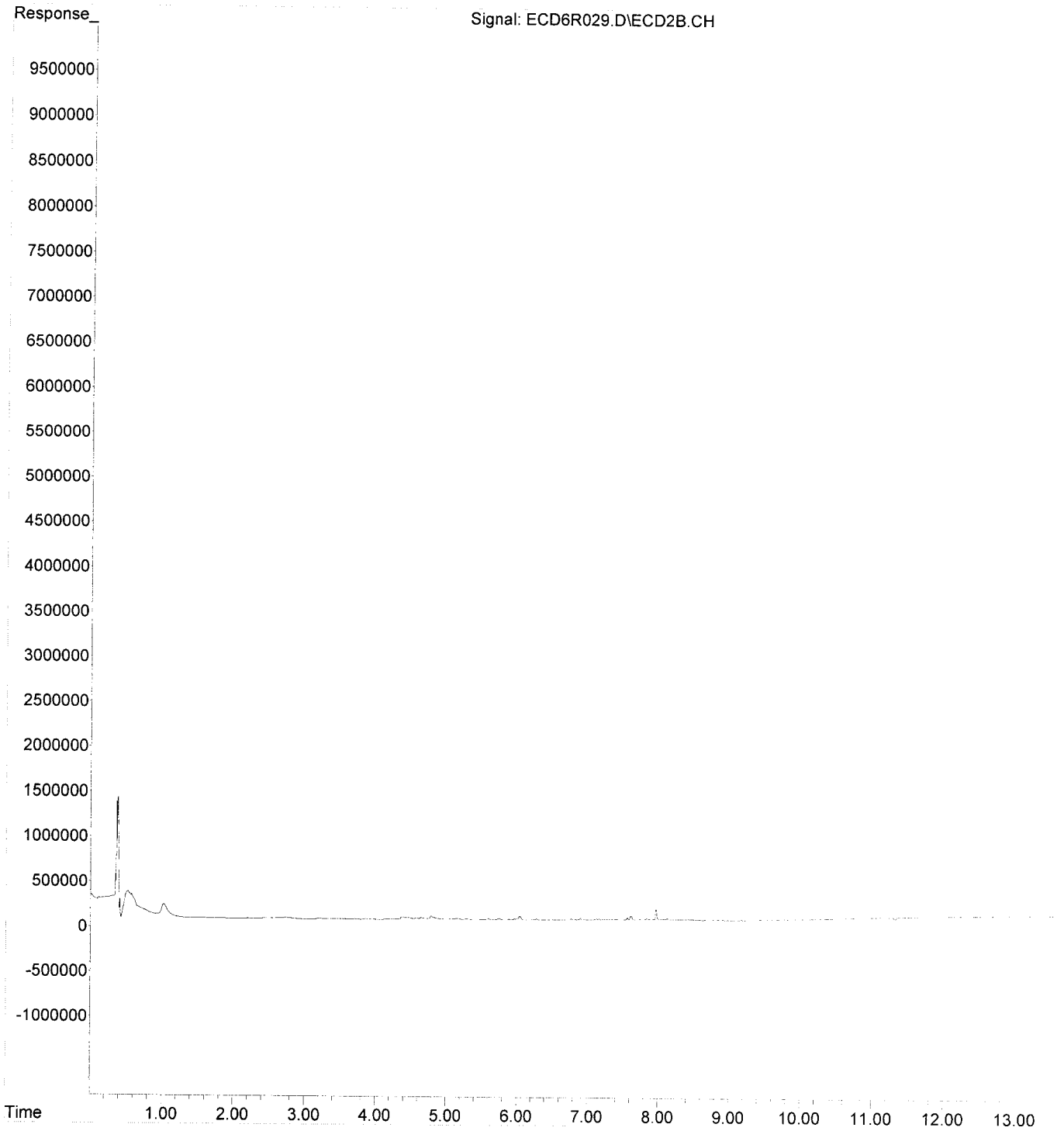
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.679	9926	1.353 ng/ml
49)	Aroclor 1262 (2)	8.982	3990	0.397 ng/ml
50)	Aroclor 1262 (3)	9.173	3813	0.515 ng/ml
51)	Aroclor 1262 (4)	9.435	6493	0.402 ng/ml
52)	Aroclor 1262 (5)	9.727	3548	0.368 ng/ml
53)	Aroclor 1262 (6)	10.367	2450	0.576 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.219	264	0.063 ng/ml
56)	Aroclor 1268 (2)	9.727	3548	0.199 ng/ml
57)	Aroclor 1268 (3)	9.800	2241	0.145 ng/ml
58)	Aroclor 1268 (4)	10.048	1077	0.086 ng/ml
59)	Aroclor 1268 (5)	10.367	2450	0.507 ng/ml
60)	Aroclor 1268 (6)	10.770	7135	0.210 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R029.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:21
Operator : MJB/KAK
Sample : 9G23022-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:47 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R030.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:38
Operator : MJB/KAK
Sample : 9G23022-ICV1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19
1016, 1260

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.958	25066934	177.136	ng/ml
62) S	DCBP (S)	11.132	11769987	174.852	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.629	1923045	450.093	ng/ml
3)	Aroclor 1016 (2)	7.116	3611701	473.112	ng/ml
4)	Aroclor 1016 (3)	7.243	1711769	457.858	ng/ml
5)	Aroclor 1016 (4)	7.330	1548604	433.810	ng/ml
6)	Aroclor 1016 (5)	7.376	1762612	442.103	ng/ml
7)	Aroclor 1016 (6)	7.502	1759122	444.920	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	6.131	125484	120.213	ng/ml
10)	Aroclor 1221 (2)	6.205	247608	238.865	ng/ml
11)	Aroclor 1221 (3)	6.292	1175698	335.928	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.292	1175698	406.612	ng/ml
14)	Aroclor 1232 (2)	6.629	1923045	1040.619	ng/ml
15)	Aroclor 1232 (3)	7.116	3611701	1105.365	ng/ml
16)	Aroclor 1232 (4)	7.330	1548604	1279.388	ng/ml
17)	Aroclor 1232 (5)	7.376	1762612	1227.756	ng/ml
18)	Aroclor 1232 (6)	7.502	1759122	1179.847	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.629	1923045	567.252	ng/ml
21)	Aroclor 1242 (2)	7.116	3611701	581.962	ng/ml
22)	Aroclor 1242 (3)	7.243	1711769	595.381	ng/ml
23)	Aroclor 1242 (4)	7.330	1548604	604.661	ng/ml
24)	Aroclor 1242 (5)	7.376	1762612	583.231	ng/ml
25)	Aroclor 1242 (6)	7.502	1759122	559.144	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	7.088	3014390	810.781	ng/ml
28)	Aroclor 1248 (2)	7.330	1548604	336.563	ng/ml
29)	Aroclor 1248 (3)	7.376	1762612	403.591	ng/ml
30)	Aroclor 1248 (4)	7.502	1759122	343.942	ng/ml
31)	Aroclor 1248 (5)	7.846	1481485	232.959	ng/ml
32)	Aroclor 1248 (6)	8.025	1618378	290.653	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.846	1481485	218.768	ng/ml
35)	Aroclor 1254 (2)	8.025	1618378	161.686	ng/ml
36)	Aroclor 1254 (3)	8.337	853894	78.308	ng/ml
37)	Aroclor 1254 (4)	8.576	468997	59.290	ng/ml
38)	Aroclor 1254 (5)	8.912	5091215	629.464	ng/ml
39)	Aroclor 1254 (6)	9.143	555881	239.590	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.474	3924143	514.810	ng/ml
42)	Aroclor 1260 (2)	8.678	4781324	517.664	ng/ml
43)	Aroclor 1260 (3)	8.912	5091215	542.444	ng/ml
44)	Aroclor 1260 (4)	9.435	6174049	455.565	ng/ml
45)	Aroclor 1260 (5)	9.728	3659932	467.198	ng/ml
46)	Aroclor 1260 (6)	10.367	1087755	350.933	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

450.32

474.77

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R030.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:38
Operator : MJB/KAK
Sample : 9G23022-ICV1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

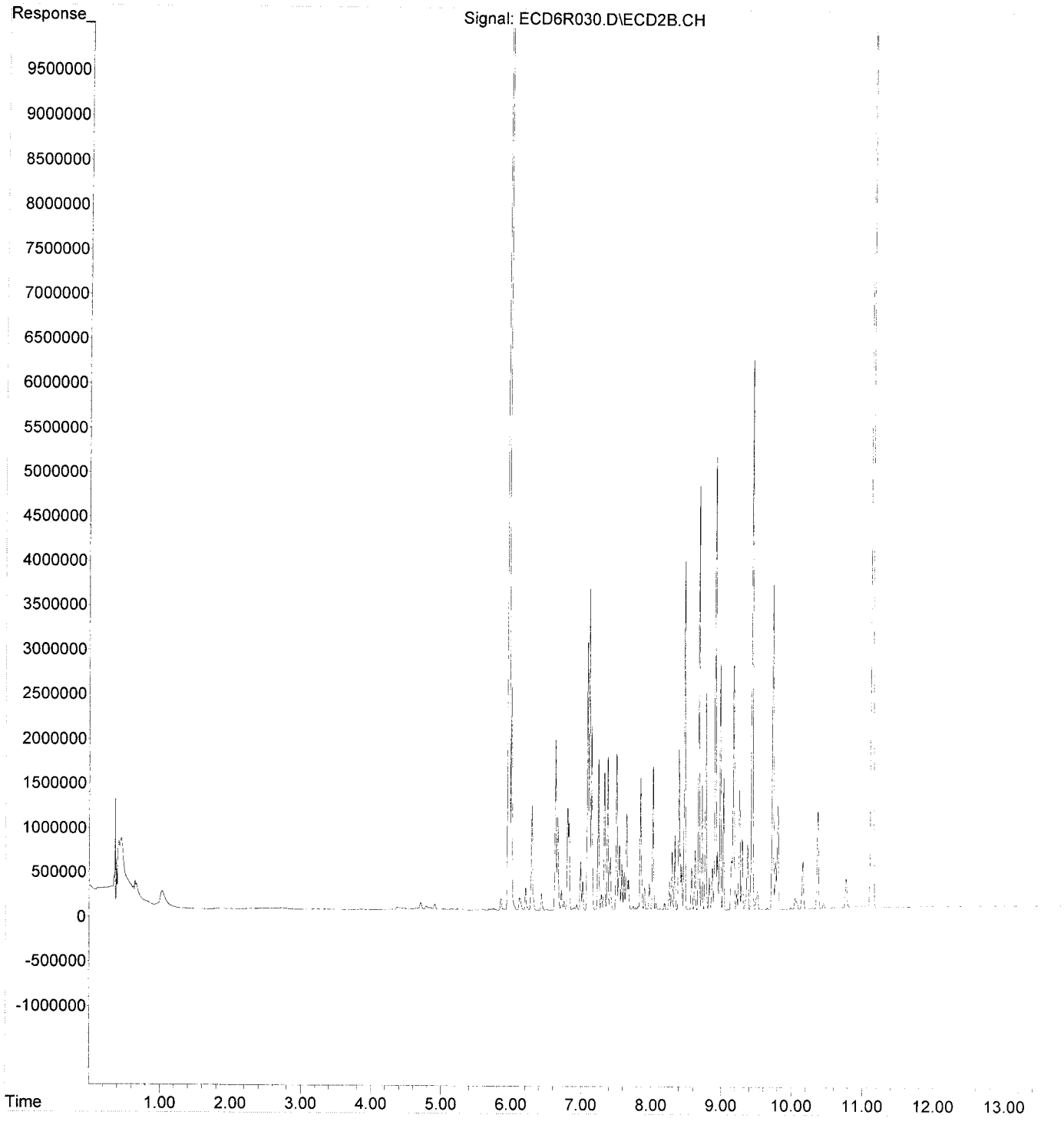
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.678	4781324	651.645 ng/ml
49)	Aroclor 1262 (2)	8.982	2788714	277.752 ng/ml
50)	Aroclor 1262 (3)	9.172	2751859	371.417 ng/ml
51)	Aroclor 1262 (4)	9.435	6174049	381.955 ng/ml
52)	Aroclor 1262 (5)	9.728	3659932	379.700 ng/ml
53)	Aroclor 1262 (6)	10.367	1087755	255.604 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.220	180956	43.410 ng/ml
56)	Aroclor 1268 (2)	9.728	3659932	205.140 ng/ml
57)	Aroclor 1268 (3)	9.801	1166981	75.630 ng/ml
58)	Aroclor 1268 (4)	10.049	124282	9.883 ng/ml
59)	Aroclor 1268 (5)	10.367	1087755	224.876 ng/ml
60)	Aroclor 1268 (6)	10.770	330607	9.720 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R030.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:38
Operator : MJB/KAK
Sample : 9G23022-ICV1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:25:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R038.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:00
Operator : MJB/KAK
Sample : 9G23022-ICV2
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19

1221, 1254

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.957	5611178	39.651	ng/ml	
62) S	DCBP (S)	11.132	5847778	86.873	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.628	288349	67.489	ng/ml	
3)	Aroclor 1016 (2)	7.115	498923	65.356	ng/ml	
4)	Aroclor 1016 (3)	7.244	245408	65.641	ng/ml	
5)	Aroclor 1016 (4)	7.329	1705541	477.773	ng/ml	
6)	Aroclor 1016 (5)	7.375	453823	113.829	ng/ml	
7)	Aroclor 1016 (6)	7.501	949543	240.160	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	6.132	1001413	959.349	ng/ml	949.59
10)	Aroclor 1221 (2)	6.204	968434	934.236	ng/ml	
11)	Aroclor 1221 (3)	6.291	3343039	955.193	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.291	3343039	1156.181	ng/ml	
14)	Aroclor 1232 (2)	6.628	288349	156.034	ng/ml	
15)	Aroclor 1232 (3)	7.115	498923	152.696	ng/ml	
16)	Aroclor 1232 (4)	7.329	1705541	1409.042	ng/ml	
17)	Aroclor 1232 (5)	7.375	453823	316.113	ng/ml	
18)	Aroclor 1232 (6)	7.501	949543	636.861	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.628	288349	85.056	ng/ml	
21)	Aroclor 1242 (2)	7.115	498923	80.393	ng/ml	
22)	Aroclor 1242 (3)	7.244	245408	85.357	ng/ml	
23)	Aroclor 1242 (4)	7.329	1705541	665.938	ng/ml	
24)	Aroclor 1242 (5)	7.375	453823	150.166	ng/ml	
25)	Aroclor 1242 (6)	7.501	949543	301.816	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	7.087	389109	104.659	ng/ml	
28)	Aroclor 1248 (2)	7.329	1705541	370.670	ng/ml	
29)	Aroclor 1248 (3)	7.375	453823	103.913	ng/ml	
30)	Aroclor 1248 (4)	7.501	949543	185.654	ng/ml	
31)	Aroclor 1248 (5)	7.863	1545409	243.011	ng/ml	
32)	Aroclor 1248 (6)	8.025	4795715	861.286	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.845	3162038	466.933	ng/ml	
35)	Aroclor 1254 (2)	8.025	4795715	479.120	ng/ml	481.00
36)	Aroclor 1254 (3)	8.336	5184467	475.452	ng/ml	
37)	Aroclor 1254 (4)	8.573	3662410	462.994	ng/ml	
38)	Aroclor 1254 (5)	8.910	4169659	515.526	ng/ml	
39)	Aroclor 1254 (6)	9.152	1127573	485.995	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.474	2017316	264.652	ng/ml	
42)	Aroclor 1260 (2)	8.677	2430688	263.165	ng/ml	
43)	Aroclor 1260 (3)	8.910	4169659	444.257	ng/ml	
44)	Aroclor 1260 (4)	9.434	730035	53.867	ng/ml	
45)	Aroclor 1260 (5)	9.726	524630	66.970	ng/ml	
46)	Aroclor 1260 (6)	10.366	84879	27.384	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R038.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:00
Operator : MJB/KAK
Sample : 9G23022-ICV2
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

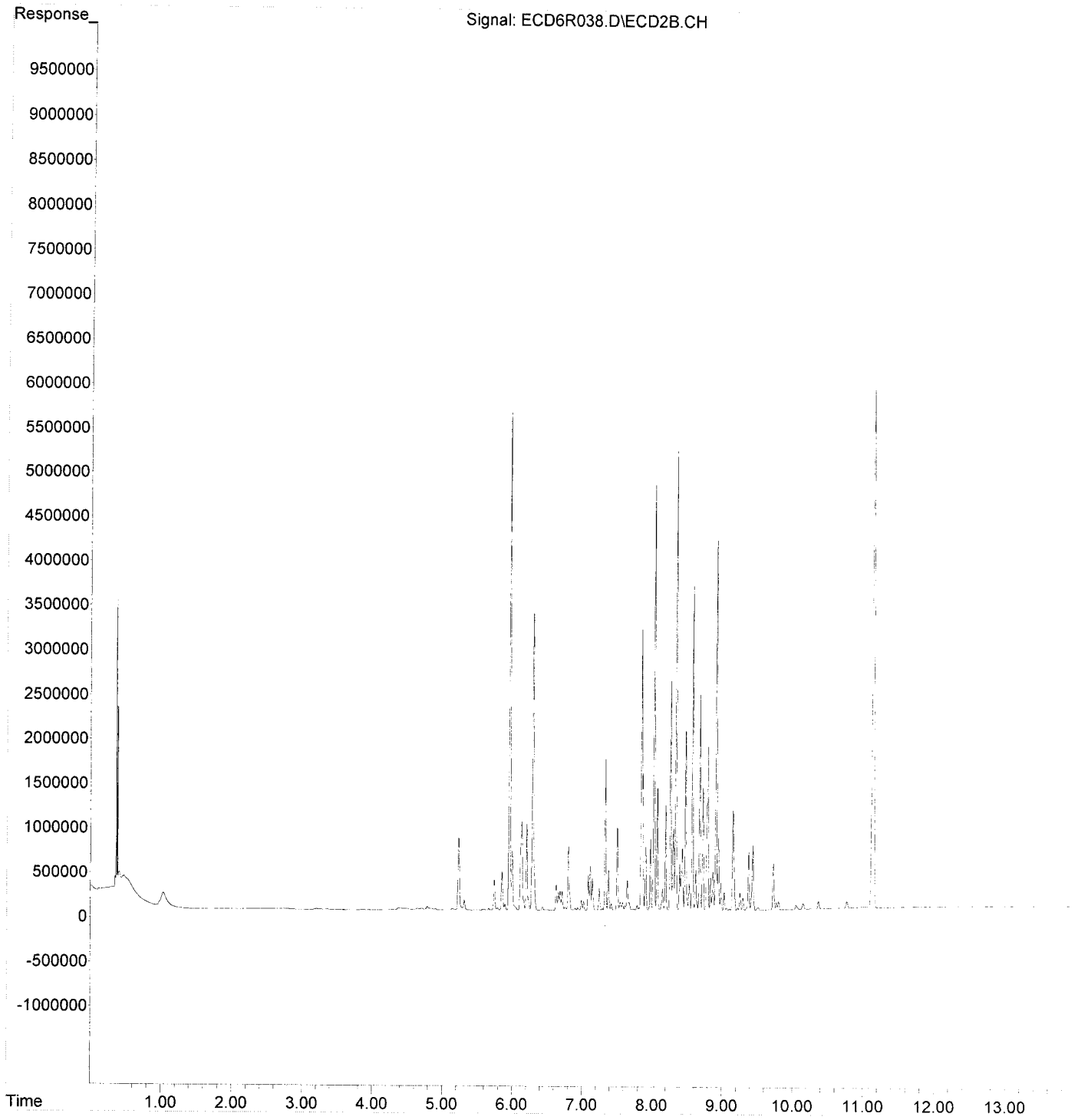
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.677	2430688	331.277 ng/ml
49)	Aroclor 1262 (2)	8.981	309468	30.823 ng/ml
50)	Aroclor 1262 (3)	9.152	1127573	152.188 ng/ml
51)	Aroclor 1262 (4)	9.434	730035	45.163 ng/ml
52)	Aroclor 1262 (5)	9.726	524630	54.428 ng/ml
53)	Aroclor 1262 (6)	10.366	84879	19.945 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.219	27937	6.702 ng/ml
56)	Aroclor 1268 (2)	9.726	524630	29.406 ng/ml
57)	Aroclor 1268 (3)	9.799	94826	6.145 ng/ml
58)	Aroclor 1268 (4)	10.048	48668	3.870 ng/ml
59)	Aroclor 1268 (5)	10.366	84879	17.547 ng/ml
60)	Aroclor 1268 (6)	10.769	80032	2.353 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R038.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:00
Operator : MJB/KAK
Sample : 9G23022-ICV2
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R039.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:17
Operator : MJB/KAK
Sample : 9G23022-ICV3
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:16 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19

1232, 1262

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.956	5724887	40.455 ng/ml
62) S	DCBP (S)	11.131	5829980	86.609 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.627	899909	210.626 ng/ml
3)	Aroclor 1016 (2)	7.114	1612387	211.214 ng/ml
4)	Aroclor 1016 (3)	7.242	793135	212.145 ng/ml
5)	Aroclor 1016 (4)	7.328	649177	181.854 ng/ml
6)	Aroclor 1016 (5)	7.374	733557	183.992 ng/ml
7)	Aroclor 1016 (6)	7.500	761481	192.595 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	6.131	335110	321.034 ng/ml
10)	Aroclor 1221 (2)	6.203	378507	365.141 ng/ml
11)	Aroclor 1221 (3)	6.290	1436248	410.373 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.290	1436248	496.723 ng/ml
14)	Aroclor 1232 (2)	6.627	899909	486.969 ng/ml
15)	Aroclor 1232 (3)	7.114	1612387	493.473 ng/ml
16)	Aroclor 1232 (4)	7.328	649177	536.321 ng/ml
17)	Aroclor 1232 (5)	7.374	733557	510.962 ng/ml
18)	Aroclor 1232 (6)	7.500	761481	510.727 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.627	899909	265.452 ng/ml
21)	Aroclor 1242 (2)	7.114	1612387	259.808 ng/ml
22)	Aroclor 1242 (3)	7.242	793135	275.865 ng/ml
23)	Aroclor 1242 (4)	7.328	649177	253.475 ng/ml
24)	Aroclor 1242 (5)	7.374	733557	242.727 ng/ml
25)	Aroclor 1242 (6)	7.500	761481	242.040 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	7.086	1373311	369.379 ng/ml
28)	Aroclor 1248 (2)	7.328	649177	141.087 ng/ml
29)	Aroclor 1248 (3)	7.374	733557	167.965 ng/ml
30)	Aroclor 1248 (4)	7.500	761481	148.884 ng/ml
31)	Aroclor 1248 (5)	7.863	906518	142.547 ng/ml
32)	Aroclor 1248 (6)	8.023	1169105	209.965 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.845	980981	144.860 ng/ml
35)	Aroclor 1254 (2)	8.023	1169105	116.801 ng/ml
36)	Aroclor 1254 (3)	8.336	447679	41.055 ng/ml
37)	Aroclor 1254 (4)	8.573	325990	41.211 ng/ml
38)	Aroclor 1254 (5)	8.912	2850994	352.489 ng/ml
39)	Aroclor 1254 (6)	9.138	840043	362.066 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.473	2977619	390.635 ng/ml
42)	Aroclor 1260 (2)	8.677	3678285	398.240 ng/ml
43)	Aroclor 1260 (3)	8.912	2850994	303.760 ng/ml
44)	Aroclor 1260 (4)	9.434	7992839	589.768 ng/ml
45)	Aroclor 1260 (5)	9.727	4647629	593.279 ng/ml
46)	Aroclor 1260 (6)	10.366	2085356	672.781 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

505.86

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R039.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:17
Operator : MJB/KAK
Sample : 9G23022-ICV3
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:16 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.677	3678285	501.312	ng/ml
49)	Aroclor 1262 (2)	8.981	5021227	500.108	ng/ml
50)	Aroclor 1262 (3)	9.172	3676607	496.230	ng/ml
51)	Aroclor 1262 (4)	9.434	7992839	494.473	ng/ml
52)	Aroclor 1262 (5)	9.727	4647629	482.169	ng/ml
53)	Aroclor 1262 (6)	10.366	2085356	490.024	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.218	484542	116.237	ng/ml
56)	Aroclor 1268 (2)	9.727	4647629	260.501	ng/ml
57)	Aroclor 1268 (3)	9.800	2568668	166.471	ng/ml
58)	Aroclor 1268 (4)	10.047	186425	14.825	ng/ml
59)	Aroclor 1268 (5)	10.366	2085356	431.114	ng/ml
60)	Aroclor 1268 (6)	10.768	654979	19.256	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

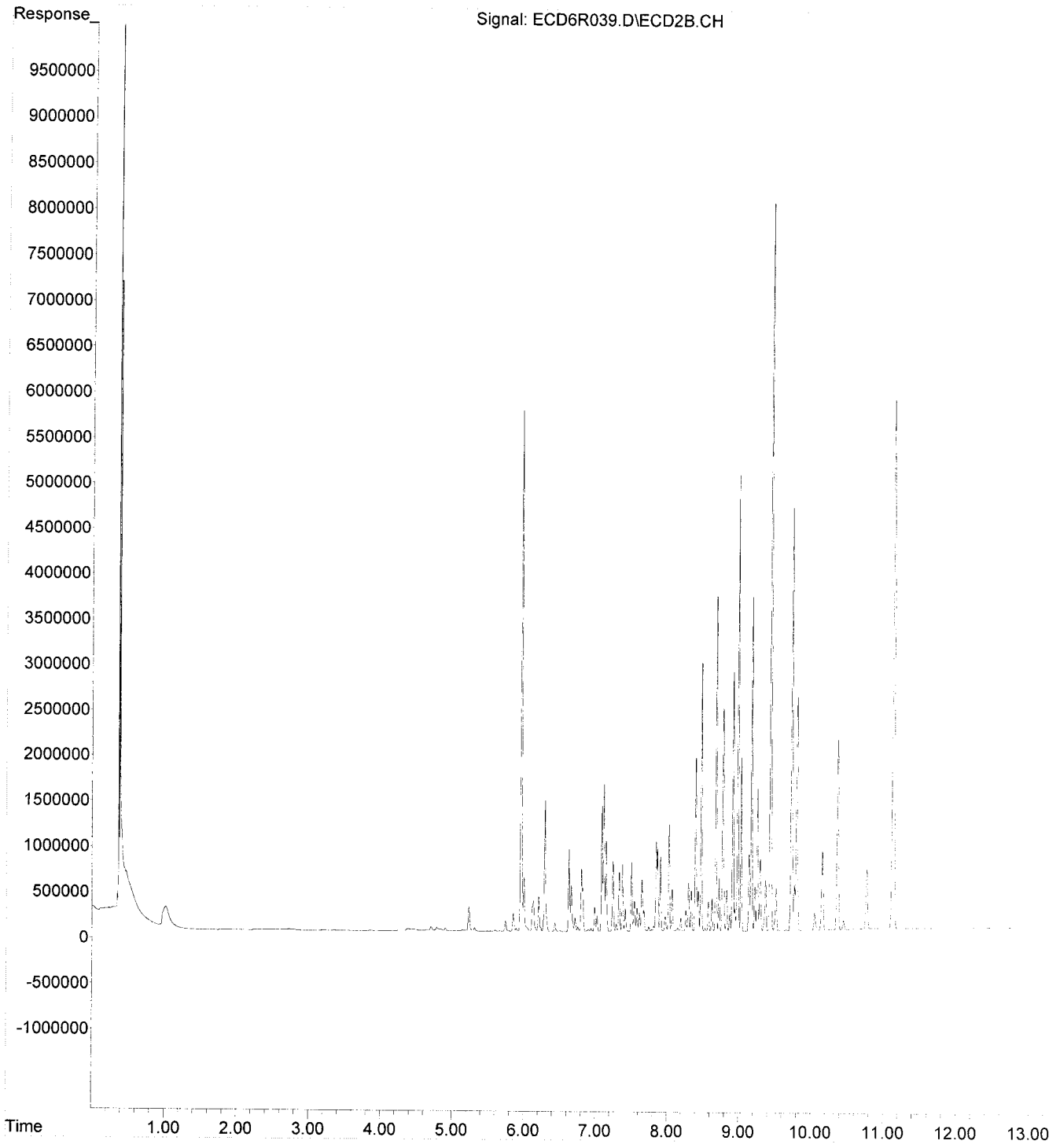
494.05

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R039.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:17
Operator : MJB/KAK
Sample : 9G23022-ICV3
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:16 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R040.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:35
Operator : MJB/KAK
Sample : 9G23022-ICV4
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19

1242, 1268

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.957	6769682	47.838	ng/ml
62) S	DCBP (S)	11.129	3044116	45.223	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.628	1875421	438.946	ng/ml
3)	Aroclor 1016 (2)	7.113	3460295	453.279	ng/ml
4)	Aroclor 1016 (3)	7.242	1634777	437.264	ng/ml
5)	Aroclor 1016 (4)	7.328	1416476	396.797	ng/ml
6)	Aroclor 1016 (5)	7.374	1642773	412.044	ng/ml
7)	Aroclor 1016 (6)	7.500	1714177	433.552	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	6.130	127944	122.570	ng/ml
10)	Aroclor 1221 (2)	6.204	252349	243.438	ng/ml
11)	Aroclor 1221 (3)	6.290	1196912	341.989	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.290	1196912	413.949	ng/ml
14)	Aroclor 1232 (2)	6.628	1875421	1014.848	ng/ml
15)	Aroclor 1232 (3)	7.113	3460295	1059.027	ng/ml
16)	Aroclor 1232 (4)	7.328	1416476	1170.229	ng/ml
17)	Aroclor 1232 (5)	7.374	1642773	1144.281	ng/ml
18)	Aroclor 1232 (6)	7.500	1714177	1149.703	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.628	1875421	553.204	ng/ml
21)	Aroclor 1242 (2)	7.113	3460295	557.565	ng/ml
22)	Aroclor 1242 (3)	7.242	1634777	568.602	ng/ml
23)	Aroclor 1242 (4)	7.328	1416476	553.071	ng/ml
24)	Aroclor 1242 (5)	7.374	1642773	543.577	ng/ml
25)	Aroclor 1242 (6)	7.500	1714177	544.858	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	7.086	2857534	768.591	ng/ml
28)	Aroclor 1248 (2)	7.328	1416476	307.847	ng/ml
29)	Aroclor 1248 (3)	7.374	1642773	376.151	ng/ml
30)	Aroclor 1248 (4)	7.500	1714177	335.154	ng/ml
31)	Aroclor 1248 (5)	7.863	1925886	302.840	ng/ml
32)	Aroclor 1248 (6)	8.022	1428401	256.534	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.847	1403681	207.279	ng/ml
35)	Aroclor 1254 (2)	8.022	1428401	142.706	ng/ml
36)	Aroclor 1254 (3)	8.335	548131	50.267	ng/ml
37)	Aroclor 1254 (4)	8.571	385795	48.771	ng/ml
38)	Aroclor 1254 (5)	8.911	113117	13.985	ng/ml
39)	Aroclor 1254 (6)	9.137	90746	39.112	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.473	52822	6.930	ng/ml
42)	Aroclor 1260 (2)	8.674	90633	9.813	ng/ml
43)	Aroclor 1260 (3)	8.911	113117	12.052	ng/ml
44)	Aroclor 1260 (4)	9.432	1007565	74.345	ng/ml
45)	Aroclor 1260 (5)	9.728	10339920	1319.912	ng/ml
46)	Aroclor 1260 (6)	10.364	2748478	886.718	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

553.48

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R040.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:35
Operator : MJB/KAK
Sample : 9G23022-ICV4
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.674	90633	12.352	ng/ml
49)	Aroclor 1262 (2)	8.980	2078551	207.021	ng/ml
50)	Aroclor 1262 (3)	9.170	148893	20.096	ng/ml
51)	Aroclor 1262 (4)	9.432	1007565	62.333	ng/ml
52)	Aroclor 1262 (5)	9.728	10339920	1072.716	ng/ml
53)	Aroclor 1262 (6)	10.364	2748478	645.846	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.217	2331157	559.222	ng/ml
56)	Aroclor 1268 (2)	9.728	10339920	579.555	ng/ml
57)	Aroclor 1268 (3)	9.801	8335824	540.232	ng/ml
58)	Aroclor 1268 (4)	10.046	6987450	555.660	ng/ml
59)	Aroclor 1268 (5)	10.364	2748478	568.204	ng/ml
60)	Aroclor 1268 (6)	10.767	18940988	556.867	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

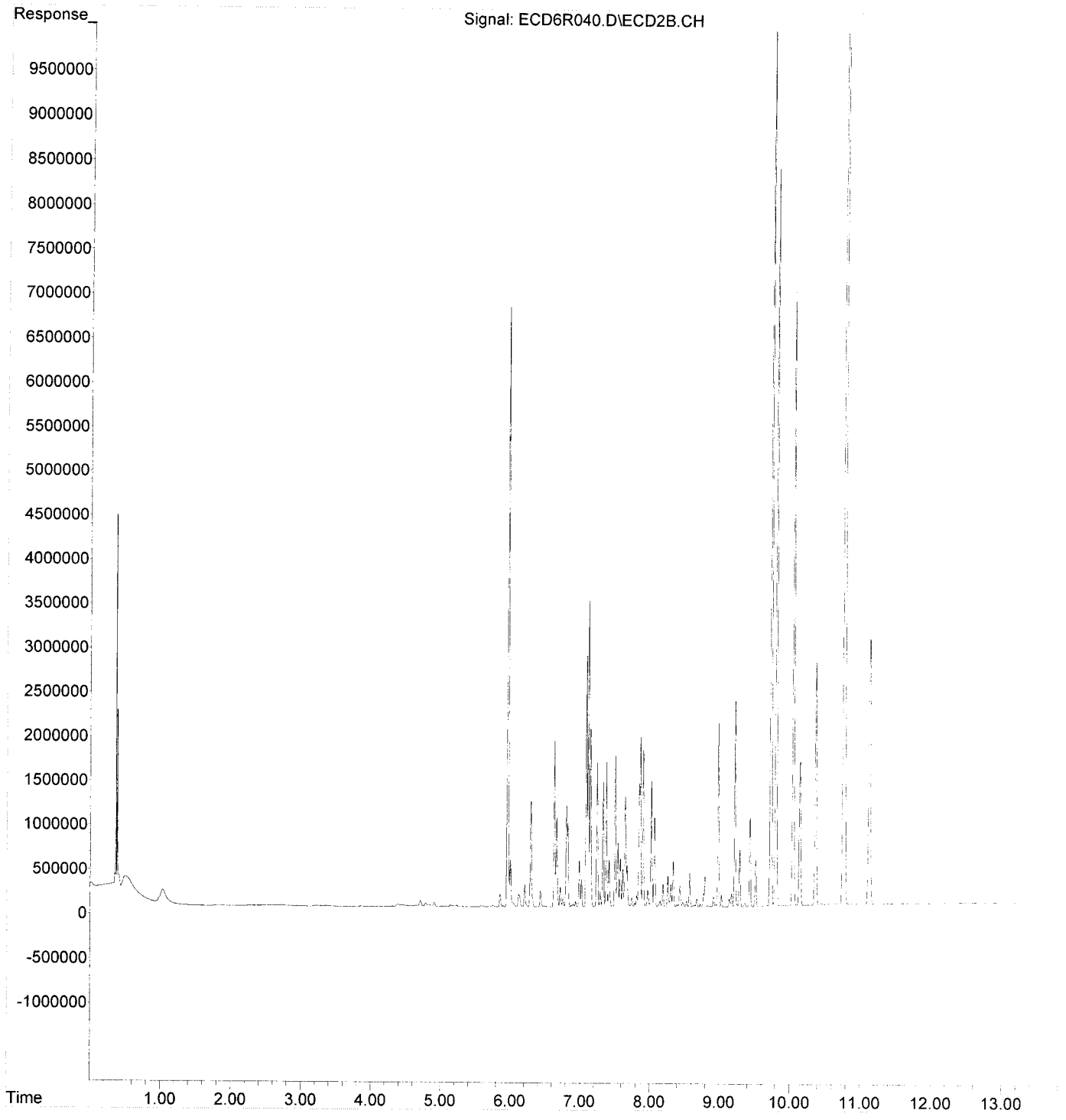
559.96

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R040.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:35
Operator : MJB/KAK
Sample : 9G23022-ICV4
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:26 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R041.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:53
Operator : MJB/KAK
Sample : 9G23022-ICV5
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:35 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19
1248

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	6.010f	9541	0.067	ng/ml
62) S	DCBP (S)	11.127	6805	0.101	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.628	876511	205.149	ng/ml
3)	Aroclor 1016 (2)	7.114	1732438	226.940	ng/ml
4)	Aroclor 1016 (3)	7.240	934154	249.864	ng/ml
5)	Aroclor 1016 (4)	7.329	2361824	661.618	ng/ml
6)	Aroclor 1016 (5)	7.374	2239546	561.728	ng/ml
7)	Aroclor 1016 (6)	7.500	2650001	670.242	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	6.130	11921	11.420	ng/ml
10)	Aroclor 1221 (2)	6.203	22387	21.597	ng/ml
11)	Aroclor 1221 (3)	6.290	128789	36.798	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.290	128789	44.541	ng/ml
14)	Aroclor 1232 (2)	6.628	876511	474.307	ng/ml
15)	Aroclor 1232 (3)	7.114	1732438	530.215	ng/ml
16)	Aroclor 1232 (4)	7.329	2361824	1951.233	ng/ml
17)	Aroclor 1232 (5)	7.374	2239546	1559.967	ng/ml
18)	Aroclor 1232 (6)	7.500	2650001	1777.363	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.628	876511	258.550	ng/ml
21)	Aroclor 1242 (2)	7.114	1732438	279.152	ng/ml
22)	Aroclor 1242 (3)	7.240	934154	324.914	ng/ml
23)	Aroclor 1242 (4)	7.329	2361824	922.188	ng/ml
24)	Aroclor 1242 (5)	7.374	2239546	741.044	ng/ml
25)	Aroclor 1242 (6)	7.500	2650001	842.314	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	7.086	1755171	472.089	ng/ml
28)	Aroclor 1248 (2)	7.329	2361824	513.302	ng/ml
29)	Aroclor 1248 (3)	7.374	2239546	512.796	ng/ml
30)	Aroclor 1248 (4)	7.500	2650001	518.126	ng/ml
31)	Aroclor 1248 (5)	7.863	3335803	524.545	ng/ml
32)	Aroclor 1248 (6)	8.023	2797738	502.460	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.846	2499125	369.041	ng/ml
35)	Aroclor 1254 (2)	8.023	2797738	279.511	ng/ml
36)	Aroclor 1254 (3)	8.335	1629548	149.441	ng/ml
37)	Aroclor 1254 (4)	8.572	1161737	146.864	ng/ml
38)	Aroclor 1254 (5)	8.909	260921	32.260	ng/ml
39)	Aroclor 1254 (6)	9.151	92170	39.726	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.473	154521	20.272	ng/ml
42)	Aroclor 1260 (2)	8.673	199395	21.588	ng/ml
43)	Aroclor 1260 (3)	8.909	260921	27.800	ng/ml
44)	Aroclor 1260 (4)	9.433	47187	3.482	ng/ml
45)	Aroclor 1260 (5)	9.725	31789	4.058	ng/ml
46)	Aroclor 1260 (6)	10.365	8602	2.775	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

507.22

Data Path : S:\DATA\9G23022\
Data File : ECD6R041.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:53
Operator : MJB/KAK
Sample : 9G23022-ICV5
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:35 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

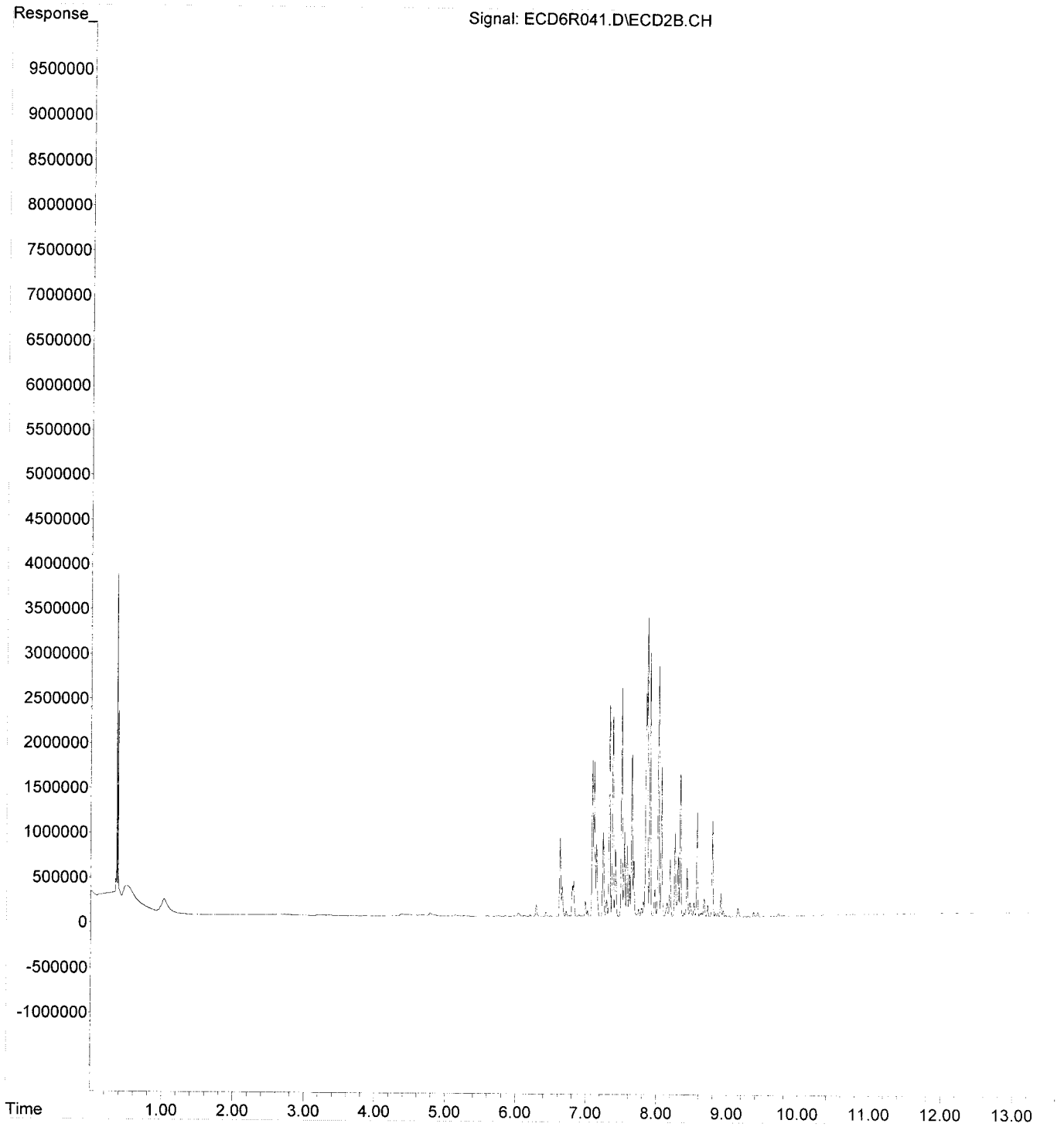
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.673	199395	27.175 ng/ml
49)	Aroclor 1262 (2)	8.980	20359	2.028 ng/ml
50)	Aroclor 1262 (3)	9.151	92170	12.440 ng/ml
51)	Aroclor 1262 (4)	9.433	47187	2.919 ng/ml
52)	Aroclor 1262 (5)	9.725	31789	3.298 ng/ml
53)	Aroclor 1262 (6)	10.365	8602	2.021 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.221	2245	0.539 ng/ml
56)	Aroclor 1268 (2)	9.725	31789	1.782 ng/ml
57)	Aroclor 1268 (3)	9.799	10148	0.658 ng/ml
58)	Aroclor 1268 (4)	10.049	1402	0.112 ng/ml
59)	Aroclor 1268 (5)	10.365	8602	1.778 ng/ml
60)	Aroclor 1268 (6)	10.769	6364	0.187 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R041.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 22:53
Operator : MJB/KAK
Sample : 9G23022-ICV5
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:26:35 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:29 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.959	1359565	9.607	ng/ml	✓
62) S	DCBP (S)	11.134	653354	9.706	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	6.630	103306	24.179	ng/ml	
3)	Aroclor 1016 (2)	7.117	165745	21.712	ng/ml	
4)	Aroclor 1016 (3)	7.245	89292	23.883	ng/ml	✓
5)	Aroclor 1016 (4)	7.331	91249	25.562	ng/ml	
6)	Aroclor 1016 (5)	7.377	100556	25.222	ng/ml	
7)	Aroclor 1016 (6)	7.503	95416	24.133	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	8.475	175285	22.996	ng/ml	
42)	Aroclor 1260 (2)	8.679	204724	22.165	ng/ml	
43)	Aroclor 1260 (3)	8.913	199444	21.250	ng/ml	
44)	Aroclor 1260 (4)	9.436	277128	20.449	ng/ml	✓
45)	Aroclor 1260 (5)	9.729	162964	20.803	ng/ml	
46)	Aroclor 1260 (6)	10.368	66652	21.503	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:29 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

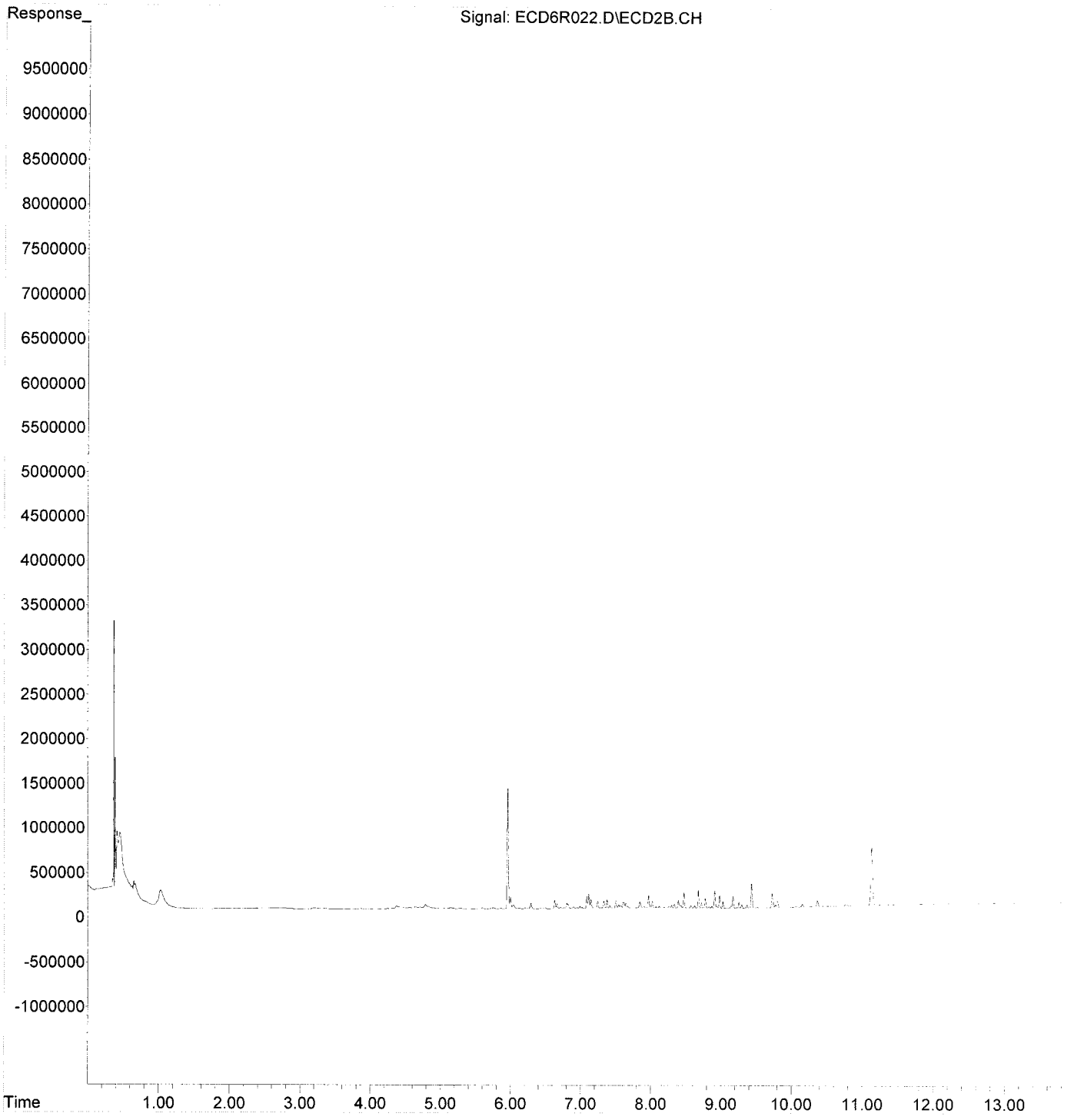
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:29 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:39 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.959	3386784	23.933	ng/ml ✓
62) S	DCBP (S)	11.135	1583071	23.518	ng/ml ✓
	Target Compounds				
2)	Aroclor 1016 (1)	6.629	231997	54.299	ng/ml
3)	Aroclor 1016 (2)	7.116	399308	52.307	ng/ml
4)	Aroclor 1016 (3)	7.244	202047	54.043	ng/ml
5)	Aroclor 1016 (4)	7.330	197891	55.435	ng/ml ✓
6)	Aroclor 1016 (5)	7.376	215663	54.093	ng/ml
7)	Aroclor 1016 (6)	7.502	213346	53.960	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.475	398462	52.274	ng/ml
42)	Aroclor 1260 (2)	8.679	487272	52.756	ng/ml
43)	Aroclor 1260 (3)	8.913	479640	51.103	ng/ml ✓
44)	Aroclor 1260 (4)	9.436	685457	50.578	ng/ml
45)	Aroclor 1260 (5)	9.730	401465	51.248	ng/ml
46)	Aroclor 1260 (6)	10.370	164111	52.946	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:39 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

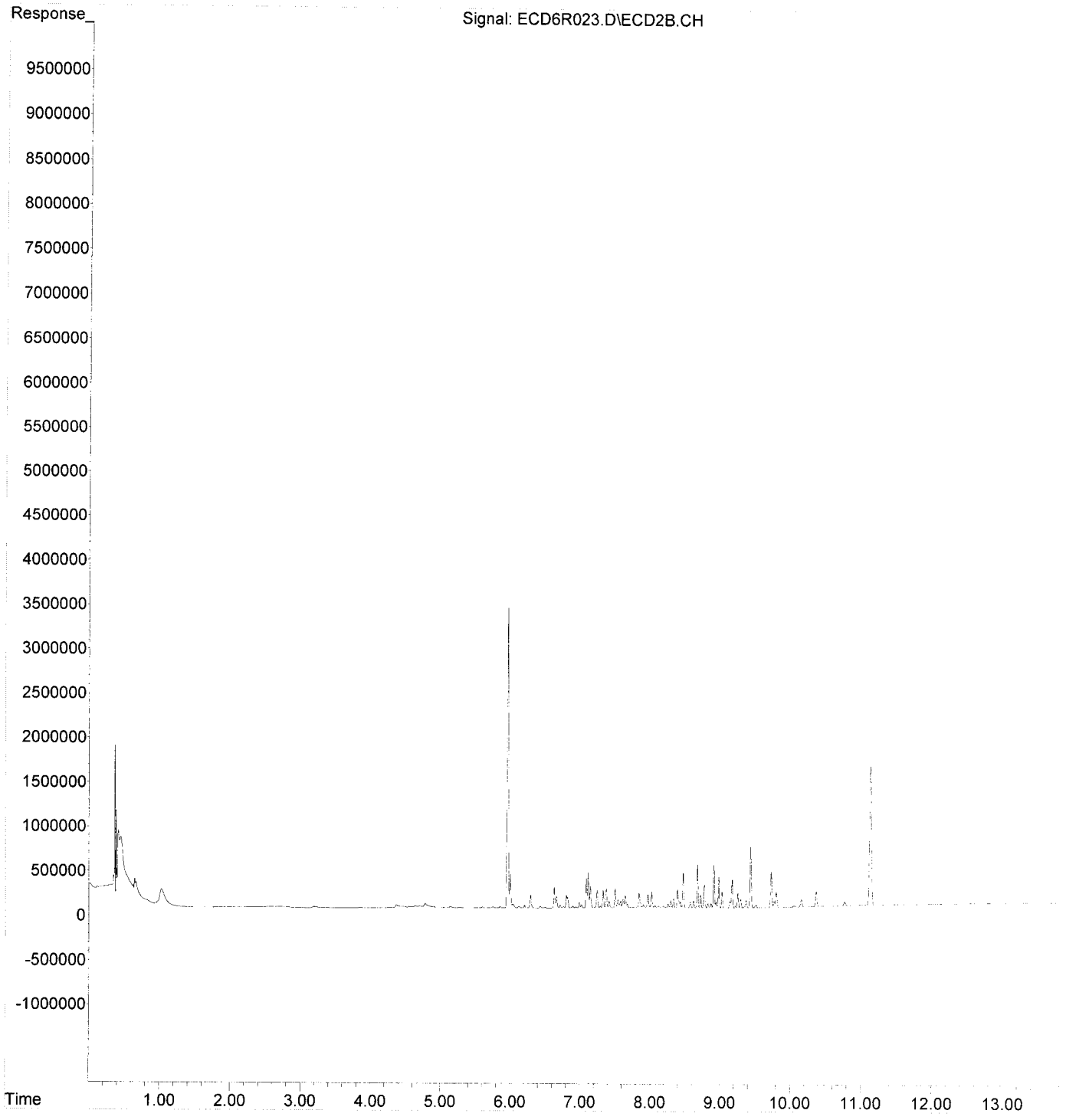
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:39 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:48 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.959	6922426	48.917 ng/ml ✓
62) S	DCBP (S)	11.133	3104483	46.120 ng/ml ✓
	Target Compounds			
2)	Aroclor 1016 (1)	6.629	426219	99.757 ng/ml
3)	Aroclor 1016 (2)	7.116	757333	99.206 ng/ml
4)	Aroclor 1016 (3)	7.244	366955	98.152 ng/ml ✓
5)	Aroclor 1016 (4)	7.330	348746	97.694 ng/ml
6)	Aroclor 1016 (5)	7.376	392974	98.567 ng/ml
7)	Aroclor 1016 (6)	7.502	394197	99.701 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.474	749483	98.325 ng/ml
42)	Aroclor 1260 (2)	8.678	910167	98.542 ng/ml
43)	Aroclor 1260 (3)	8.912	918575	97.870 ng/ml
44)	Aroclor 1260 (4)	9.435	1296307	95.651 ng/ml ✓
45)	Aroclor 1260 (5)	9.728	764760	97.623 ng/ml
46)	Aroclor 1260 (6)	10.368	299665	96.678 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:48 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

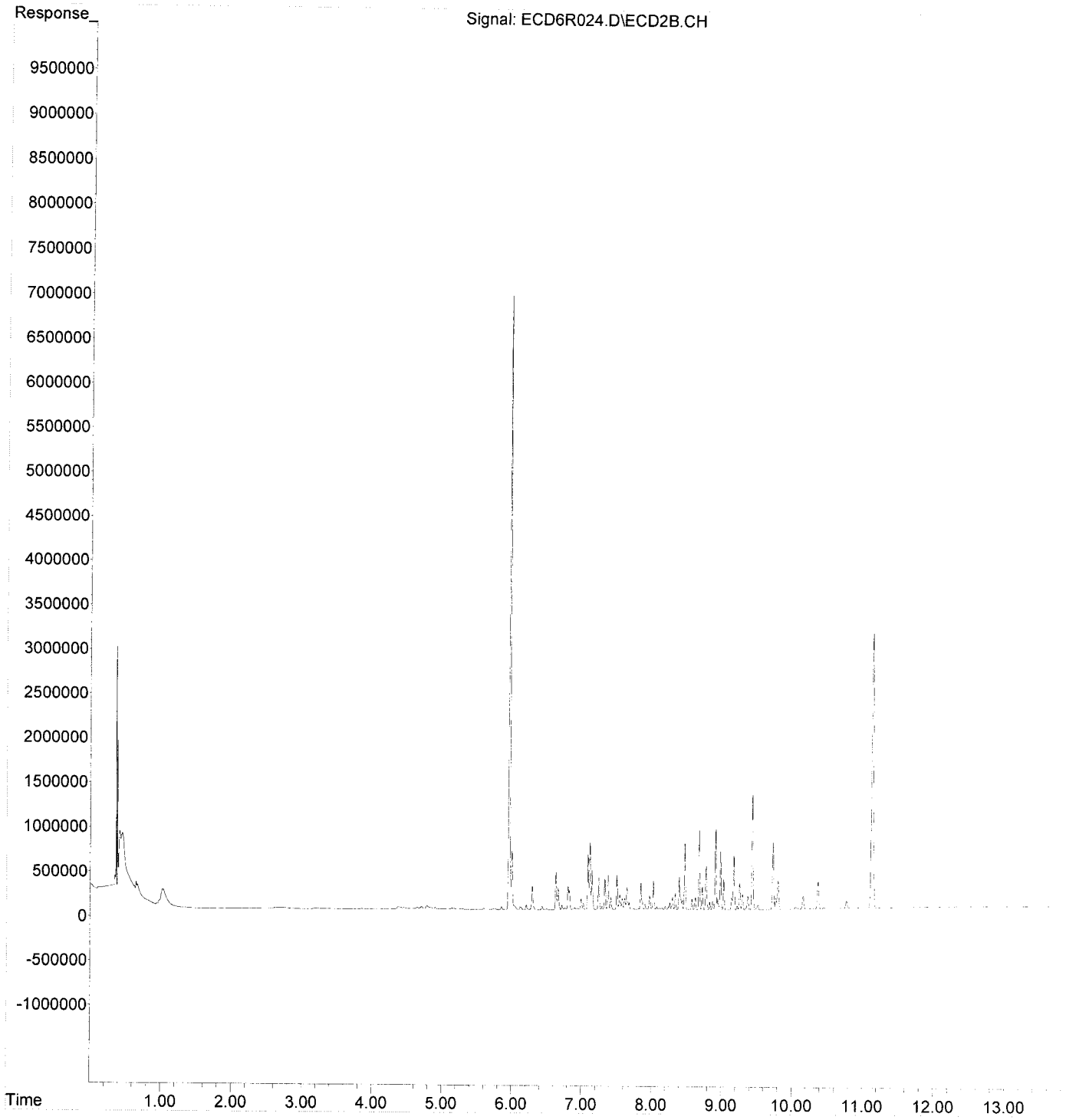
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:48 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.959	13475774	95.227	ng/ml	✓
62) S	DCBP (S)	11.133	6390068	94.930	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	6.629	811049	189.828	ng/ml	
3)	Aroclor 1016 (2)	7.116	1453494	190.399	ng/ml	
4)	Aroclor 1016 (3)	7.244	704258	188.372	ng/ml	✓
5)	Aroclor 1016 (4)	7.330	657786	184.265	ng/ml	
6)	Aroclor 1016 (5)	7.376	744464	186.728	ng/ml	
7)	Aroclor 1016 (6)	7.502	733850	185.606	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	8.474	1429782	187.574	ng/ml	
42)	Aroclor 1260 (2)	8.678	1736681	188.027	ng/ml	
43)	Aroclor 1260 (3)	8.912	1745851	186.012	ng/ml	
44)	Aroclor 1260 (4)	9.435	2585035	190.742	ng/ml	✓
45)	Aroclor 1260 (5)	9.728	1456967	185.985	ng/ml	
46)	Aroclor 1260 (6)	10.368	597884	192.890	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

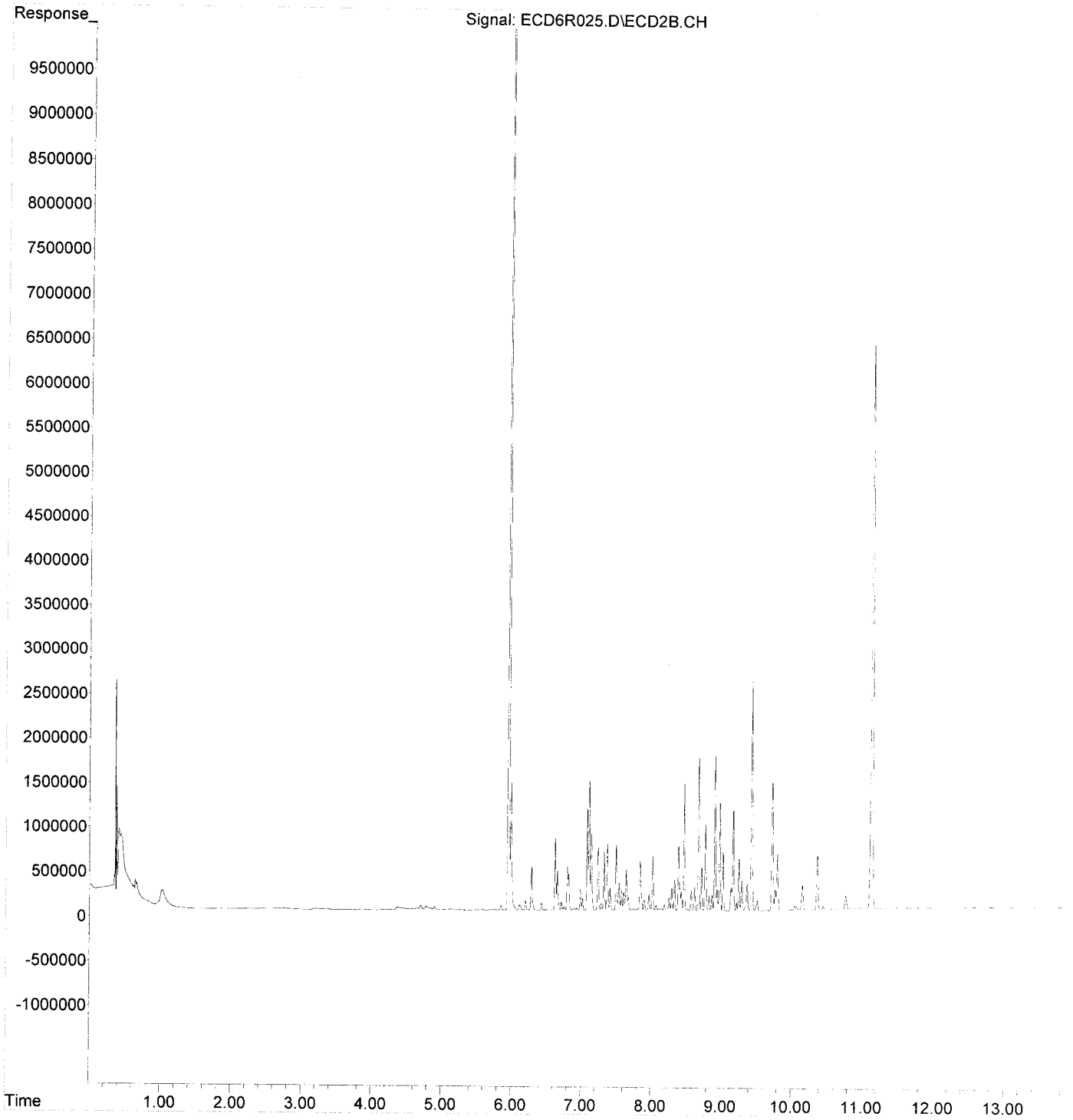
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:06:57 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:06 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.958	37648700	266.045	ng/ml ✓
62) S	DCBP (S)	11.133	17663880	262.411	ng/ml ✓
	Target Compounds				
2)	Aroclor 1016 (1)	6.628	2036225	476.583	ng/ml
3)	Aroclor 1016 (2)	7.115	3755979	492.012	ng/ml
4)	Aroclor 1016 (3)	7.243	1792186	479.368	ng/ml ✓
5)	Aroclor 1016 (4)	7.329	1643709	460.452	ng/ml
6)	Aroclor 1016 (5)	7.375	1841055	461.778	ng/ml
7)	Aroclor 1016 (6)	7.501	1843066	466.151	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.473	3633732	476.710	ng/ml
42)	Aroclor 1260 (2)	8.678	4491636	486.300	ng/ml
43)	Aroclor 1260 (3)	8.912	4715739	502.439	ng/ml ✓
44)	Aroclor 1260 (4)	9.435	6807898	502.335	ng/ml
45)	Aroclor 1260 (5)	9.727	3955443	504.920	ng/ml
46)	Aroclor 1260 (6)	10.367	1488704	480.288	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:06 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

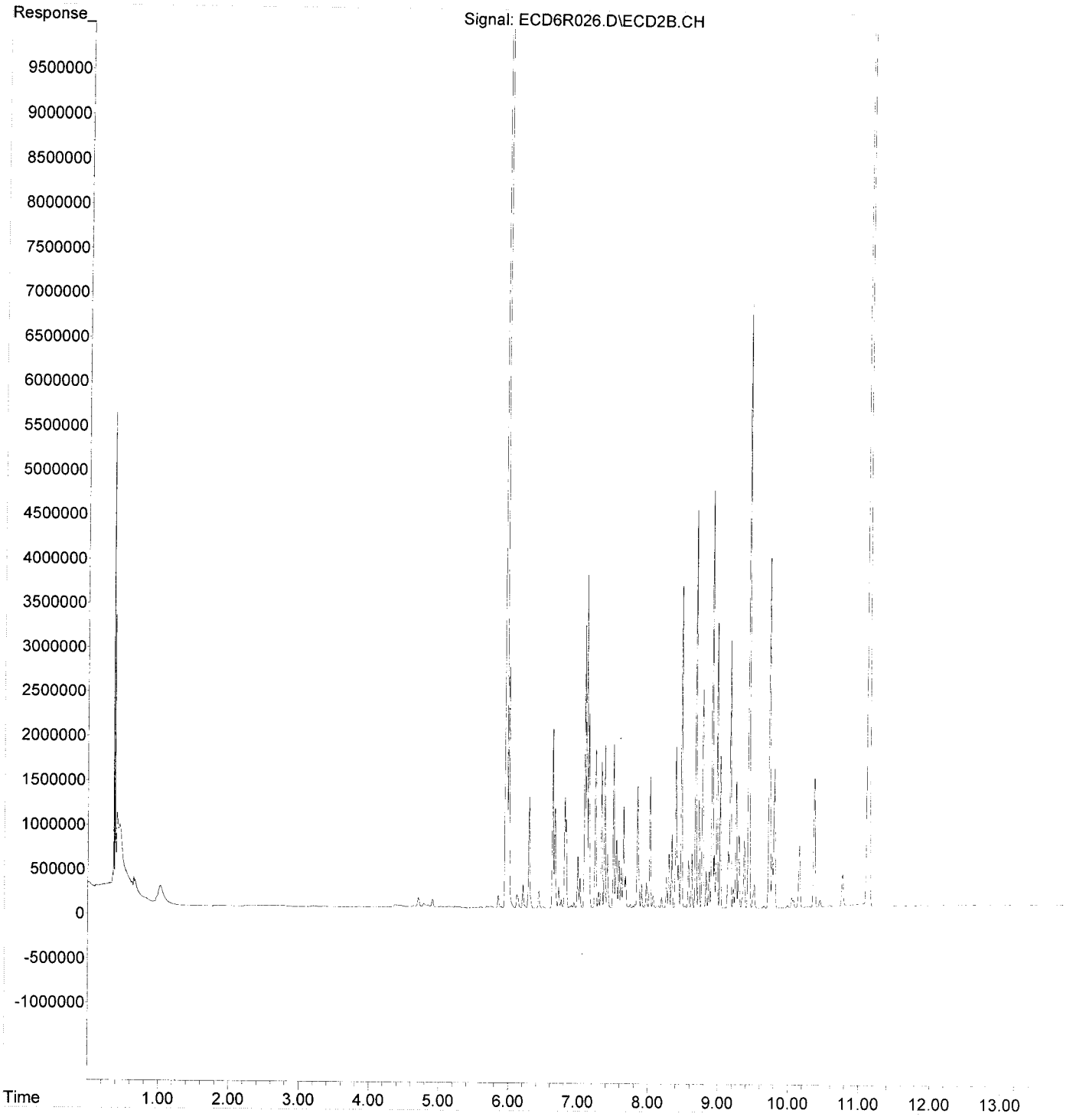
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:06 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.960	71501858	505.268 ng/ml
62) S	DCBP (S)	11.133	33891044	503.478 ng/ml ✓
	Target Compounds			
2)	Aroclor 1016 (1)	6.629	3776021	883.786 ng/ml
3)	Aroclor 1016 (2)	7.116	7181462	940.731 ng/ml
4)	Aroclor 1016 (3)	7.244	3446934	921.974 ng/ml
5)	Aroclor 1016 (4)	7.330	3142909	880.423 ng/ml ✓
6)	Aroclor 1016 (5)	7.376	3585981	899.444 ng/ml
7)	Aroclor 1016 (6)	7.502	3616773	914.759 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.474	7213909	946.395 ng/ml
42)	Aroclor 1260 (2)	8.678	8817712	954.674 ng/ml
43)	Aroclor 1260 (3)	8.912	9177024	977.767 ng/ml
44)	Aroclor 1260 (4)	9.435	13490978	995.460 ng/ml ✓
45)	Aroclor 1260 (5)	9.729	7695998	982.410 ng/ml
46)	Aroclor 1260 (6)	10.367	2965288	956.665 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

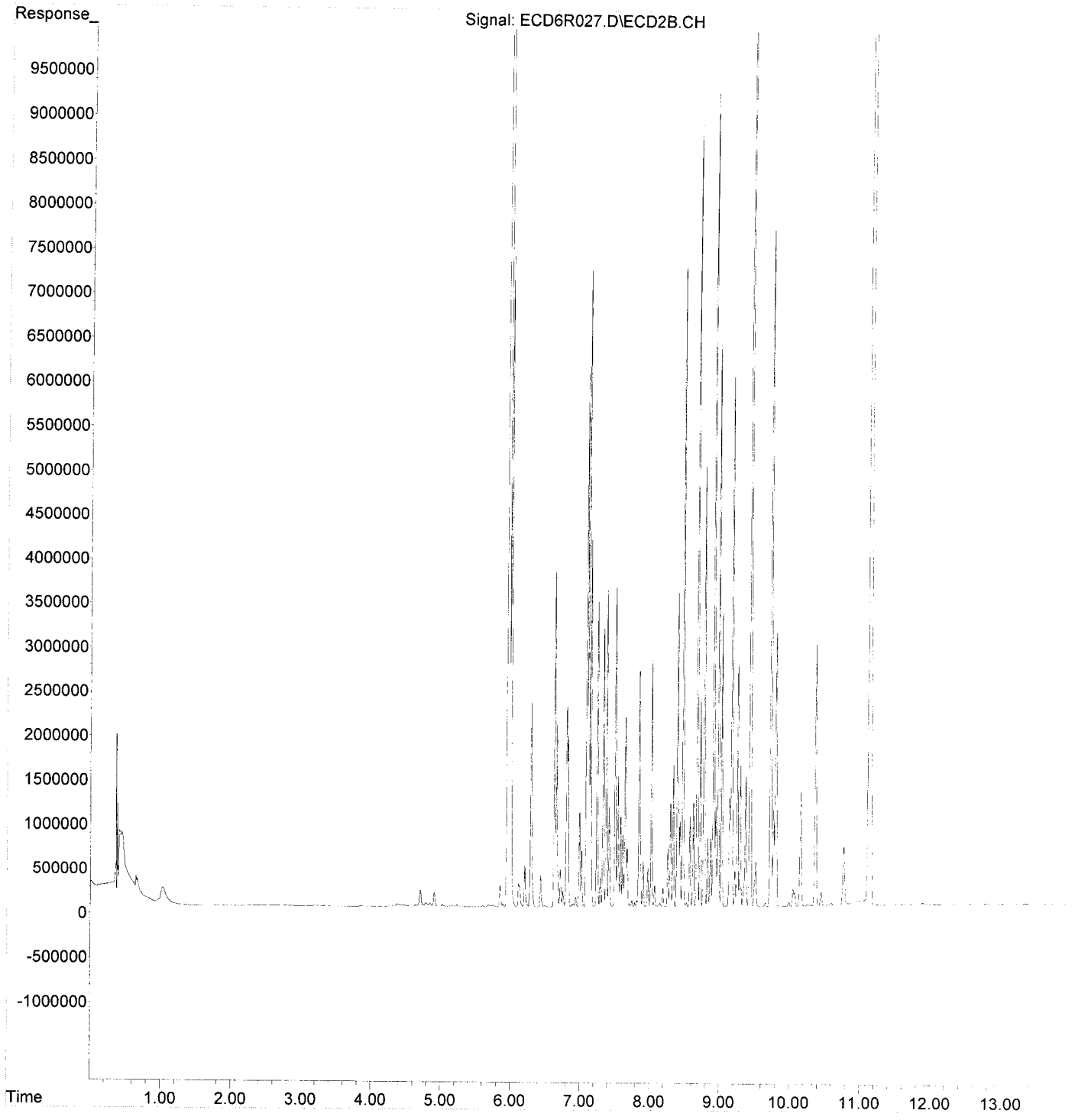
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:15 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:24 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.960	121885275	861.302	ng/ml	✓
62)	S DCBP (S)	11.135	62488470	928.315	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	6.628	5905075	1382.095	ng/ml	
3)	Aroclor 1016 (2)	7.116	11444731	1499.195	ng/ml	
4)	Aroclor 1016 (3)	7.243	5164294	1381.327	ng/ml	✓
5)	Aroclor 1016 (4)	7.330	4892125	1370.431	ng/ml	
6)	Aroclor 1016 (5)	7.376	5470473	1372.117	ng/ml	
7)	Aroclor 1016 (6)	7.502	5587140	1413.107	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	8.474	11248529	1475.698	ng/ml	
42)	Aroclor 1260 (2)	8.679	13630182	1475.710	ng/ml	
43)	Aroclor 1260 (3)	8.913	14417064	1536.068	ng/ml	
44)	Aroclor 1260 (4)	9.436	21460443	1583.504	ng/ml	✓
45)	Aroclor 1260 (5)	9.728	12179663	1554.759	ng/ml	
46)	Aroclor 1260 (6)	10.368	4730507	1526.163	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:24 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

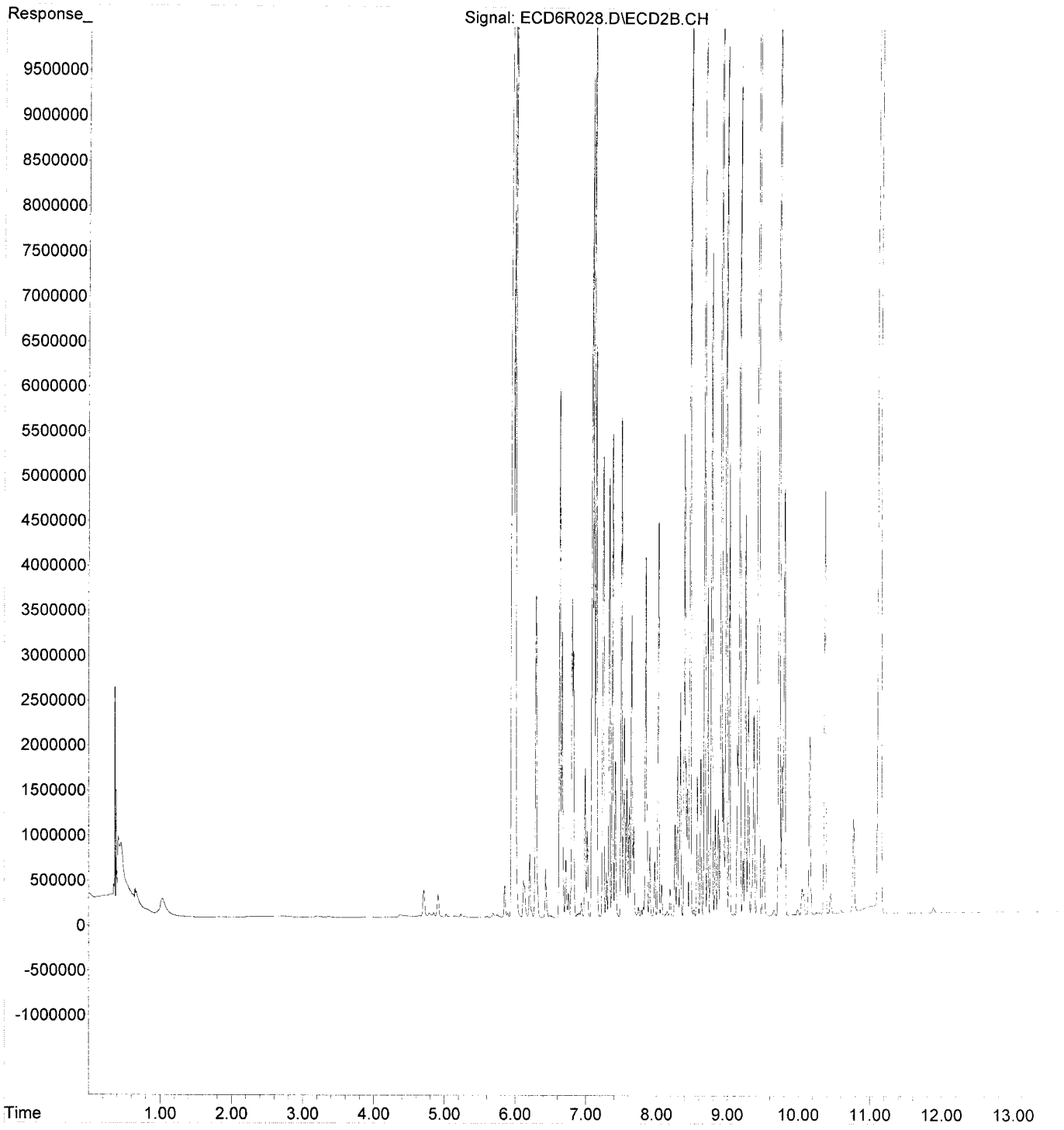
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\Requant\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 14:07:24 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 14:00:12 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\1\SEQUENCE\9G23021A.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	Isooctane	E6A71717	1	Sample		
2	Vial 1	Isooctane	E6A71717	1	Sample		
3	Vial 2	9G23021-CCV1	E6A71717	1	Sample		
4	Vial 1	Isooctane	E6A71717	1	Sample		
5	Vial 3	MRL check	E6A71717	1	Sample		
6	Vial 4	9G23021-ICB1	E6A71717	1	Sample		
7	Vial 5	9G23021-CAL1	E6A71717	1	Sample		
8	Vial 6	9G23021-CAL2	E6A71717	1	Sample		
9	Vial 7	9G23021-CAL3	E6A71717	1	Sample		
10	Vial 8	9G23021-CAL4	E6A71717	1	Sample		
11	Vial 9	9G23021-CAL5	E6A71717	1	Sample		
12	Vial 10	9G23021-CAL6	E6A71717	1	Sample		
13	Vial 11	9G23021-CAL7	E6A71717	1	Sample		
14	Vial 1	9G23021-IBL1	E6A71717	1	Sample		
15	Vial 12	9G23021-ICV1	E6A71717	1	Sample		
16	Vial 13	9G23021-CAL8	E6A71717	1	Sample		
17	Vial 14	9G23021-CAL9	E6A71717	1	Sample		
18	Vial 15	9G23021-CALA	E6A71717	1	Sample		
19	Vial 16	9G23021-CALB	E6A71717	1	Sample		
20	Vial 17	9G23021-CALC	E6A71717	1	Sample		
21	Vial 18	9G23021-CALD	E6A71717	1	Sample		
22	Vial 19	9G23021-CALE	E6A71717	1	Sample		
23	Vial 20	9G23021-ICV2	E6A71717	1	Sample		
24	Vial 21	9G23021-ICV3	E6A71717	1	Sample		
25	Vial 22	9G23021-ICV4	E6A71717	1	Sample		
26	Vial 23	9G23021-ICV5	E6A71717	1	Sample		
27	Vial 1	Isooctane	E6A71717	1	Sample		

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	Isooctane	E6A71717	1	Sample		
2	Vial 51	Isooctane	E6A71717	1	Sample		
3	Vial 52	9G23022-CCV1	E6A71717	1	Sample		
4	Vial 51	Isooctane	E6A71717	1	Sample		
5	Vial 53	MRL check	E6A71717	1	Sample		
6	Vial 51	Isooctane	E6A71717	1	Sample		
7	Vial 54	9G23022-ICB1	E6A71717	1	Sample		
8	Vial 5	9G23022-CAL1	E6A71717	1	Sample		
9	Vial 6	9G23022-CAL2	E6A71717	1	Sample		
10	Vial 7	9G23022-CAL3	E6A71717	1	Sample		
11	Vial 8	9G23022-CAL4	E6A71717	1	Sample		
12	Vial 9	9G23022-CAL5	E6A71717	1	Sample		
13	Vial 10	9G23022-CAL6	E6A71717	1	Sample		
14	Vial 11	9G23022-CAL7	E6A71717	1	Sample		
15	Vial 51	9G23022-IBL1	E6A71717	1	Sample		
16	Vial 12	9G23022-ICV1	E6A71717	1	Sample		
17	Vial 13	9G23022-CAL8	E6A71717	1	Sample		
18	Vial 14	9G23022-CAL9	E6A71717	1	Sample		
19	Vial 15	9G23022-CALA	E6A71717	1	Sample		
20	Vial 16	9G23022-CALB	E6A71717	1	Sample		
21	Vial 17	9G23022-CALC	E6A71717	1	Sample		
22	Vial 18	9G23022-CALD	E6A71717	1	Sample		

7/24/19

Sequence: C:\HPCHEM\1\SEQUENCE\9G23021A.S

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
23	Vial 19	9G23022-CALE	E6A71717	1	Sample		
24	Vial 20	9G23022-ICV2	E6A71717	1	Sample		
25	Vial 21	9G23022-ICV3	E6A71717	1	Sample		
26	Vial 22	9G23022-ICV4	E6A71717	1	Sample		
27	Vial 23	9G23022-ICV5	E6A71717	1	Sample		

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.959	1359565	11.026 ng/ml
62) S	DCBP (S)	11.134	653354	8.883 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.630	103306	28.569 ng/ml
3)	Aroclor 1016 (2)	7.117	165745	25.337 ng/ml
4)	Aroclor 1016 (3)	7.245	89292	31.618 ng/ml
5)	Aroclor 1016 (4)	7.331	91249	26.400 ng/ml
6)	Aroclor 1016 (5)	7.377	100556	25.812 ng/ml
7)	Aroclor 1016 (6)	7.503	95416	24.582 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.475	175285	22.449 ng/ml
42)	Aroclor 1260 (2)	8.679	204724	21.940 ng/ml
43)	Aroclor 1260 (3)	8.913	199444	20.953 ng/ml
44)	Aroclor 1260 (4)	9.436	277128	20.668 ng/ml
45)	Aroclor 1260 (5)	9.729	162964	18.785 ng/ml
46)	Aroclor 1260 (6)	10.368	66652	19.868 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

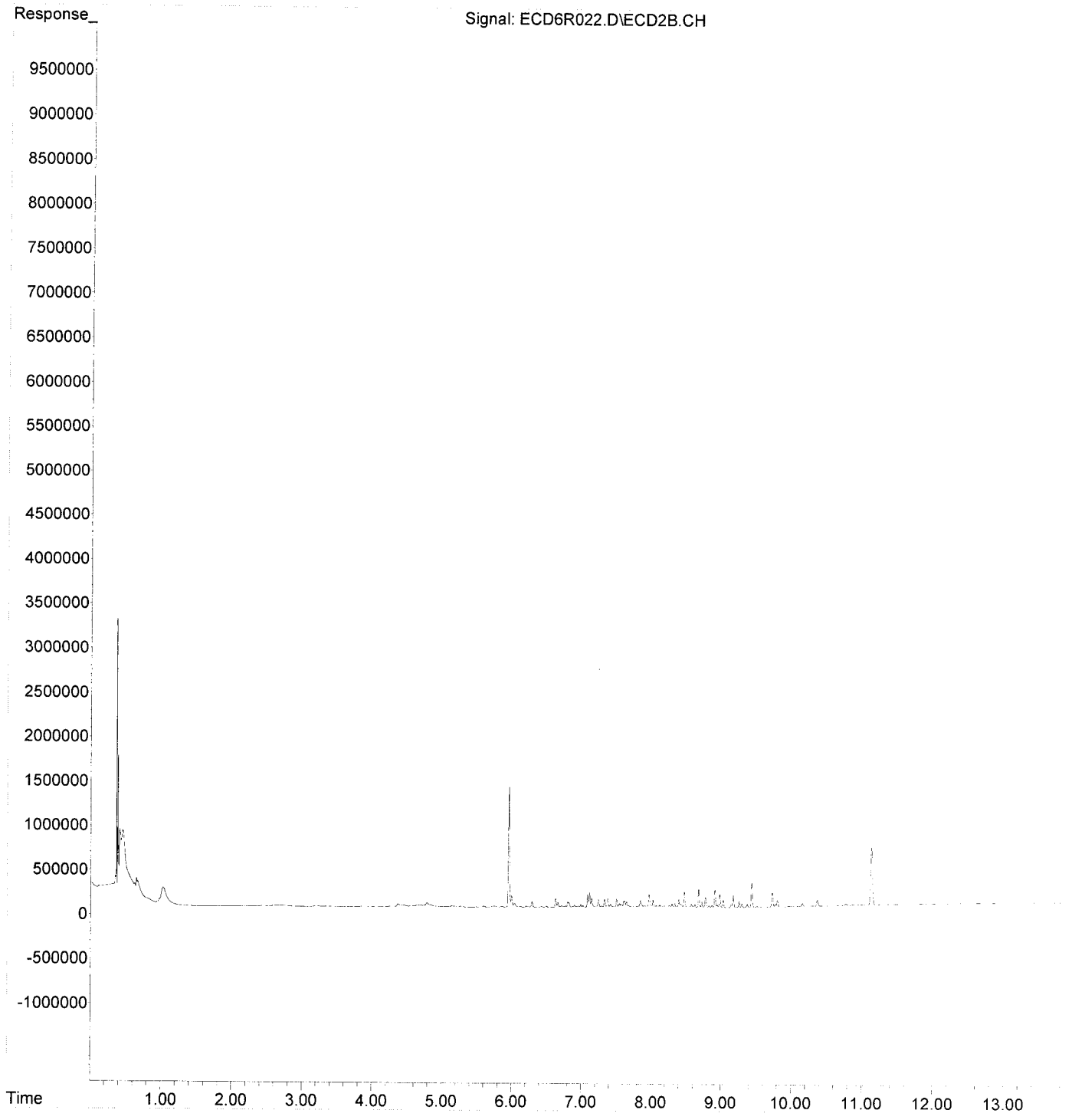
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R022.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:16
Operator : MJB/KAK
Sample : 9G23022-CAL1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:58 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.959	3386784	27.466	ng/ml
62) S	DCBP (S)	11.135	1583071	21.524	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.629	231997	64.159	ng/ml
3)	Aroclor 1016 (2)	7.116	399308	61.041	ng/ml
4)	Aroclor 1016 (3)	7.244	202047	71.545	ng/ml
5)	Aroclor 1016 (4)	7.330	197891	57.254	ng/ml
6)	Aroclor 1016 (5)	7.376	215663	55.359	ng/ml
7)	Aroclor 1016 (6)	7.502	213346	54.965	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.475	398462	51.031	ng/ml
42)	Aroclor 1260 (2)	8.679	487272	52.220	ng/ml
43)	Aroclor 1260 (3)	8.913	479640	50.389	ng/ml
44)	Aroclor 1260 (4)	9.436	685457	51.121	ng/ml
45)	Aroclor 1260 (5)	9.730	401465	46.276	ng/ml
46)	Aroclor 1260 (6)	10.370	164111	48.920	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:58 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

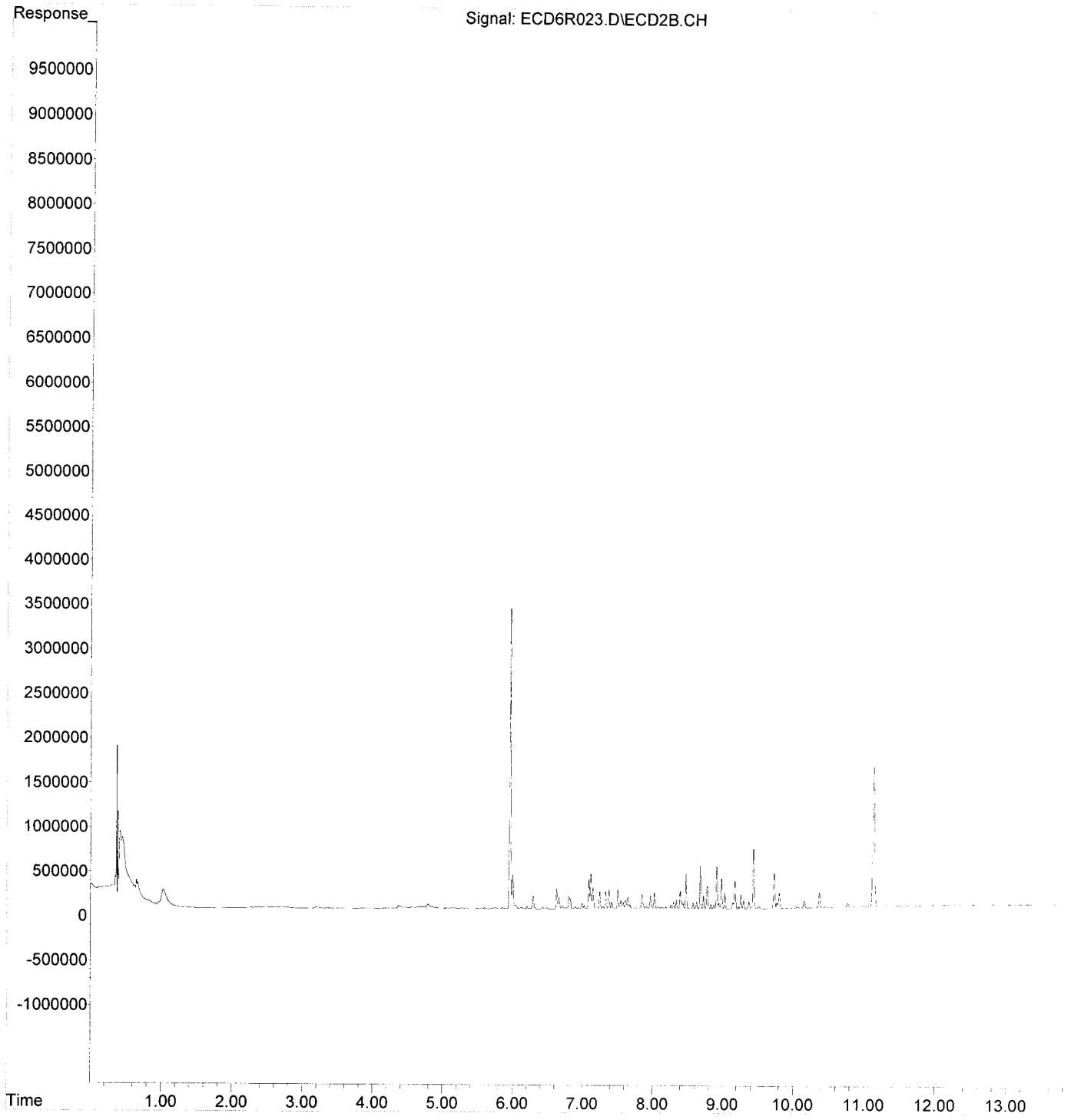
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R023.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:34
Operator : MJB/KAK
Sample : 9G23022-CAL2
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:38:58 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:13 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.959	6922426	56.140 ng/ml
62) S	DCBP (S)	11.133	3104483	42.210 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.629	426219	117.871 ng/ml
3)	Aroclor 1016 (2)	7.116	757333	115.770 ng/ml
4)	Aroclor 1016 (3)	7.244	366955	129.938 ng/ml
5)	Aroclor 1016 (4)	7.330	348746	100.900 ng/ml
6)	Aroclor 1016 (5)	7.376	392974	100.873 ng/ml
7)	Aroclor 1016 (6)	7.502	394197	101.559 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.474	749483	95.986 ng/ml
42)	Aroclor 1260 (2)	8.678	910167	97.541 ng/ml
43)	Aroclor 1260 (3)	8.912	918575	96.503 ng/ml
44)	Aroclor 1260 (4)	9.435	1296307	96.678 ng/ml
45)	Aroclor 1260 (5)	9.728	764760	88.153 ng/ml
46)	Aroclor 1260 (6)	10.368	299665	89.327 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:13 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

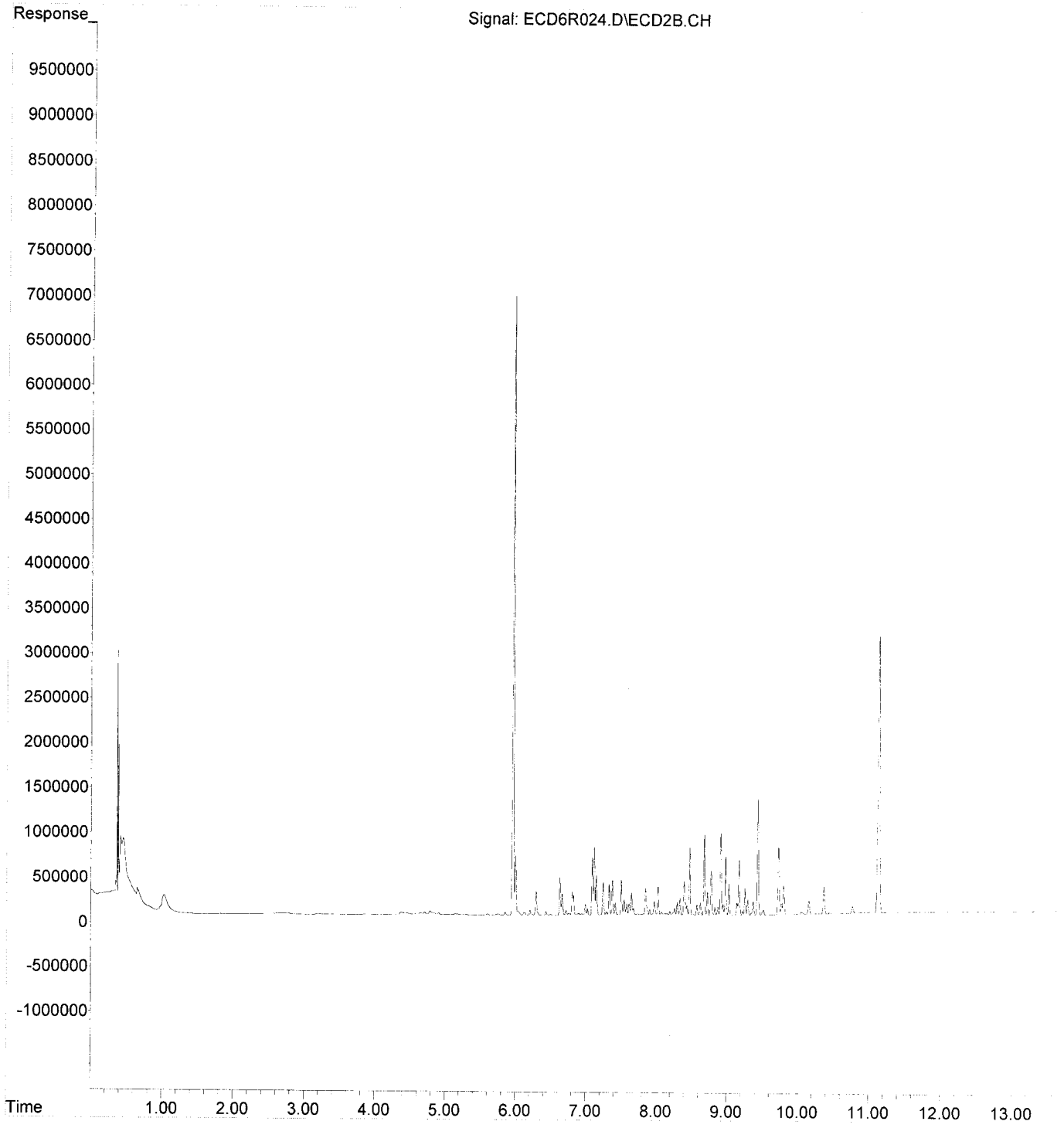
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R024.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 17:52
Operator : MJB/KAK
Sample : 9G23022-CAL3
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:13 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:28 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.959	13475774	109.287	ng/ml
62)	S DCBP (S)	11.133	6390068	86.882	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.629	811049	224.296	ng/ml
3)	Aroclor 1016 (2)	7.116	1453494	222.190	ng/ml
4)	Aroclor 1016 (3)	7.244	704258	249.377	ng/ml
5)	Aroclor 1016 (4)	7.330	657786	190.312	ng/ml
6)	Aroclor 1016 (5)	7.376	744464	191.098	ng/ml
7)	Aroclor 1016 (6)	7.502	733850	189.066	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.474	1429782	183.112	ng/ml
42)	Aroclor 1260 (2)	8.678	1736681	186.116	ng/ml
43)	Aroclor 1260 (3)	8.912	1745851	183.414	ng/ml
44)	Aroclor 1260 (4)	9.435	2585035	193.791	ng/ml
45)	Aroclor 1260 (5)	9.728	1456967	167.942	ng/ml
46)	Aroclor 1260 (6)	10.368	597884	178.223	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:28 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

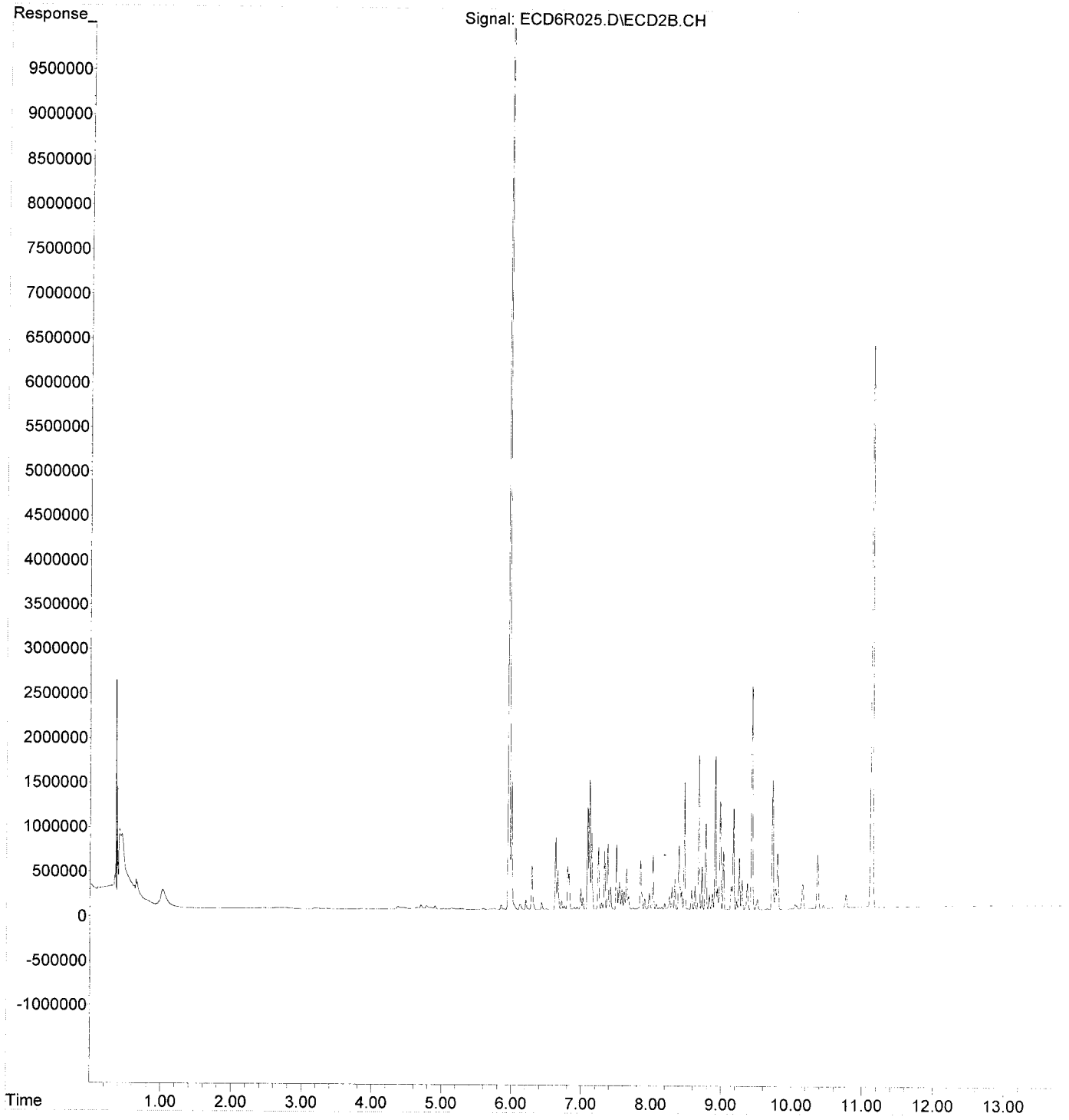
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R025.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:10
Operator : MJB/KAK
Sample : 9G23022-CAL4
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:28 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.958	37648700	305.325 ng/ml
62) S	DCBP (S)	11.133	17663880	240.166 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.628	2036225	563.120 ng/ml
3)	Aroclor 1016 (2)	7.115	3755979	574.161 ng/ml
4)	Aroclor 1016 (3)	7.243	1792186	634.611 ng/ml
5)	Aroclor 1016 (4)	7.329	1643709	475.562 ng/ml
6)	Aroclor 1016 (5)	7.375	1841055	472.585 ng/ml
7)	Aroclor 1016 (6)	7.501	1843066	474.839 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.473	3633732	465.372 ng/ml
42)	Aroclor 1260 (2)	8.678	4491636	481.358 ng/ml
43)	Aroclor 1260 (3)	8.912	4715739	495.421 ng/ml
44)	Aroclor 1260 (4)	9.435	6807898	507.730 ng/ml
45)	Aroclor 1260 (5)	9.727	3955443	455.937 ng/ml
46)	Aroclor 1260 (6)	10.367	1488704	443.766 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

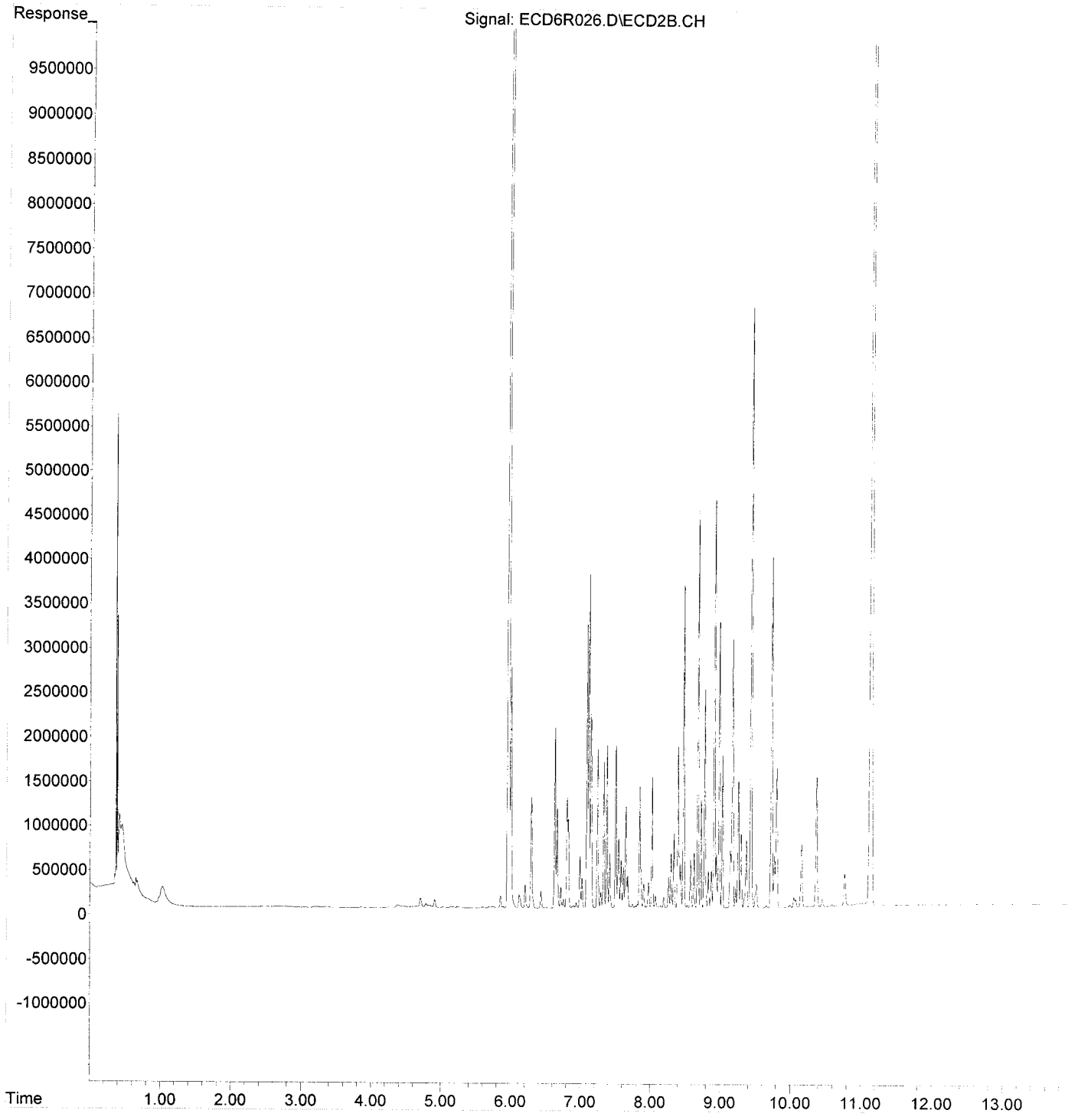
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R026.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:27
Operator : MJB/KAK
Sample : 9G23022-CAL5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:44 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.960	71501858	579.869	ng/ml
62) S	DCBP (S)	11.133	33891044	460.797	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.629	3776021	1044.262	ng/ml
3)	Aroclor 1016 (2)	7.116	7181462	1097.801	ng/ml
4)	Aroclor 1016 (3)	7.244	3446934	1220.555	ng/ml
5)	Aroclor 1016 (4)	7.330	3142909	909.314	ng/ml
6)	Aroclor 1016 (5)	7.376	3585981	920.494	ng/ml
7)	Aroclor 1016 (6)	7.502	3616773	931.808	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.474	7213909	923.886	ng/ml
42)	Aroclor 1260 (2)	8.678	8817712	944.974	ng/ml
43)	Aroclor 1260 (3)	8.912	9177024	964.110	ng/ml
44)	Aroclor 1260 (4)	9.435	13490978	1006.150	ng/ml
45)	Aroclor 1260 (5)	9.729	7695998	887.104	ng/ml
46)	Aroclor 1260 (6)	10.367	2965288	883.920	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

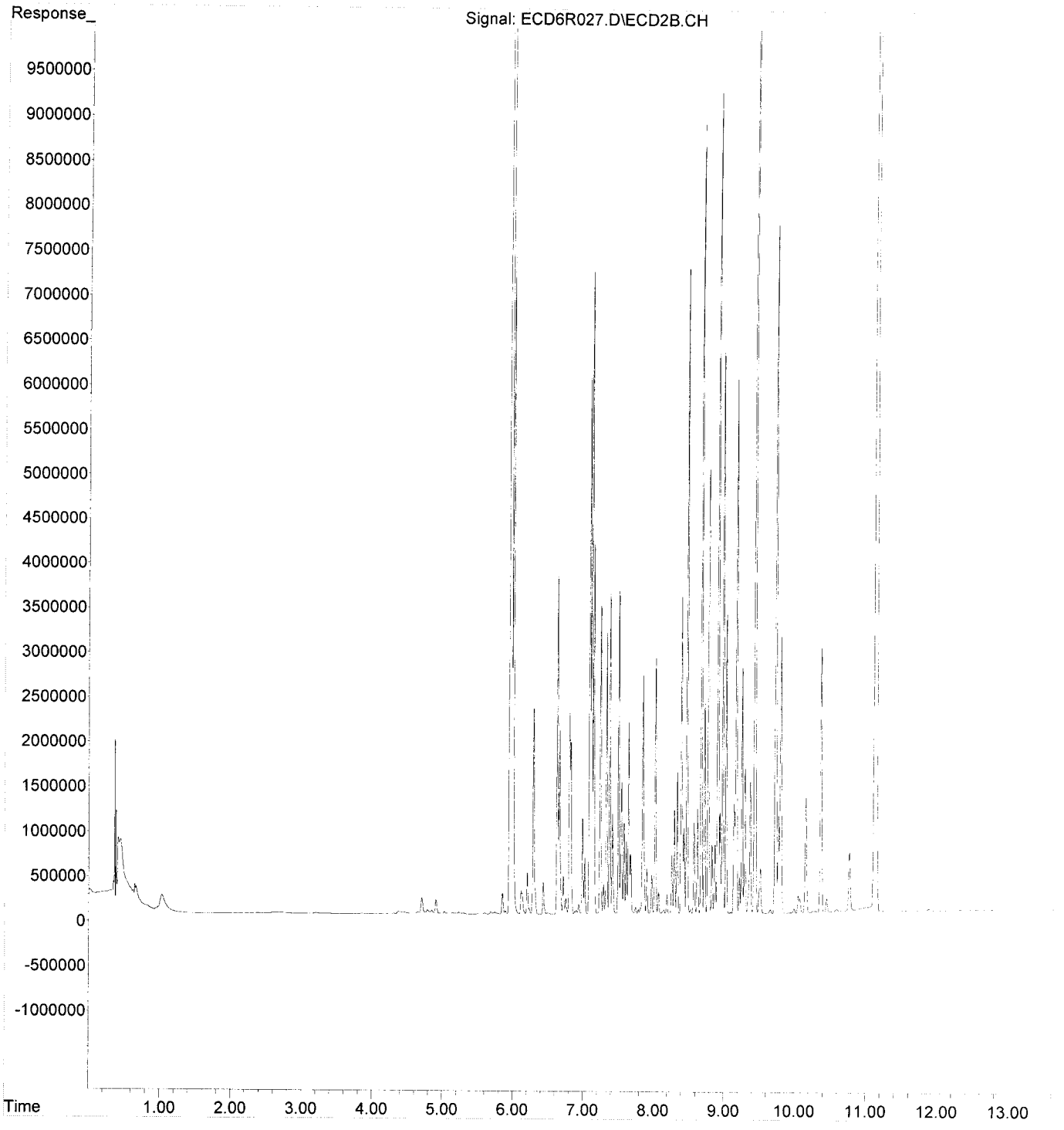
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R027.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 18:45
Operator : MJB/KAK
Sample : 9G23022-CAL6
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:39:59 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:40:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.960	121885275	988.471	ng/ml
62) S	DCBP (S)	11.135	62488470	849.620	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.628	5905075	1633.054	ng/ml
3)	Aroclor 1016 (2)	7.116	11444731	1749.509	ng/ml
4)	Aroclor 1016 (3)	7.243	5164294	1828.670	ng/ml
5)	Aroclor 1016 (4)	7.330	4892125	1415.401	ng/ml
6)	Aroclor 1016 (5)	7.376	5470473	1404.228	ng/ml
7)	Aroclor 1016 (6)	7.502	5587140	1439.444	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.474	11248529	1440.600	ng/ml
42)	Aroclor 1260 (2)	8.679	13630182	1460.716	ng/ml
43)	Aroclor 1260 (3)	8.913	14417064	1514.612	ng/ml
44)	Aroclor 1260 (4)	9.436	21460443	1600.509	ng/ml
45)	Aroclor 1260 (5)	9.728	12179663	1403.928	ng/ml
46)	Aroclor 1260 (6)	10.368	4730507	1410.113	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:40:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

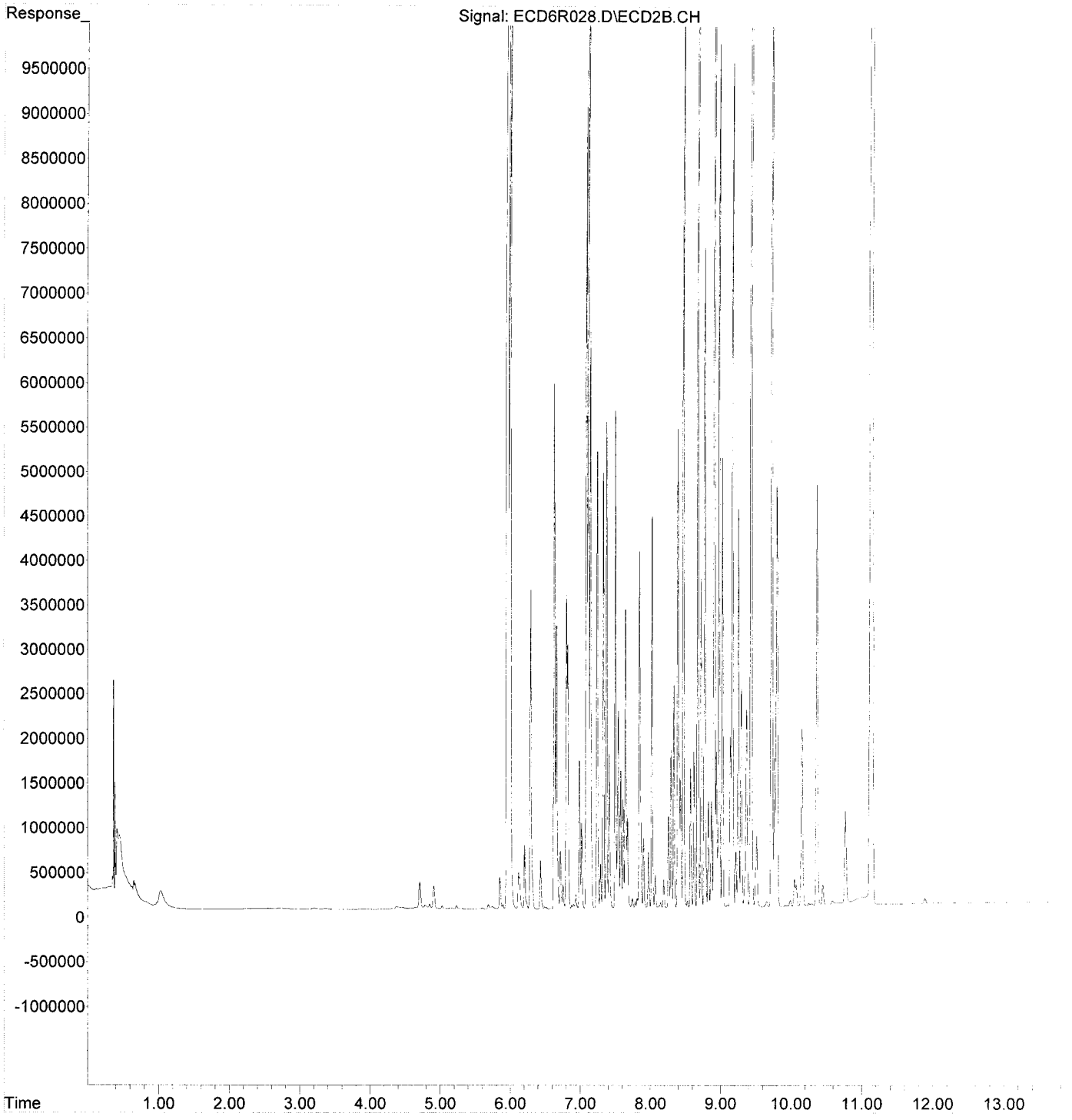
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R028.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:03
Operator : MJB/KAK
Sample : 9G23022-CAL7
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:40:17 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Tue May 28 10:06:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R031.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:56
Operator : MJB/KAK
Sample : 9G23022-CAL8
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:46:10 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:46:05 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	6.133	521923	499.968	ng/ml
10)	Aroclor 1221 (2)	6.205	518302	534.448	ng/ml
11)	Aroclor 1221 (3)	6.292	1749928	525.945	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R031.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:56
Operator : MJB/KAK
Sample : 9G23022-CAL8
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:46:10 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:46:05 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

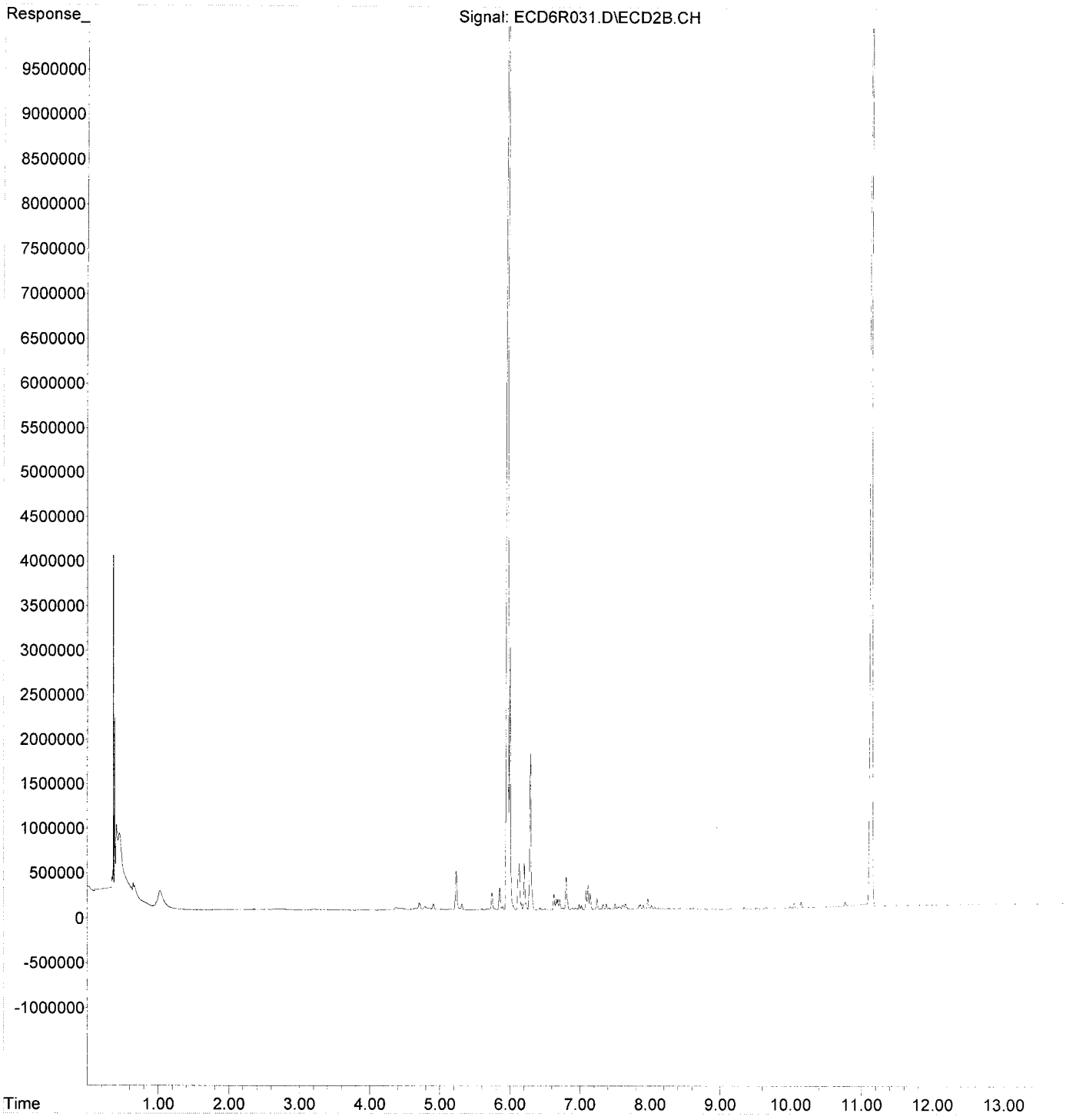
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R031.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 19:56
Operator : MJB/KAK
Sample : 9G23022-CAL8
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:46:10 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:46:05 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R032.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:14
Operator : MJB/KAK
Sample : 9G23022-CAL9
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:47:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:47:38 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	6.292	1445725	534.756	ng/ml
14)	Aroclor 1232 (2)	6.628	923991	549.248	ng/ml
15)	Aroclor 1232 (3)	7.115	1633714	566.852	ng/ml
16)	Aroclor 1232 (4)	7.329	605213	501.480	ng/ml
17)	Aroclor 1232 (5)	7.375	717818	544.946	ng/ml
18)	Aroclor 1232 (6)	7.501	745487	518.775	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R032.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:14
Operator : MJB/KAK
Sample : 9G23022-CAL9
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:47:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:47:38 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

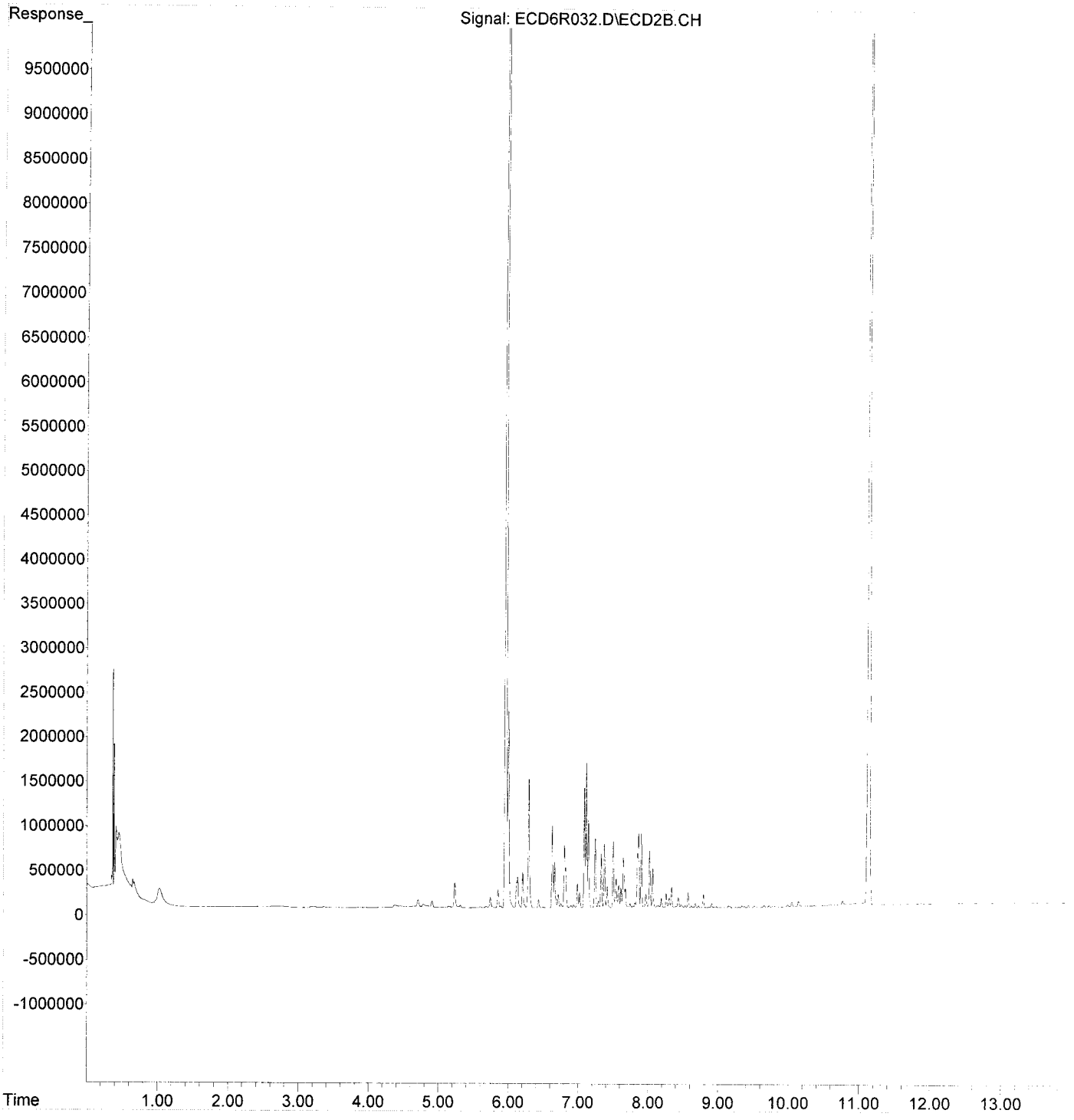
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R032.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:14
Operator : MJB/KAK
Sample : 9G23022-CAL9
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:47:43 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:47:38 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R033.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:31
Operator : MJB/KAK
Sample : 9G23022-CALA
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:49:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:49:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	6.628	1695053	531.304	ng/ml
21)	Aroclor 1242 (2)	7.115	3103041	547.528	ng/ml
22)	Aroclor 1242 (3)	7.242	1437541	556.816	ng/ml
23)	Aroclor 1242 (4)	7.329	1280555	495.845	ng/ml
24)	Aroclor 1242 (5)	7.375	1511075	510.179	ng/ml
25)	Aroclor 1242 (6)	7.501	1573049	512.370	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R033.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:31
Operator : MJB/KAK
Sample : 9G23022-CALA
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:49:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:49:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

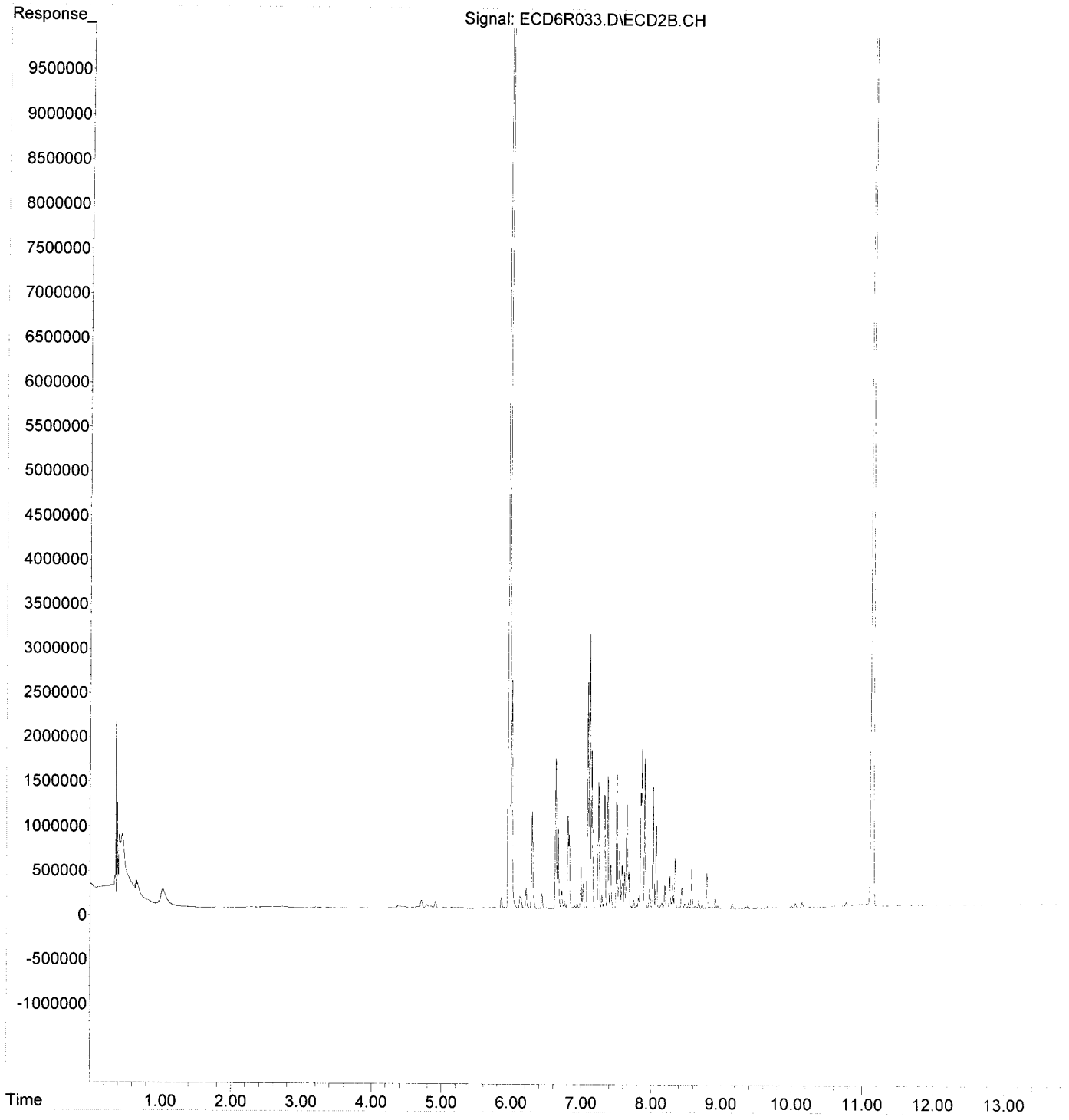
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R033.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:31
Operator : MJB/KAK
Sample : 9G23022-CALA
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:49:07 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:49:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R034.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:49
Operator : MJB/KAK
Sample : 9G23022-CALB
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:50:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:50:34 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	7.087	1858943	559.626	ng/ml
28)	Aroclor 1248 (2)	7.329	2300619	495.941	ng/ml
29)	Aroclor 1248 (3)	7.375	2183662	518.061	ng/ml
30)	Aroclor 1248 (4)	7.501	2557296	501.816	ng/ml
31)	Aroclor 1248 (5)	7.864	3179713	530.232	ng/ml
32)	Aroclor 1248 (6)	8.024	2784042	493.434	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R034.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:49
Operator : MJB/KAK
Sample : 9G23022-CALB
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:50:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:50:34 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

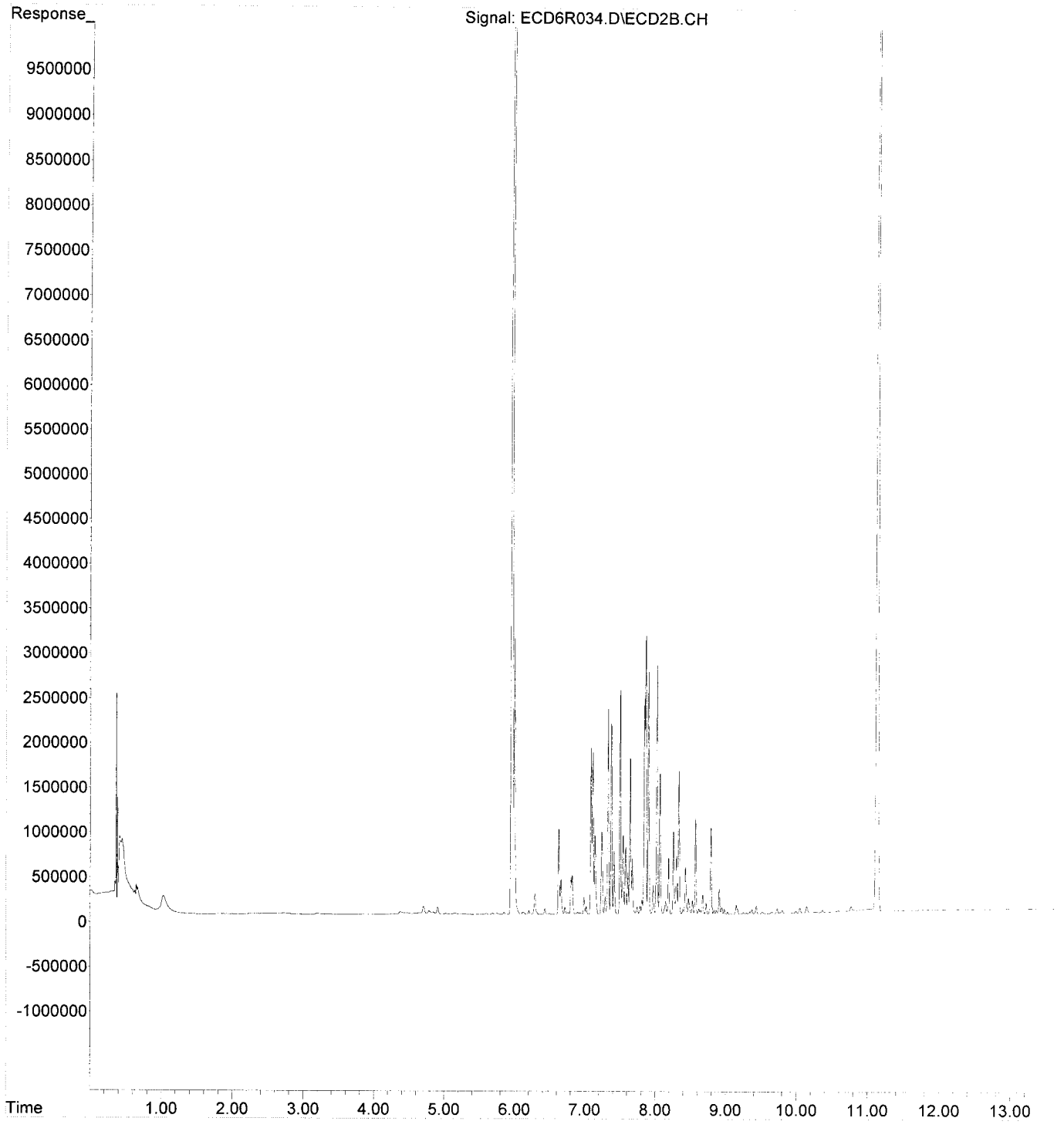
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R034.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 20:49
Operator : MJB/KAK
Sample : 9G23022-CALB
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:50:40 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:50:34 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R035.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:07
Operator : MJB/KAK
Sample : 9G23022-CALC
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:52:04 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:51:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	7.844	3385968	539.189	ng/ml
35)	Aroclor 1254 (2)	8.024	5004707	495.625	ng/ml
36)	Aroclor 1254 (3)	8.336	5452151	526.367	ng/ml
37)	Aroclor 1254 (4)	8.572	3955138	521.463	ng/ml
38)	Aroclor 1254 (5)	8.909	4044086	516.953	ng/ml
39)	Aroclor 1254 (6)	9.151	1160068	484.987	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R035.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:07
Operator : MJB/KAK
Sample : 9G23022-CALC
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:52:04 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:51:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

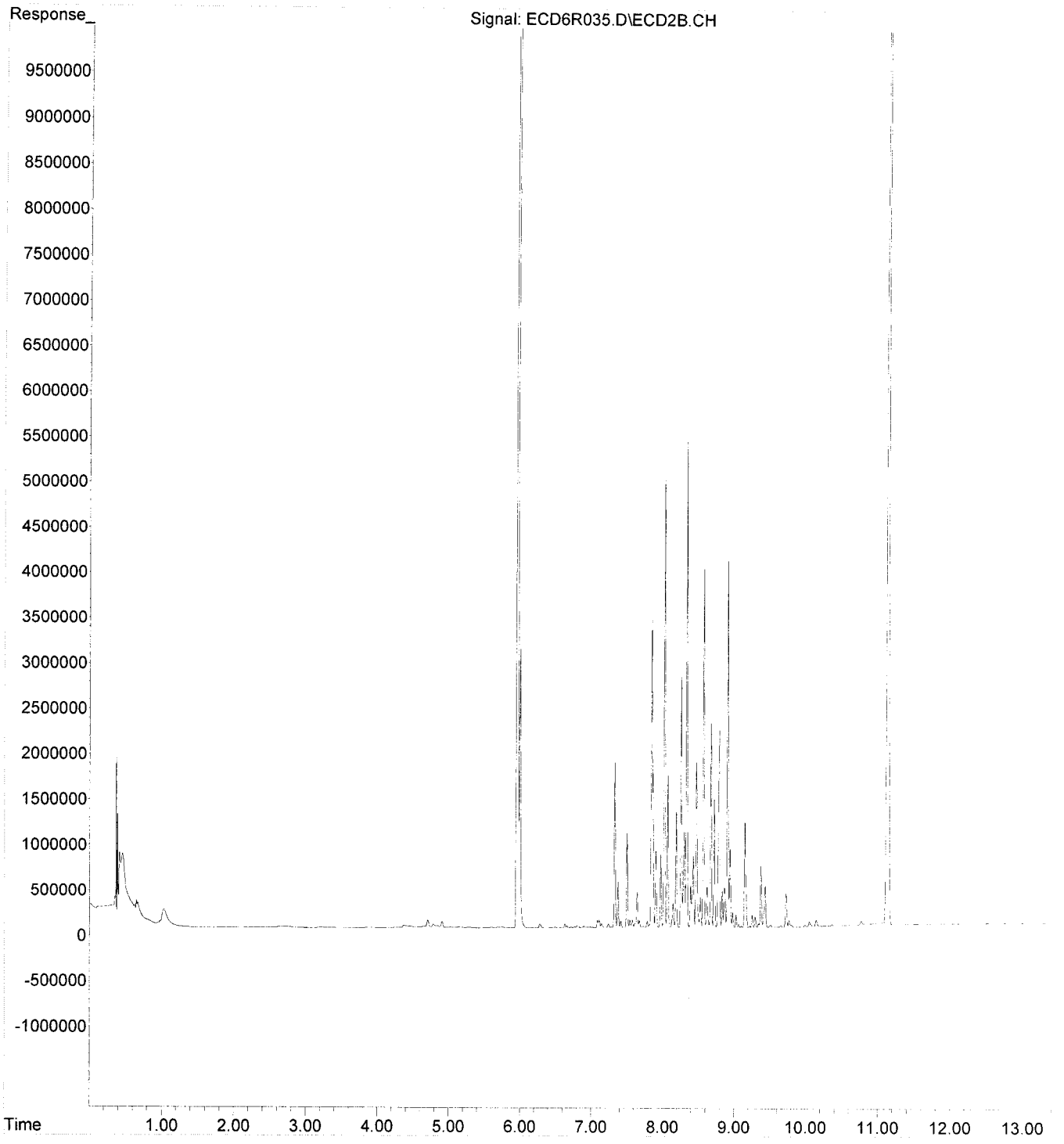
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R035.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:07
Operator : MJB/KAK
Sample : 9G23022-CALC
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:52:04 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:51:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R036.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:24
Operator : MJB/KAK
Sample : 9G23022-CALD
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:53:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:53:28 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R036.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:24
Operator : MJB/KAK
Sample : 9G23022-CALD
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:53:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:53:28 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.676	3668659	511.020	ng/ml
49)	Aroclor 1262 (2)	8.981	5020145	500.103	ng/ml
50)	Aroclor 1262 (3)	9.172	3704540	460.360	ng/ml
51)	Aroclor 1262 (4)	9.434	8082175	478.834	ng/ml
52)	Aroclor 1262 (5)	9.727	4819506	469.223	ng/ml
53)	Aroclor 1262 (6)	10.365	2127811	483.896	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

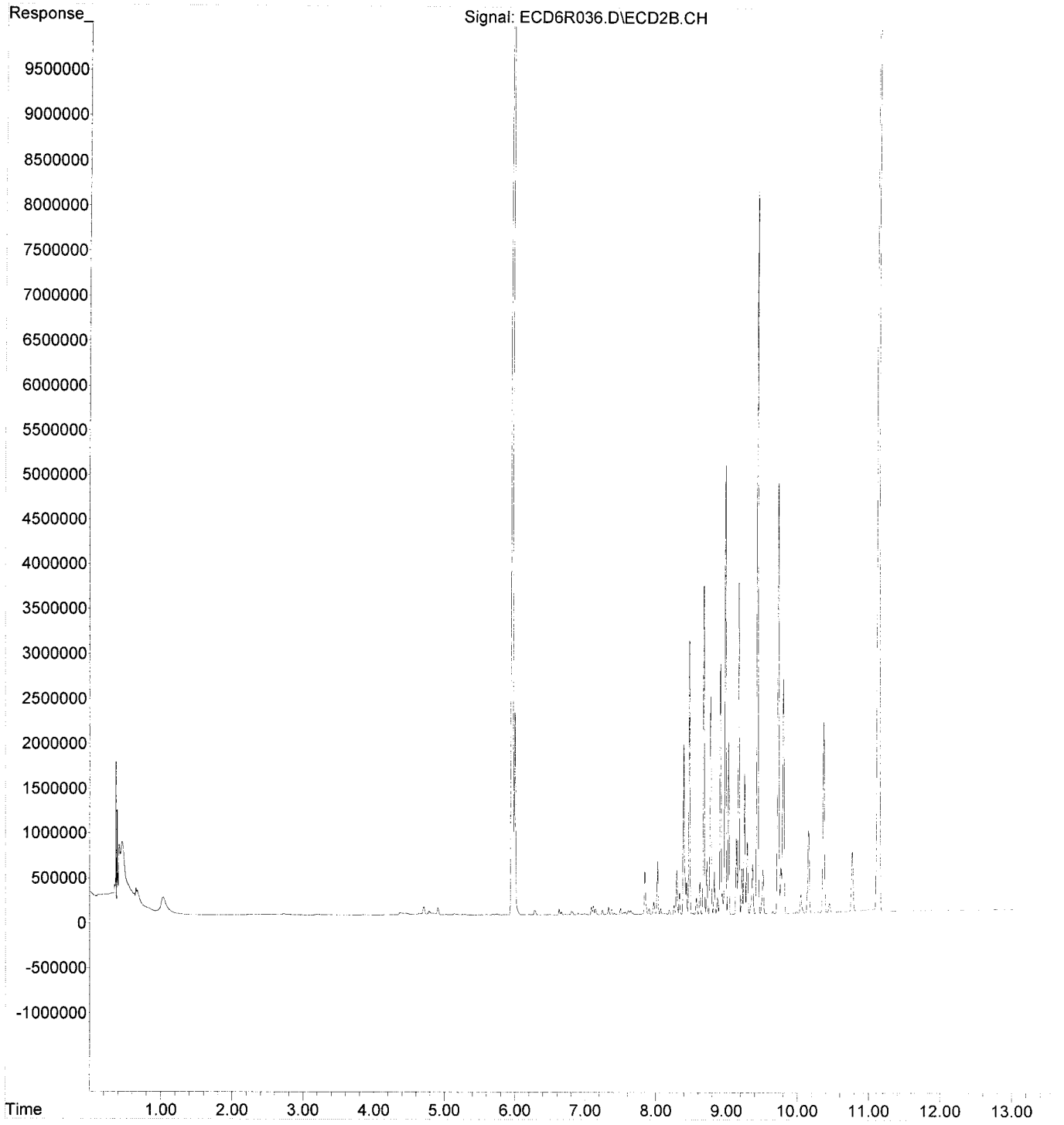
(f)=RT Delta > 1/2 Window (m)=manual int.

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R036.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:24
Operator : MJB/KAK
Sample : 9G23022-CALD
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:53:37 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:53:28 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R037.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:42
Operator : MJB/KAK
Sample : 9G23022-CALE
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:56:00 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:55:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

7/27/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R037.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:42
Operator : MJB/KAK
Sample : 9G23022-CALE
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:56:00 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:55:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	9.219	2084287	454.101	ng/ml
56)	Aroclor 1268 (2)	9.730	8920570	461.797	ng/ml
57)	Aroclor 1268 (3)	9.803	7715043	489.177	ng/ml
58)	Aroclor 1268 (4)	10.048	6287523	465.367	ng/ml
59)	Aroclor 1268 (5)	10.365	2418565	463.794	ng/ml
60)	Aroclor 1268 (6)	10.769	17006729	474.914	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

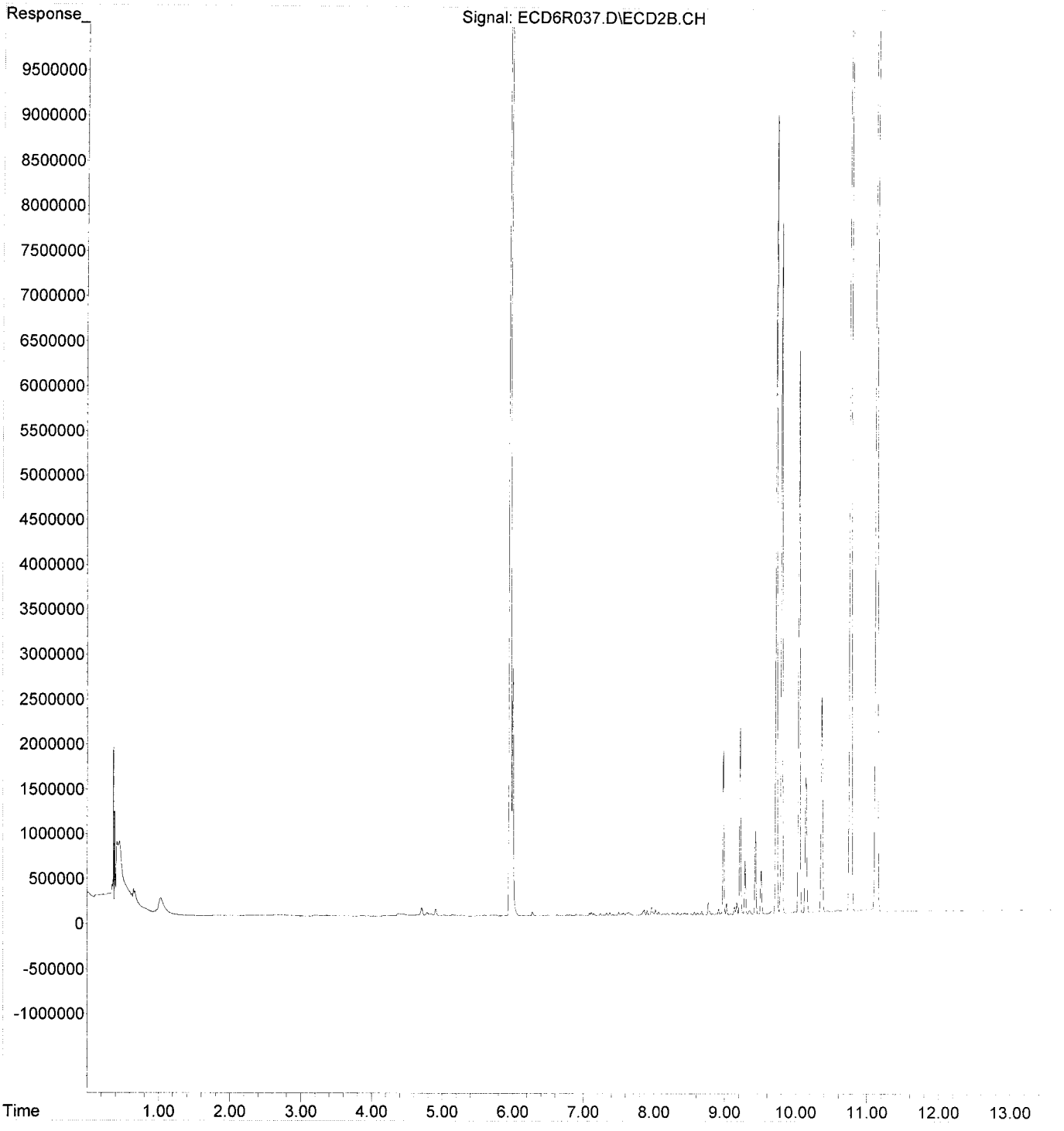
(f)=RT Delta > 1/2 Window (m)=manual int.

7/27/19

Quantitation Report (QT Reviewed)

Data Path : S:\DATA\9G23022\
Data File : ECD6R037.D
Signal(s) : ECD2B.CH
Acq On : 23 Jul 2019 21:42
Operator : MJB/KAK
Sample : 9G23022-CALE
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jul 27 13:56:00 2019
Quant Method : T:\METHODS\RECD6_QUANTPCB_190723.M
Quant Title : PCB Data Analysis
QLast Update : Sat Jul 27 13:55:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9J25014 (Cal ID A9J2803) DUALECD2R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J25014**	Instrument:	**DUALECD2R**
Date:	**10/25/19 07:18**	Calibration:	**A9J2803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J25014-ICB1	Water	QC	QC				A19J194
2	9J25014-CAL1	Water	QC	QC				A19F250
3	9J25014-CAL2	Water	QC	QC				A19F251
4	9J25014-CAL3	Water	QC	QC				A19F252
5	9J25014-CAL4	Water	QC	QC				A19F253
6	9J25014-CAL5	Water	QC	QC				A19F247
7	9J25014-CAL6	Water	QC	QC				A19F248
8	9J25014-CAL7	Water	QC	QC				A19F249
9	9J25014-IBL1	Water	QC	QC				
10	9J25014-ICV1	Water	QC	QC				A19H459
11	9J25014-CAL8	Water	QC	QC				A19H447
12	9J25014-CAL9	Water	QC	QC				A19H448
13	9J25014-CALA	Water	QC	QC				A19H449
14	9J25014-CALB	Water	QC	QC				A19H450
15	9J25014-CALC	Water	QC	QC				A19H451
16	9J25014-CALD	Water	QC	QC				A19H452
17	9J25014-CALE	Water	QC	QC				A19H453
18	9J25014-ICV2	Water	QC	QC				A19H405
19	9J25014-ICV3	Water	QC	QC				A19J367
20	9J25014-ICV4	Water	QC	QC				A19H406
21	9J25014-ICV5	Water	QC	QC				A19E303

Comments:

Data Entered By: 10/28/19

Data Reviewed By: 10/28/19

Calibration Status Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_191025.M
Title : PCB Data Analysis
Last Update : Fri Oct 25 14:23:20 2019
Response Via : Initial Calibration

A9J2803 10/28/19

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	K:\DATA\9J25014\ECD2R004.D
2	2	25	0	K:\DATA\9J25014\ECD2R005.D
3	3	50	0	K:\DATA\9J25014\ECD2R006.D
4	4	100	0	K:\DATA\9J25014\ECD2R007.D
5	5	250	0	K:\DATA\9J25014\ECD2R019.D
6	6	500	0	K:\DATA\9J25014\ECD2R009.D
7	7	800	0	K:\DATA\9J25014\ECD2R010.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Oct 25 11:31 2019	Oct 25 11:23 2019	25 Oct 2019 8:19
2	2	Oct 25 11:31 2019	Oct 25 11:25 2019	25 Oct 2019 8:37
3	3	Oct 25 11:31 2019	Oct 25 11:26 2019	25 Oct 2019 8:54
4	4	Oct 25 11:31 2019	Oct 25 11:27 2019	25 Oct 2019 9:12
5	5	Oct 25 14:23 2019	Oct 25 14:21 2019	25 Oct 2019 12:43
6	6	Oct 25 11:32 2019	Oct 25 11:29 2019	25 Oct 2019 9:47
7	7	Oct 25 11:32 2019	Oct 25 11:30 2019	25 Oct 2019 10:05

RECD2_QUANTPCB_191025.M Mon Oct 28 09:51:25 2019

Response Factor Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_191025.M
Title : PCB Data Analysis
Last Update : Fri Oct 25 14:23:20 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2R004.D 2 =ECD2R005.D 3 =ECD2R006.D
4 =ECD2R007.D 5 =ECD2R019.D 6 =ECD2R009.D

		Compound	1	2	3	4	5	6	Avg		%RSD	
1)	S	TCMX (S)	2.392	2.532	2.582	2.520	2.990	2.823	2.623	E5	7.91	
2)		Aroclor 1016 ...	1.015	0.987	0.925	0.841	0.809	0.801	0.888	E4	9.84	✓
3)		Aroclor 1016 ...	1.713	1.702	1.692	1.475	1.608	1.560	1.636	E4	5.60	✓
4)		Aroclor 1016 ...	8.502	7.706	7.552	6.698	7.013	6.716	7.366	E3	8.65	✓
5)		Aroclor 1016 ...	8.858	8.177	7.726	6.857	6.888	6.546	7.457	E3	11.17	✓
6)		Aroclor 1016 ...	9.451	9.136	8.479	7.726	7.876	7.260	8.251	E3	9.71	✓
7)		Aroclor 1016 (6)	9.587	9.057	8.471	7.445	7.904	7.304	8.231	E3	10.29	✓
8)		Aroclor 1016 ...							0.000		-1.00	
9)		Aroclor 1221 (1)					2.144		2.144	E3	0.00	
10)		Aroclor 1221 (2)					2.186		2.186	E3	0.00	
11)		Aroclor 1221 (3)					7.075		7.075	E3	0.00	
12)		Aroclor 1221 ...							0.000		-1.00	
13)		Aroclor 1232 (1)					5.725		5.725	E3	0.00	
14)		Aroclor 1232 (2)					3.476		3.476	E3	0.00	
15)		Aroclor 1232 (3)					6.474		6.474	E3	0.00	
16)		Aroclor 1232 (4)					2.388		2.388	E3	0.00	
17)		Aroclor 1232 (5)					2.732		2.732	E3	0.00	
18)		Aroclor 1232 (6)					2.966		2.966	E3	0.00	
19)		Aroclor 1232 ...							0.000		-1.00	
20)		Aroclor 1242 ...					6.551		6.551	E3	0.00	
21)		Aroclor 1242 ...					1.183		1.183	E4	0.00	
22)		Aroclor 1242 ...					5.282		5.282	E3	0.00	
23)		Aroclor 1242 ...					4.993		4.993	E3	0.00	
24)		Aroclor 1242 ...					5.814		5.814	E3	0.00	
25)		Aroclor 1242 (6)					6.195		6.195	E3	0.00	
26)		Aroclor 1242 ...							0.000		-1.00	
27)		Aroclor 1248 ...					7.462		7.462	E3	0.00	
28)		Aroclor 1248 ...					9.336		9.336	E3	0.00	
29)		Aroclor 1248 ...					8.770		8.770	E3	0.00	
30)		Aroclor 1248 ...					1.047		1.047	E4	0.00	
31)		Aroclor 1248 ...					1.293		1.293	E4	0.00	
32)		Aroclor 1248 (6)					1.179		1.179	E4	0.00	
33)		Aroclor 1248 ...							0.000		-1.00	
34)		Aroclor 1254 ...					1.293		1.293	E4	0.00	
35)		Aroclor 1254 ...					2.025		2.025	E4	0.00	
36)		Aroclor 1254 ...					2.143		2.143	E4	0.00	
37)		Aroclor 1254 ...					1.652		1.652	E4	0.00	
38)		Aroclor 1254 ...					1.569		1.569	E4	0.00	
39)		Aroclor 1254 (6)					4.890		4.890	E3	0.00	
40)		Aroclor 1254 ...							0.000		-1.00	
41)		Aroclor 1260 ...	1.686	1.648	1.567	1.471	1.569	1.494	1.578	E4	4.94	✓
42)		Aroclor 1260 ...	2.067	2.052	1.996	1.771	2.028	1.787	1.957	E4	6.36	✓
43)		Aroclor 1260 (3)	2.092	2.106	1.985	1.912	2.013	1.904	2.013	E4	4.17	✓
44)		Aroclor 1260 (4)	3.093	3.099	3.070	2.863	2.999	3.123	3.095	E4	5.38	✓
45)		Aroclor 1260 (5)	1.806	1.861	1.747	1.646	1.795	1.768	1.790	E4	4.65	✓
46)		Aroclor 1260 (6)	7.431	7.502	6.942	6.147	6.473	6.505	6.899	E3	7.72	✓
47)		Aroclor 1260 ...							0.000		-1.00	
48)		Aroclor 1262 (1)					1.513		1.513	E4	0.00	
49)		Aroclor 1262 (2)					2.115		2.115	E4	0.00	
50)		Aroclor 1262 (3)					1.747		1.747	E4	0.00	
51)		Aroclor 1262 (4)					3.581		3.581	E4	0.00	
52)		Aroclor 1262 (5)					2.196		2.196	E4	0.00	
53)		Aroclor 1262 (6)					9.701		9.701	E3	0.00	
54)		Aroclor 1262 ...							0.000		-1.00	
55)		Aroclor 1268 (1)					9.333		9.333	E3	0.00	
56)		Aroclor 1268 (2)					3.924		3.924	E4	0.00	
57)		Aroclor 1268 (3)					3.153		3.153	E4	0.00	
58)		Aroclor 1268 (4)					2.709		2.709	E4	0.00	
59)		Aroclor 1268 (5)					1.060		1.060	E4	0.00	
60)		Aroclor 1268 (6)					7.348		7.348	E4	0.00	

Response Factor Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_191025.M
Title : PCB Data Analysis
Last Update : Fri Oct 25 14:23:20 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2R004.D 2 =ECD2R005.D 3 =ECD2R006.D
4 =ECD2R007.D 5 =ECD2R019.D 6 =ECD2R009.D

	Compound	1	2	3	4	5	6	Avg	%RSD
61)	Aroclor 1268 ...							0.000	-1.00
62) S	DCBP (S)	1.319	1.403	1.373	1.354	1.513	1.517	1.468 E5	11.14

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_191025.M
Title : PCB Data Analysis
Last Update : Fri Oct 25 14:23:20 2019
Response Via : Initial Calibration

Total Cpnds : 62

10/28/19

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	5.721	1.000	A	H	R
2		Aroclor 1016 (1)	6.391	1.000	A	H	R
3		Aroclor 1016 (2)	6.880	1.000	A	H	R
4		Aroclor 1016 (3)	7.007	1.000	A	H	R
5		Aroclor 1016 (4)	7.093	1.000	A	H	R
6		Aroclor 1016 (5)	7.138	1.000	A	H	R
7		Aroclor 1016 (6)	7.263	1.000	A	H	R
8		Aroclor 1016 - AVE	1.821	1.000	A	H	R
9		Aroclor 1221 (1)	5.896	1.000	A	H	R
10		Aroclor 1221 (2)	5.967	1.000	A	H	R
11		Aroclor 1221 (3)	6.055	1.000	A	H	R
12		Aroclor 1221 - AVE	1.821	1.000	A	H	R
13		Aroclor 1232 (1)	6.055	1.000	A	H	R
14		Aroclor 1232 (2)	6.392	1.000	A	H	R
15		Aroclor 1232 (3)	6.880	1.000	A	H	R
16		Aroclor 1232 (4)	7.093	1.000	A	H	R
17		Aroclor 1232 (5)	7.138	1.000	A	H	R
18		Aroclor 1232 (6)	7.264	1.000	A	H	R
19		Aroclor 1232 - AVE	1.821	1.000	A	H	R
20		Aroclor 1242 (1)	6.391	1.000	A	H	R
21		Aroclor 1242 (2)	6.879	1.000	A	H	R
22		Aroclor 1242 (3)	7.007	1.000	A	H	R
23		Aroclor 1242 (4)	7.093	1.000	A	H	R
24		Aroclor 1242 (5)	7.137	1.000	A	H	R
25		Aroclor 1242 (6)	7.263	1.000	A	H	R
26		Aroclor 1242 - AVE	1.821	1.000	A	H	R
27		Aroclor 1248 (1)	6.852	1.000	A	H	R
28		Aroclor 1248 (2)	7.093	1.000	A	H	R
29		Aroclor 1248 (3)	7.138	1.000	A	H	R
30		Aroclor 1248 (4)	7.263	1.000	A	H	R
31		Aroclor 1248 (5)	7.628	1.000	A	H	R
32		Aroclor 1248 (6)	7.785	1.000	A	H	R
33		Aroclor 1248 - AVE	1.821	1.000	A	H	R
34		Aroclor 1254 (1)	7.605	1.000	A	H	R
35		Aroclor 1254 (2)	7.786	1.000	A	H	R
36		Aroclor 1254 (3)	8.098	1.000	A	H	R
37		Aroclor 1254 (4)	8.335	1.000	A	H	R
38		Aroclor 1254 (5)	8.669	1.000	A	H	R
39		Aroclor 1254 (6)	8.900	1.000	A	H	R
40		Aroclor 1254 - AVE	1.821	1.000	A	H	R
41		Aroclor 1260 (1)	8.233	1.000	A	H	R
42		Aroclor 1260 (2)	8.439	1.000	A	H	R
43		Aroclor 1260 (3)	8.671	1.000	A	H	R
44		Aroclor 1260 (4)	9.161	1.000	A	H	R
45		Aroclor 1260 (5)	9.428	1.000	A	H	R
46		Aroclor 1260 (6)	10.012	1.000	A	H	R
47		Aroclor 1260 - AVE	1.821	1.000	A	H	R
48		Aroclor 1262 (1)	8.437	1.000	A	H	R
49		Aroclor 1262 (2)	8.738	1.000	A	H	R
50		Aroclor 1262 (3)	8.916	1.000	A	H	R
51		Aroclor 1262 (4)	9.160	1.000	A	H	R
52		Aroclor 1262 (5)	9.427	1.000	A	H	R
53		Aroclor 1262 (6)	10.013	1.000	A	H	R
54		Aroclor 1262 - AVE	1.821	1.000	A	H	R
55		Aroclor 1268 (1)	8.958	1.000	A	H	R
56		Aroclor 1268 (2)	9.429	1.000	A	H	R

57		Aroclor 1268 (3)	9.497	1.000	A	H	R
58		Aroclor 1268 (4)	9.717	1.000	A	H	R
59		Aroclor 1268 (5)	10.014	1.000	A	H	R
60		Aroclor 1268 (6)	10.377	1.000	A	H	R
61		Aroclor 1268 - AVE	1.820	1.000	A	H	R
62	S	DCBP (S)	10.702	1.000	A	H	R

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

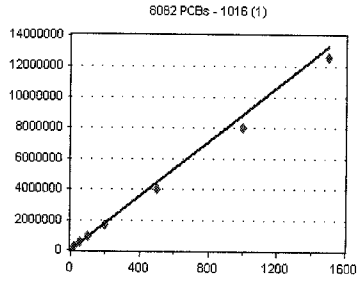
RECD2_QUANTPCB_191025.M Mon Oct 28 09:51:12 2019

Element Calibration Review Sheet

Calibration ID: **A9J2803** Instrument: **DUALECD2R** Calibration Date: **10/28/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19102**

1016 (1)

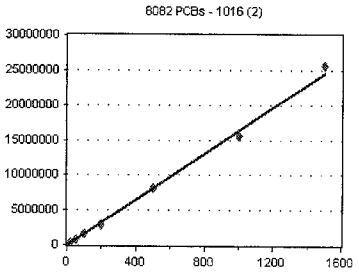


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	203035	10151.750	6.39
9J25014-CAL2	50	493668	9873.360	6.39
9J25014-CAL3	100	925201	9252.010	6.39
9J25014-CAL4	200	1681899	8409.495	6.39
9J25014-CAL5	500	4042674	8085.348	6.39
9J25014-CAL6	1000	8009226	8009.226	6.39
9J25014-CAL7	1500	260073E+07	8400.486	6.39

AVE RF **8883.097** RF RSD **9.84** AVE RT **6.39**

1016 (2)

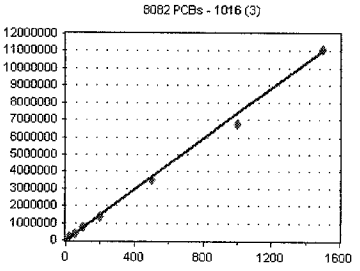


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	342549	17127.450	6.88
9J25014-CAL2	50	850982	17019.640	6.88
9J25014-CAL3	100	1692274	16922.740	6.88
9J25014-CAL4	200	2950427	14752.130	6.88
9J25014-CAL5	500	8040226	16080.450	6.88
9J25014-CAL6	1000	560002E+07	15600.020	6.88
9J25014-CAL7	1500	556068E+07	17040.450	6.88

AVE RF **16363.270** RF RSD **5.60** AVE RT **6.88**

1016 (3)

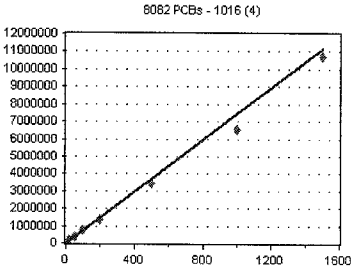


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	170044	8502.200	7.01
9J25014-CAL2	50	385301	7706.020	7.01
9J25014-CAL3	100	755246	7552.460	7.01
9J25014-CAL4	200	1339661	6698.305	7.01
9J25014-CAL5	500	3506618	7013.236	7.01
9J25014-CAL6	1000	6715654	6715.654	7.01
9J25014-CAL7	1500	105948E+07	7372.987	7.01

AVE RF **7365.837** RF RSD **8.65** AVE RT **7.01**

1016 (4)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	177152	8857.600	7.09
9J25014-CAL2	50	408863	8177.260	7.09
9J25014-CAL3	100	772578	7725.780	7.09
9J25014-CAL4	200	1371367	6856.835	7.09
9J25014-CAL5	500	3443828	6887.656	7.09
9J25014-CAL6	1000	6545978	6545.978	7.09
9J25014-CAL7	1500	.07251E+07	7150.067	7.09

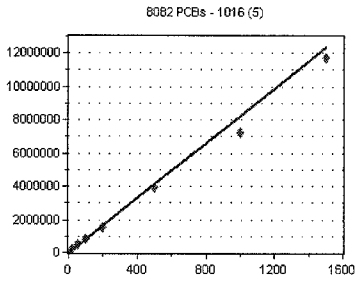
AVE RF **7457.311** RF RSD **11.17** AVE RT **7.09**

Element Calibration Review Sheet

Calibration ID: **A9J2803** Instrument: **DUALECD2R** Calibration Date: **10/28/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19102**

1016 (5)

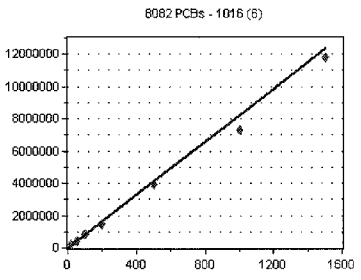


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	189025	9451.250	7.14
9J25014-CAL2	50	456813	9136.260	7.14
9J25014-CAL3	100	847932	8479.320	7.14
9J25014-CAL4	200	1545261	7726.305	7.14
9J25014-CAL5	500	3937867	7875.734	7.14
9J25014-CAL6	1000	7260053	7260.053	7.14
9J25014-CAL7	1500	174281E+07	7828.540	7.14

AVE RF **8251.066** RF RSD **9.71** AVE RT **7.14**

1016 (6)

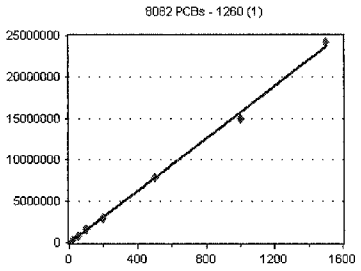


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	191737	9586.850	7.26
9J25014-CAL2	50	452852	9057.040	7.26
9J25014-CAL3	100	847087	8470.870	7.26
9J25014-CAL4	200	1488996	7444.980	7.26
9J25014-CAL5	500	3952172	7904.344	7.26
9J25014-CAL6	1000	7304270	7304.270	7.26
9J25014-CAL7	1500	177387E+07	7849.247	7.26

AVE RF **8231.086** RF RSD **10.29** AVE RT **7.26**

1260 (1)

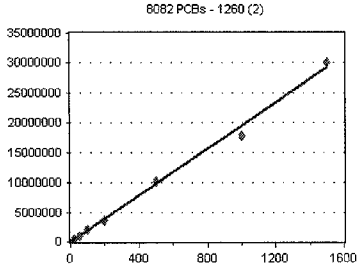


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	337139	16856.950	8.23
9J25014-CAL2	50	824221	16484.420	8.23
9J25014-CAL3	100	1567269	15672.690	8.23
9J25014-CAL4	200	2941552	14707.760	8.23
9J25014-CAL5	500	7847499	15695.000	8.23
9J25014-CAL6	1000	494224E+07	14942.240	8.23
9J25014-CAL7	1500	418156E+07	16121.040	8.23

AVE RF **15782.870** RF RSD **4.94** AVE RT **8.23**

1260 (2)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	413345	20667.250	8.44
9J25014-CAL2	50	1025756	20515.120	8.44
9J25014-CAL3	100	1995660	19956.600	8.44
9J25014-CAL4	200	3541866	17709.330	8.44
9J25014-CAL5	500	.01387E+07	20277.400	8.44
9J25014-CAL6	1000	786744E+07	17867.440	8.44
9J25014-CAL7	1500	003444E+07	20022.960	8.44

AVE RF **19573.730** RF RSD **6.36** AVE RT **8.44**

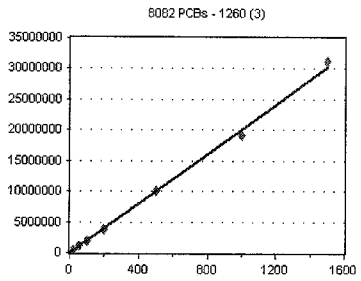
Element Calibration Review Sheet

Calibration ID: **A9J2803** Instrument: **DUALECD2R** Calibration Date: **10/28/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19102**

1260 (3)

Curve Fit: **AVERAGE RF**

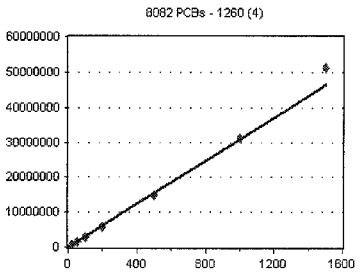


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	418334	20916.700	8.67
9J25014-CAL2	50	1053008	21060.160	8.67
9J25014-CAL3	100	1985447	19854.470	8.67
9J25014-CAL4	200	3824049	19120.240	8.67
9J25014-CAL5	500	006718E+07	20134.360	8.67
9J25014-CAL6	1000	.90367E+07	19036.700	8.67
9J25014-CAL7	1500	.12038E+07	20802.530	8.67

AVE RF **20132.170** RF RSD **4.17** AVE RT **8.67**

1260 (4)

Curve Fit: **AVERAGE RF**

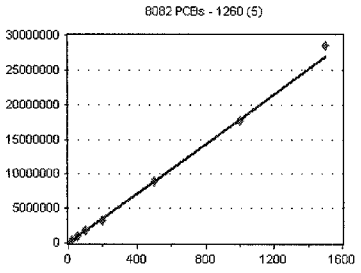


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	618662	30933.100	9.16
9J25014-CAL2	50	1549626	30992.520	9.16
9J25014-CAL3	100	3069980	30699.800	9.16
9J25014-CAL4	200	5726786	28633.930	9.16
9J25014-CAL5	500	499636E+07	29992.720	9.16
9J25014-CAL6	1000	122851E+07	31228.510	9.16
9J25014-CAL7	1500	121403E+07	34142.690	9.16

AVE RF **30946.180** RF RSD **5.38** AVE RT **9.16**

1260 (5)

Curve Fit: **AVERAGE RF**

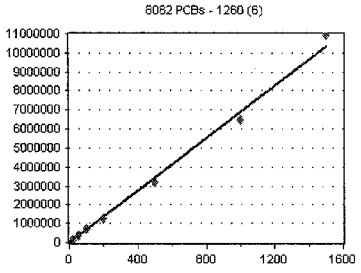


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	361157	18057.850	9.43
9J25014-CAL2	50	930309	18606.180	9.43
9J25014-CAL3	100	1747257	17472.570	9.43
9J25014-CAL4	200	3291800	16459.000	9.43
9J25014-CAL5	500	8974797	17949.590	9.43
9J25014-CAL6	1000	.76817E+07	17681.700	9.43
9J25014-CAL7	1500	858019E+07	19053.460	9.43

AVE RF **17897.190** RF RSD **4.65** AVE RT **9.43**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	148612	7430.600	10.01
9J25014-CAL2	50	375099	7501.980	10.01
9J25014-CAL3	100	694240	6942.400	10.01
9J25014-CAL4	200	1229444	6147.220	10.01
9J25014-CAL5	500	3236527	6473.054	10.01
9J25014-CAL6	1000	6505242	6505.242	10.01
9J25014-CAL7	1500	093401E+07	7289.340	10.01

AVE RF **6898.548** RF RSD **7.72** AVE RT **10.01**

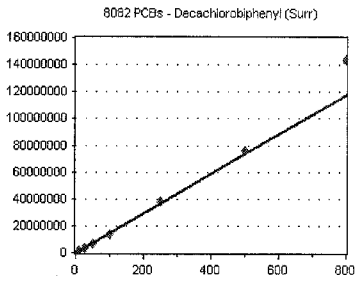
Element Calibration Review Sheet

Calibration ID: **A9J2803** Instrument: **DUALECD2R** Calibration Date: **10/28/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19102**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	10	1318659	131865.900	10.70
9J25014-CAL2	25	3507689	140307.600	10.70
9J25014-CAL3	50	6866760	137335.200	10.70
9J25014-CAL4	100	354269E+07	135426.900	10.70
9J25014-CAL5	250	782642E+07	151305.700	10.70
9J25014-CAL6	500	585181E+07	151703.600	10.70
9J25014-CAL7	800	436705E+08	179588.100	10.70

AVE RF **146790.400** RF RSD **11.14** AVE RT **10.70**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J25014

Analysis Included

1311/8082 TCLP PCBs
608 PCBs
608 PCBs - LL (1000/1mL) +1262/68
8082 PCBs
8082 PCBs - Low Level (2mL FV)
8082 PCBs - Low Level (2mL FV) +1262/68
8082 PCBs - Low Level (1000/1mL)
8082 PCBs - Low Level (1000/1mL) +1262/68
8082 PCBs - Low Level (30g/2mL)
8082 PCBs + 1262/1268
8082 PCBs in Trans. Oil - LL

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9J25014-ICB1	Initial Cal Blank	Water	A19J194		10/25/2019 8:01:00AM
9J25014-CAL1	Cal Standard	Water	A19F250	"	10/25/2019 8:19:00AM
9J25014-CAL2	Cal Standard	Water	A19F251	"	10/25/2019 8:37:00AM
9J25014-CAL3	Cal Standard	Water	A19F252	"	10/25/2019 8:54:00AM
9J25014-CAL4	Cal Standard	Water	A19F253	"	10/25/2019 9:12:00AM
9J25014-CAL5	Cal Standard	Water	A19F247	"	10/25/2019 9:29:00AM
9J25014-CAL6	Cal Standard	Water	A19F248	"	10/25/2019 9:47:00AM
9J25014-CAL7	Cal Standard	Water	A19F249	"	10/25/2019 10:05:00AM
9J25014-ICV1	Initial Cal Check	Water	A19H459	"	10/25/2019 10:40:00AM
9J25014-CAL8	Cal Standard	Water	A19H447	"	10/25/2019 10:58:00AM
9J25014-CAL9	Cal Standard	Water	A19H448	"	10/25/2019 11:15:00AM
9J25014-CALA	Cal Standard	Water	A19H449	"	10/25/2019 11:33:00AM
9J25014-CALB	Cal Standard	Water	A19H450	"	10/25/2019 11:50:00AM
9J25014-CALC	Cal Standard	Water	A19H451	"	10/25/2019 12:08:00PM
9J25014-CALD	Cal Standard	Water	A19H452	"	10/25/2019 12:26:00PM
9J25014-CALE	Cal Standard	Water	A19H453	"	10/25/2019 12:43:00PM
9J25014-ICV2	Initial Cal Check	Water	A19H405	"	10/25/2019 1:02:00PM
9J25014-ICV3	Initial Cal Check	Water	A19J367	"	10/25/2019 1:20:00PM
9J25014-ICV4	Initial Cal Check	Water	A19H406	"	10/25/2019 1:37:00PM
9J25014-ICV5	Initial Cal Check	Water	A19E303	"	10/25/2019 1:55:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J2803** Instrument: **DUALECD2R**

1311/8082 TCLP PCBs Sequence: **9J25014** Matrix: **Water**

9J25014-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	

9J25014-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J25014

Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	
9J25014-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
9J25014-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
9J25014-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
9J25014-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1000	0	
Aroclor 1260	800.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
9J25014-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1500	0	
Aroclor 1260	800.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
9J25014-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1221	0.0000	0.00	500	0	
Aroclor 1221	0.0000	0.00	500	0	
9J25014-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1232	0.0000	0.00	500	0	
Aroclor 1232	0.0000	0.00	500	0	
9J25014-CALA	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1242	0.0000	0.00	500	0	
Aroclor 1242	0.0000	0.00	500	0	
9J25014-CALB	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1248	0.0000	0.00	500	0	
Aroclor 1248	0.0000	0.00	500	0	
9J25014-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1254	0.0000	0.00	500	0	
Aroclor 1254	0.0000	0.00	500	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J25014

9J25014-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1262	0.0000	0.00	500	0	
Aroclor 1262	0.0000	0.00	500	0	

9J25014-CALE	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1268	0.0000	0.00	500	0	
Aroclor 1268	0.0000	0.00	500	0	

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: **A9J2803** Instrument: **DUALECD2R**

8082 PCBs Sequence: **9J25014** Matrix: **Water**

9J25014-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.

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:01
Operator : MJB / KAK
Sample : 9J25014-ICB1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

Clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.718	27556359	105.044 ng/ml
62) S	DCBP (S)	10.700	14610541	99.533 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.392	13227	1.489 ng/ml
3)	Aroclor 1016 (2)	6.879	17995	1.100 ng/ml
4)	Aroclor 1016 (3)	6.994	19572	2.657 ng/ml
5)	Aroclor 1016 (4)	7.092	19389	2.600 ng/ml
6)	Aroclor 1016 (5)	7.144	20766	2.517 ng/ml
7)	Aroclor 1016 (6)	7.261	20665	2.511 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.887	12214	5.697 ng/ml
10)	Aroclor 1221 (2)	5.962	11334	5.185 ng/ml
11)	Aroclor 1221 (3)	6.038	55121	7.791 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.038	55121	9.629 ng/ml
14)	Aroclor 1232 (2)	6.392	13227	3.805 ng/ml
15)	Aroclor 1232 (3)	6.879	17995	2.780 ng/ml
16)	Aroclor 1232 (4)	7.092	19389	8.121 ng/ml
17)	Aroclor 1232 (5)	7.144	20766	7.600 ng/ml
18)	Aroclor 1232 (6)	7.261	20665	6.967 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.392	13227	2.019 ng/ml
21)	Aroclor 1242 (2)	6.879	17995	1.521 ng/ml
22)	Aroclor 1242 (3)	6.994	19572	3.705 ng/ml
23)	Aroclor 1242 (4)	7.092	19389	3.884 ng/ml
24)	Aroclor 1242 (5)	7.144	20766	3.572 ng/ml
25)	Aroclor 1242 (6)	7.261	20665	3.336 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.857	18207	2.440 ng/ml
28)	Aroclor 1248 (2)	7.092	19389	2.077 ng/ml
29)	Aroclor 1248 (3)	7.144	20766	2.368 ng/ml
30)	Aroclor 1248 (4)	7.261	20665	1.974 ng/ml
31)	Aroclor 1248 (5)	7.629	26385	2.040 ng/ml
32)	Aroclor 1248 (6)	7.754	127372	10.802 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.619	25116	1.943 ng/ml
35)	Aroclor 1254 (2)	7.754	127372	6.291 ng/ml
36)	Aroclor 1254 (3)	8.105	13206	0.616 ng/ml
37)	Aroclor 1254 (4)	8.350	343131	20.775 ng/ml
38)	Aroclor 1254 (5)	8.673	9926	0.632 ng/ml
39)	Aroclor 1254 (6)	8.902	8040	1.644 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.226	15241	0.966 ng/ml
42)	Aroclor 1260 (2)	8.434	21295	1.088 ng/ml
43)	Aroclor 1260 (3)	8.673	9926	0.493 ng/ml
44)	Aroclor 1260 (4)	9.156	3952	0.128 ng/ml
45)	Aroclor 1260 (5)	9.427	3726	0.208 ng/ml
46)	Aroclor 1260 (6)	10.013	4782	0.693 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:01
Operator : MJB / KAK
Sample : 9J25014-ICB1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

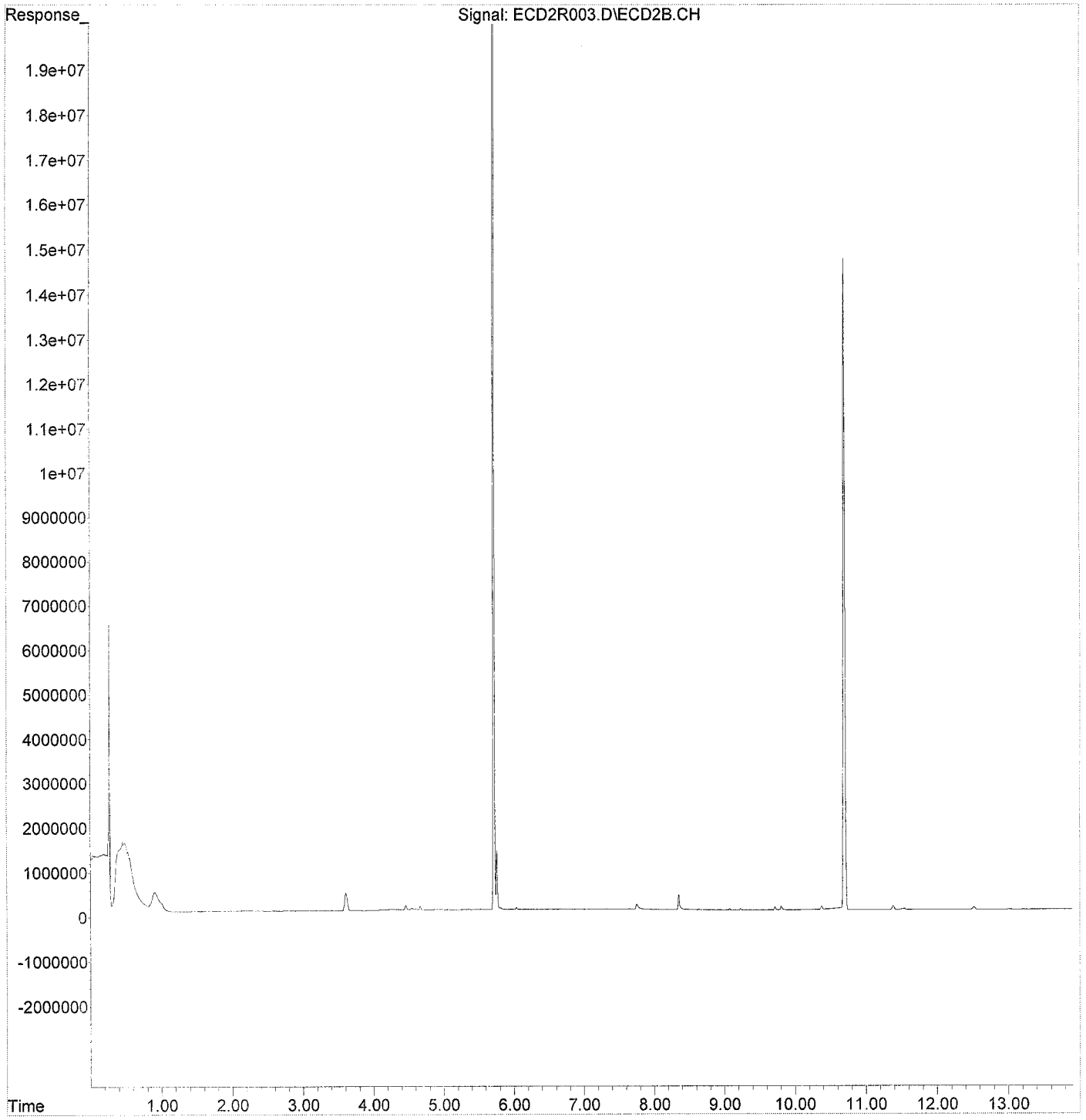
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.434	21295	1.407 ng/ml
49)	Aroclor 1262 (2)	8.737	8663	0.410 ng/ml
50)	Aroclor 1262 (3)	8.915	8112	0.464 ng/ml
51)	Aroclor 1262 (4)	9.156	3952	0.110 ng/ml
52)	Aroclor 1262 (5)	9.427	3726	0.170 ng/ml
53)	Aroclor 1262 (6)	10.013	4782	0.493 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.958	8304	0.890 ng/ml
56)	Aroclor 1268 (2)	9.427	3726	0.095 ng/ml
57)	Aroclor 1268 (3)	9.487	3192	0.101 ng/ml
58)	Aroclor 1268 (4)	9.717	72970	2.694 ng/ml
59)	Aroclor 1268 (5)	10.013	4782	0.451 ng/ml
60)	Aroclor 1268 (6)	10.376	83846	1.141 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:01
Operator : MJB / KAK
Sample : 9J25014-ICB1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:22
Operator : MJB / KAK
Sample : 9J25014-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

No Carry-over

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.690	11770	0.045 ng/ml
62)	S DCBP (S)	10.700	5513	0.038 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.390	18426	2.074 ng/ml
3)	Aroclor 1016 (2)	6.888	27114	1.657 ng/ml
4)	Aroclor 1016 (3)	7.013	24169	3.281 ng/ml
5)	Aroclor 1016 (4)	7.101	25823	3.463 ng/ml
6)	Aroclor 1016 (5)	7.136	25296	3.066 ng/ml
7)	Aroclor 1016 (6)	7.269	26819	3.258 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.891	15191	7.086 ng/ml
10)	Aroclor 1221 (2)	5.969	15416	7.052 ng/ml
11)	Aroclor 1221 (3)	6.045	22057	3.118 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.045	22057	3.853 ng/ml
14)	Aroclor 1232 (2)	6.390	18426	5.300 ng/ml
15)	Aroclor 1232 (3)	6.888	27114	4.188 ng/ml
16)	Aroclor 1232 (4)	7.101	25823	10.815 ng/ml
17)	Aroclor 1232 (5)	7.136	25296	9.258 ng/ml
18)	Aroclor 1232 (6)	7.269	26819	9.042 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.390	18426	2.812 ng/ml
21)	Aroclor 1242 (2)	6.888	27114	2.292 ng/ml
22)	Aroclor 1242 (3)	7.013	24169	4.575 ng/ml
23)	Aroclor 1242 (4)	7.101	25823	5.172 ng/ml
24)	Aroclor 1242 (5)	7.136	25296	4.351 ng/ml
25)	Aroclor 1242 (6)	7.269	26819	4.329 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.862	26172	3.507 ng/ml
28)	Aroclor 1248 (2)	7.101	25823	2.766 ng/ml
29)	Aroclor 1248 (3)	7.136	25296	2.885 ng/ml
30)	Aroclor 1248 (4)	7.269	26819	2.561 ng/ml
31)	Aroclor 1248 (5)	7.622	27346	2.114 ng/ml
32)	Aroclor 1248 (6)	7.758	122347	10.376 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.622	27346	2.116 ng/ml
35)	Aroclor 1254 (2)	7.758	122347	6.043 ng/ml
36)	Aroclor 1254 (3)	8.097	18838	0.879 ng/ml
37)	Aroclor 1254 (4)	8.351	340662	20.625 ng/ml
38)	Aroclor 1254 (5)	8.670	13643	0.869 ng/ml
39)	Aroclor 1254 (6)	8.909	9489	1.940 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.235	19682	1.247 ng/ml
42)	Aroclor 1260 (2)	8.467	21567	1.102 ng/ml
43)	Aroclor 1260 (3)	8.670	13643	0.678 ng/ml
44)	Aroclor 1260 (4)	9.161	6575	0.212 ng/ml
45)	Aroclor 1260 (5)	9.428	3767	0.211 ng/ml
46)	Aroclor 1260 (6)	10.008	2564	0.372 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Data Path : K:\DATA\9J25014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:22
Operator : MJB / KAK
Sample : 9J25014-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

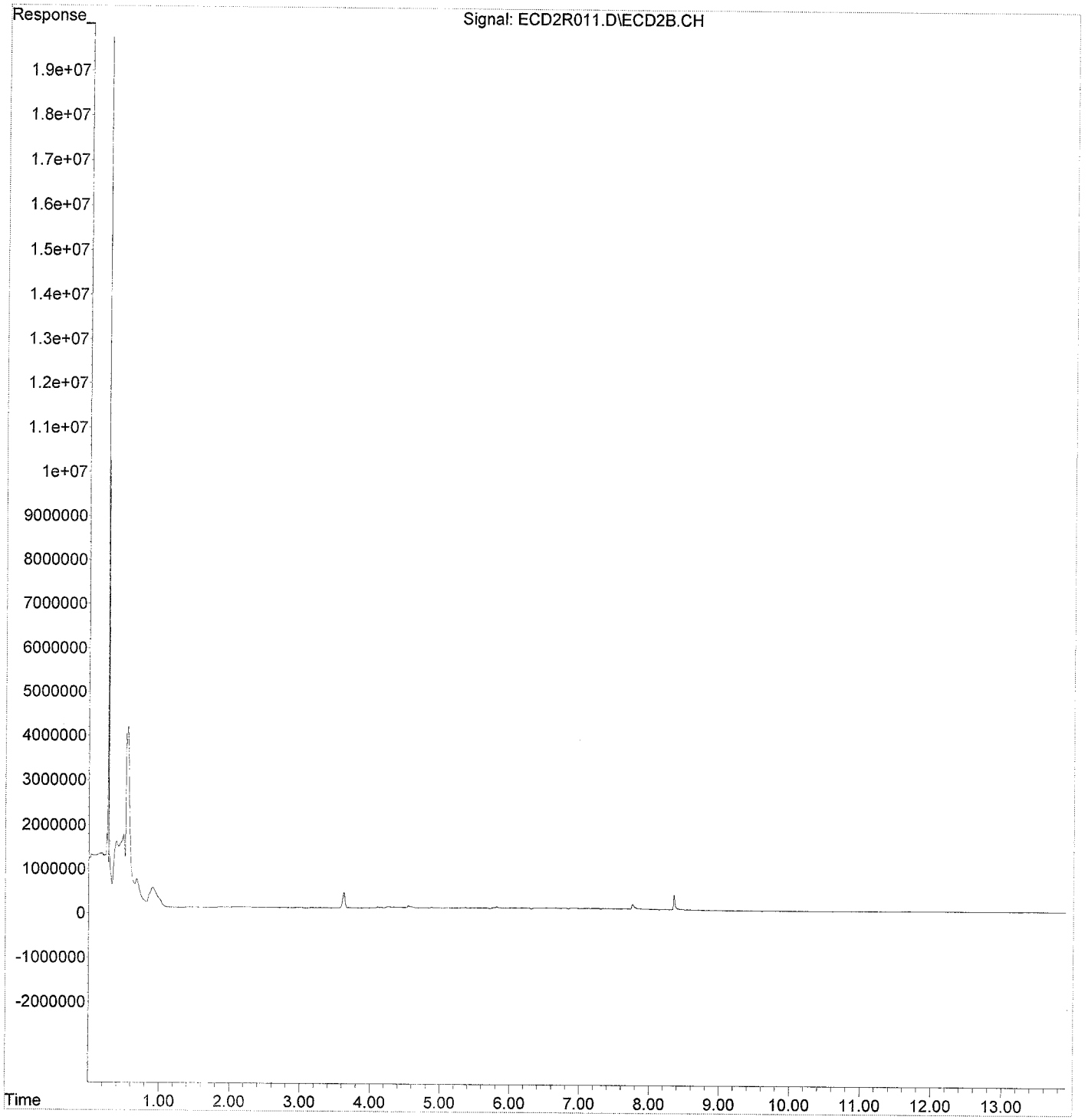
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.467	21567	1.425 ng/ml
49)	Aroclor 1262 (2)	8.734	11593	0.548 ng/ml
50)	Aroclor 1262 (3)	8.915	9304	0.533 ng/ml
51)	Aroclor 1262 (4)	9.161	6575	0.184 ng/ml
52)	Aroclor 1262 (5)	9.428	3767	0.172 ng/ml
53)	Aroclor 1262 (6)	10.008	2564	0.264 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.961	8275	0.887 ng/ml
56)	Aroclor 1268 (2)	9.428	3767	0.096 ng/ml
57)	Aroclor 1268 (3)	9.496	3710	0.118 ng/ml
58)	Aroclor 1268 (4)	9.720	3199	0.118 ng/ml
59)	Aroclor 1268 (5)	10.008	2564	0.242 ng/ml
60)	Aroclor 1268 (6)	10.374	993	0.014 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:22
Operator : MJB / KAK
Sample : 9J25014-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:50:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:40
Operator : MJB / KAK
Sample : 9J25014-ICV1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

1016, 1260

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.721	53368717	203.440	ng/ml
62)	S DCBP (S)	10.701	28147899	191.756	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	4111835	462.883	ng/ml
3)	Aroclor 1016 (2)	6.880	7654677	467.796	ng/ml
4)	Aroclor 1016 (3)	7.007	3520521	477.953	ng/ml
5)	Aroclor 1016 (4)	7.093	3338734	447.713	ng/ml
6)	Aroclor 1016 (5)	7.138	3775980	457.636	ng/ml
7)	Aroclor 1016 (6)	7.263	3722448	452.243	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.894	272584	127.147	ng/ml
10)	Aroclor 1221 (2)	5.968	535733	245.075	ng/ml
11)	Aroclor 1221 (3)	6.056	2552172	360.742	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.056	2552172	445.820	ng/ml
14)	Aroclor 1232 (2)	6.391	4111835	1182.839	ng/ml
15)	Aroclor 1232 (3)	6.880	7654677	1182.326	ng/ml
16)	Aroclor 1232 (4)	7.093	3338734	1398.364	ng/ml
17)	Aroclor 1232 (5)	7.138	3775980	1381.953	ng/ml
18)	Aroclor 1232 (6)	7.263	3722448	1255.031	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.391	4111835	627.621	ng/ml
21)	Aroclor 1242 (2)	6.880	7654677	646.961	ng/ml
22)	Aroclor 1242 (3)	7.007	3520521	666.456	ng/ml
23)	Aroclor 1242 (4)	7.093	3338734	668.719	ng/ml
24)	Aroclor 1242 (5)	7.138	3775980	649.456	ng/ml
25)	Aroclor 1242 (6)	7.263	3722448	600.871	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.853	6409798	858.949	ng/ml
28)	Aroclor 1248 (2)	7.093	3338734	357.613	ng/ml
29)	Aroclor 1248 (3)	7.138	3775980	430.577	ng/ml
30)	Aroclor 1248 (4)	7.263	3722448	355.516	ng/ml
31)	Aroclor 1248 (5)	7.628	731865	56.589	ng/ml
32)	Aroclor 1248 (6)	7.786	3551286	301.184	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.606	3041600	235.326	ng/ml
35)	Aroclor 1254 (2)	7.786	3551286	175.393	ng/ml
36)	Aroclor 1254 (3)	8.097	1902055	88.766	ng/ml
37)	Aroclor 1254 (4)	8.336	1213528	73.473	ng/ml
38)	Aroclor 1254 (5)	8.670	11136132	709.617	ng/ml
39)	Aroclor 1254 (6)	8.889	1244649	254.522	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.233	8464869	536.333	ng/ml
42)	Aroclor 1260 (2)	8.439	10443443	533.544	ng/ml
43)	Aroclor 1260 (3)	8.670	11136132	553.151	ng/ml
44)	Aroclor 1260 (4)	9.161	14517371	469.117	ng/ml
45)	Aroclor 1260 (5)	9.429	8301461	463.841	ng/ml
46)	Aroclor 1260 (6)	10.014	2589505	375.370	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

461.037

488.58559 10/28/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:40
Operator : MJB / KAK
Sample : 9J25014-ICV1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

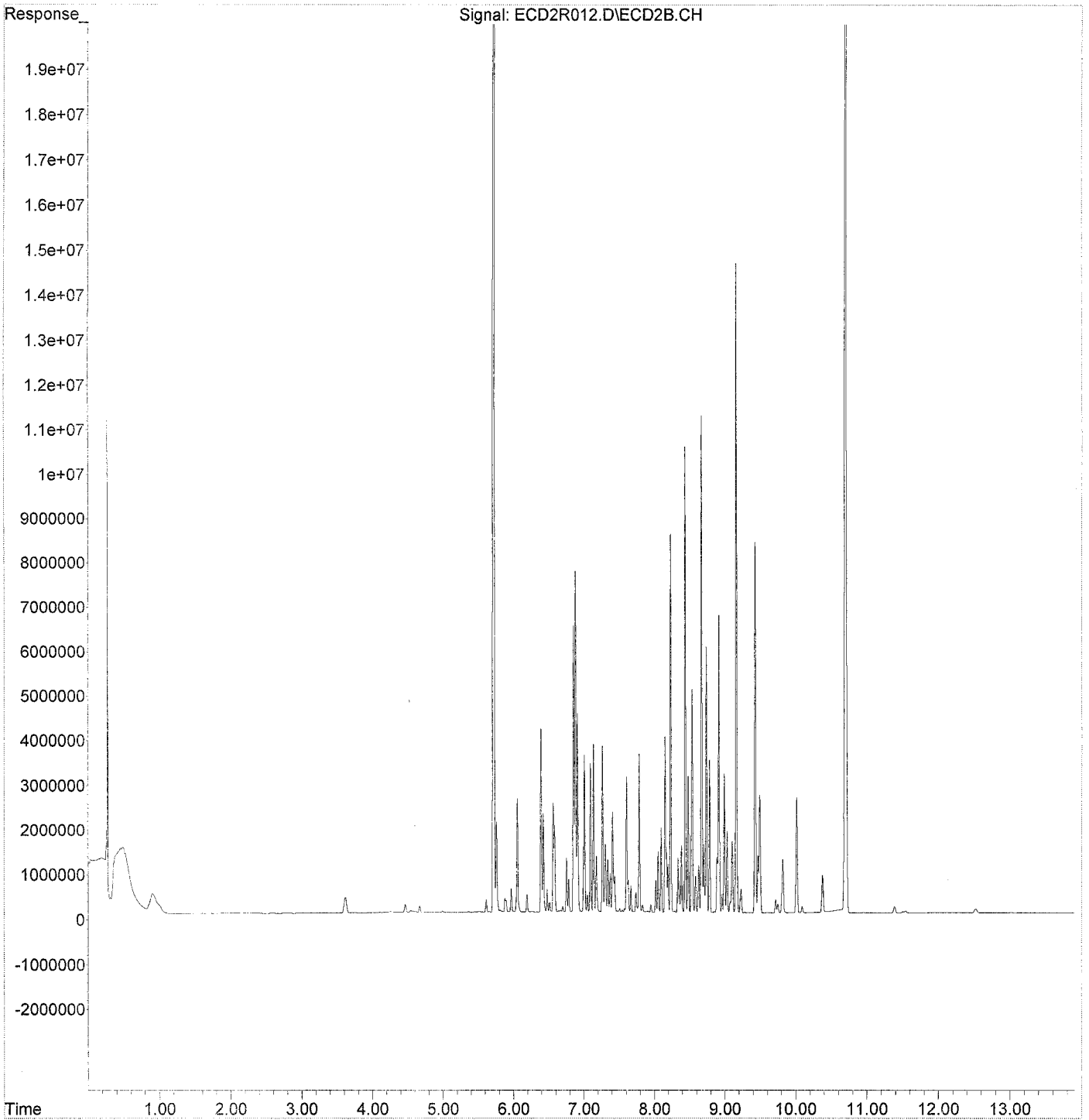
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.439	10443443	690.087 ng/ml
49)	Aroclor 1262 (2)	8.739	5949076	281.224 ng/ml
50)	Aroclor 1262 (3)	8.917	6667821	381.710 ng/ml
51)	Aroclor 1262 (4)	9.161	14517371	405.407 ng/ml
52)	Aroclor 1262 (5)	9.429	8301461	377.943 ng/ml
53)	Aroclor 1262 (6)	10.014	2589505	266.945 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.959	413199	44.271 ng/ml
56)	Aroclor 1268 (2)	9.429	8301461	211.577 ng/ml
57)	Aroclor 1268 (3)	9.494	2645151	83.901 ng/ml
58)	Aroclor 1268 (4)	9.719	297187	10.972 ng/ml
59)	Aroclor 1268 (5)	10.014	2589505	244.381 ng/ml
60)	Aroclor 1268 (6)	10.377	846845	11.525 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:40
Operator : MJB / KAK
Sample : 9J25014-ICV1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:02
Operator : MJB / KAK
Sample : 9J25014-ICV2
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.718	11274680	42.979	ng/ml	
62) S	DCBP (S)	10.701	12601635	85.848	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.390	744966	83.863	ng/ml	
3)	Aroclor 1016 (2)	6.879	1257236	76.833	ng/ml	
4)	Aroclor 1016 (3)	7.006	573835	77.905	ng/ml	
5)	Aroclor 1016 (4)	7.092	3963620	531.508	ng/ml	
6)	Aroclor 1016 (5)	7.138	1549136	187.750	ng/ml	
7)	Aroclor 1016 (6)	7.262	2535533	308.043	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.894	2123768	990.631	ng/ml	1067.588
10)	Aroclor 1221 (2)	5.967	2145063	981.273	ng/ml	
11)	Aroclor 1221 (3)	6.054	7434611	1050.859	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.054	7434611	1298.697	ng/ml	
14)	Aroclor 1232 (2)	6.390	744966	214.302	ng/ml	
15)	Aroclor 1232 (3)	6.879	1257236	194.190	ng/ml	
16)	Aroclor 1232 (4)	7.092	3963620	1660.085	ng/ml	
17)	Aroclor 1232 (5)	7.138	1549136	566.961	ng/ml	
18)	Aroclor 1232 (6)	7.262	2535533	854.860	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.390	744966	113.710	ng/ml	
21)	Aroclor 1242 (2)	6.879	1257236	106.260	ng/ml	
22)	Aroclor 1242 (3)	7.006	573835	108.631	ng/ml	
23)	Aroclor 1242 (4)	7.092	3963620	793.878	ng/ml	
24)	Aroclor 1242 (5)	7.138	1549136	266.446	ng/ml	
25)	Aroclor 1242 (6)	7.262	2535533	409.281	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.852	1072449	143.714	ng/ml	
28)	Aroclor 1248 (2)	7.092	3963620	424.545	ng/ml	
29)	Aroclor 1248 (3)	7.138	1549136	176.649	ng/ml	
30)	Aroclor 1248 (4)	7.262	2535533	242.159	ng/ml	
31)	Aroclor 1248 (5)	7.628	3867982	299.078	ng/ml	
32)	Aroclor 1248 (6)	7.786	10669244	904.857	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.606	6671559	516.173	ng/ml	516.477
35)	Aroclor 1254 (2)	7.786	10669244	526.939	ng/ml	
36)	Aroclor 1254 (3)	8.096	11088952	517.506	ng/ml	
37)	Aroclor 1254 (4)	8.335	8021191	485.645	ng/ml	
38)	Aroclor 1254 (5)	8.669	8583301	546.946	ng/ml	
39)	Aroclor 1254 (6)	8.900	2472718	505.653	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.232	3931473	249.097	ng/ml	
42)	Aroclor 1260 (2)	8.438	4714974	240.883	ng/ml	
43)	Aroclor 1260 (3)	8.669	8583301	426.348	ng/ml	
44)	Aroclor 1260 (4)	9.160	1356478	43.833	ng/ml	
45)	Aroclor 1260 (5)	9.427	1090849	60.951	ng/ml	
46)	Aroclor 1260 (6)	10.012	77810	11.279	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:02
Operator : MJB / KAK
Sample : 9J25014-ICV2
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

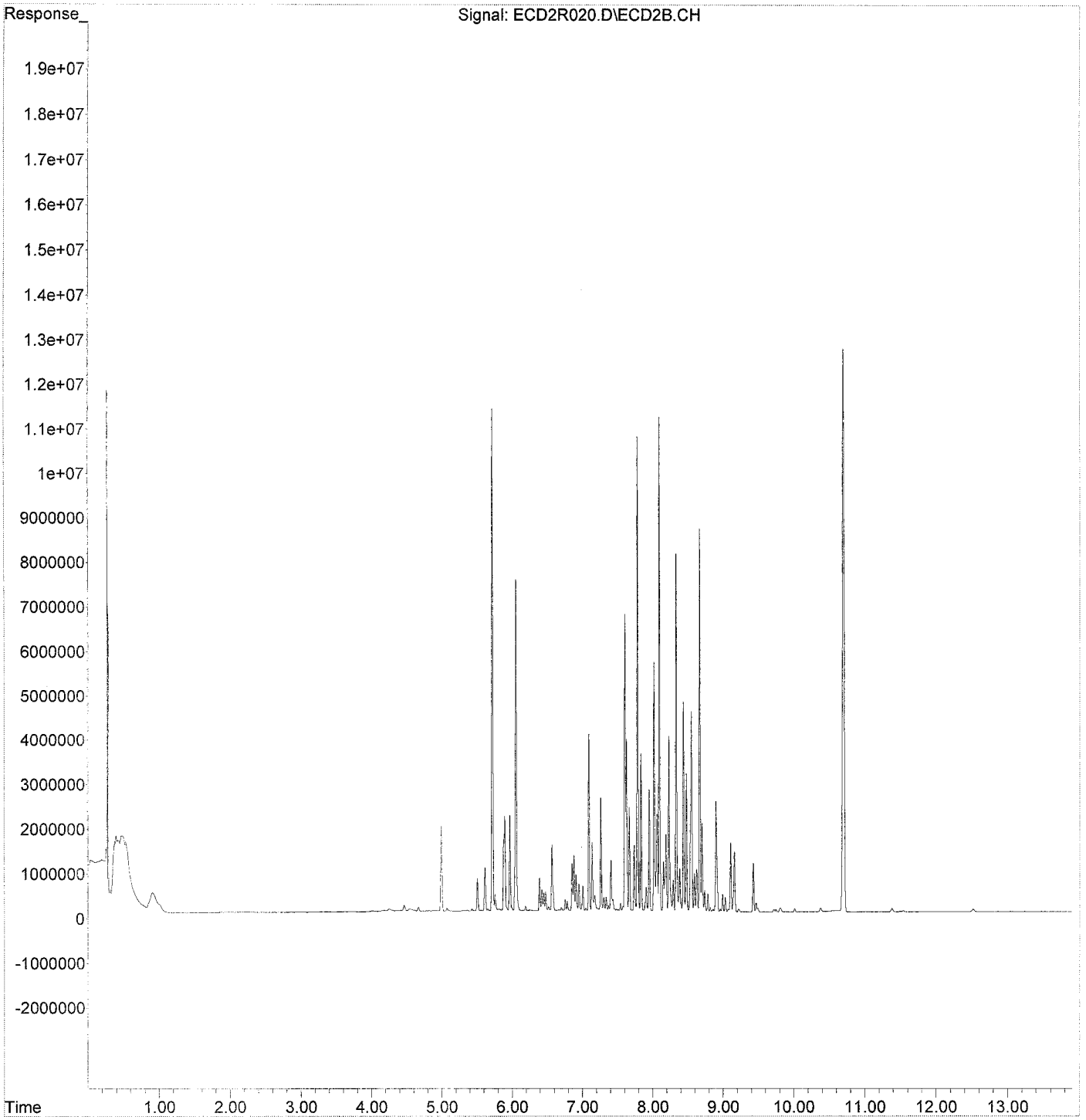
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.438	4714974	311.558 ng/ml
49)	Aroclor 1262 (2)	8.738	489237	23.127 ng/ml
50)	Aroclor 1262 (3)	8.900	2472718	141.555 ng/ml
51)	Aroclor 1262 (4)	9.160	1356478	37.881 ng/ml
52)	Aroclor 1262 (5)	9.427	1090849	49.663 ng/ml
53)	Aroclor 1262 (6)	10.012	77810	8.021 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.959	61405	6.579 ng/ml
56)	Aroclor 1268 (2)	9.427	1090849	27.802 ng/ml
57)	Aroclor 1268 (3)	9.493	87638	2.780 ng/ml
58)	Aroclor 1268 (4)	9.718	61790	2.281 ng/ml
59)	Aroclor 1268 (5)	10.012	77810	7.343 ng/ml
60)	Aroclor 1268 (6)	10.376	84737	1.153 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:02
Operator : MJB / KAK
Sample : 9J25014-ICV2
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:20
Operator : MJB / KAK
Sample : 9J25014-ICV3
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

1232, 1262

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.718	11042209	42.093 ng/ml
62)	S DCBP (S)	10.699	13066737	89.016 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.390	1865512	210.007 ng/ml
3)	Aroclor 1016 (2)	6.879	3384841	206.856 ng/ml
4)	Aroclor 1016 (3)	7.006	1589246	215.759 ng/ml
5)	Aroclor 1016 (4)	7.092	1394711	187.026 ng/ml
6)	Aroclor 1016 (5)	7.137	1532904	185.783 ng/ml
7)	Aroclor 1016 (6)	7.262	1611313	195.759 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.894	676475	315.541 ng/ml
10)	Aroclor 1221 (2)	5.967	788459	360.686 ng/ml
11)	Aroclor 1221 (3)	6.054	2947524	416.623 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.054	2947524	514.881 ng/ml
14)	Aroclor 1232 (2)	6.390	1865512	536.646 ng/ml
15)	Aroclor 1232 (3)	6.879	3384841	522.816 ng/ml
16)	Aroclor 1232 (4)	7.092	1394711	584.147 ng/ml
17)	Aroclor 1232 (5)	7.137	1532904	561.020 ng/ml
18)	Aroclor 1232 (6)	7.262	1611313	543.258 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.390	1865512	284.747 ng/ml
21)	Aroclor 1242 (2)	6.879	3384841	286.082 ng/ml
22)	Aroclor 1242 (3)	7.006	1589246	300.854 ng/ml
23)	Aroclor 1242 (4)	7.092	1394711	279.348 ng/ml
24)	Aroclor 1242 (5)	7.137	1532904	263.654 ng/ml
25)	Aroclor 1242 (6)	7.262	1611313	260.095 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.851	2839214	380.471 ng/ml
28)	Aroclor 1248 (2)	7.092	1394711	149.388 ng/ml
29)	Aroclor 1248 (3)	7.137	1532904	174.798 ng/ml
30)	Aroclor 1248 (4)	7.262	1611313	153.890 ng/ml
31)	Aroclor 1248 (5)	7.627	1901290	147.011 ng/ml
32)	Aroclor 1248 (6)	7.785	2598036	220.339 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.607	1895634	146.663 ng/ml
35)	Aroclor 1254 (2)	7.785	2598036	128.313 ng/ml
36)	Aroclor 1254 (3)	8.096	1017618	47.491 ng/ml
37)	Aroclor 1254 (4)	8.336	803872	48.671 ng/ml
38)	Aroclor 1254 (5)	8.671	6101946	388.828 ng/ml
39)	Aroclor 1254 (6)	8.886	1873958	383.211 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.232	6342349	401.850 ng/ml
42)	Aroclor 1260 (2)	8.438	7675275	392.121 ng/ml
43)	Aroclor 1260 (3)	8.671	6101946	303.094 ng/ml
44)	Aroclor 1260 (4)	9.160	17971064	580.720 ng/ml
45)	Aroclor 1260 (5)	9.428	9961323	556.586 ng/ml
46)	Aroclor 1260 (6)	10.012	4587639	665.015 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

543.795

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:20
Operator : MJB / KAK
Sample : 9J25014-ICV3
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.438	7675275	507.171 ng/ml
49)	Aroclor 1262 (2)	8.738	10522774	497.430 ng/ml
50)	Aroclor 1262 (3)	8.916	8447542	483.593 ng/ml
51)	Aroclor 1262 (4)	9.160	17971064	501.854 ng/ml
52)	Aroclor 1262 (5)	9.428	9961323	453.513 ng/ml
53)	Aroclor 1262 (6)	10.012	4587639	472.927 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.957	1115515	119.519 ng/ml
56)	Aroclor 1268 (2)	9.428	9961323	253.881 ng/ml
57)	Aroclor 1268 (3)	9.494	5460035	173.185 ng/ml
58)	Aroclor 1268 (4)	9.716	460031	16.985 ng/ml
59)	Aroclor 1268 (5)	10.012	4587639	432.952 ng/ml
60)	Aroclor 1268 (6)	10.374	1476627	20.095 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

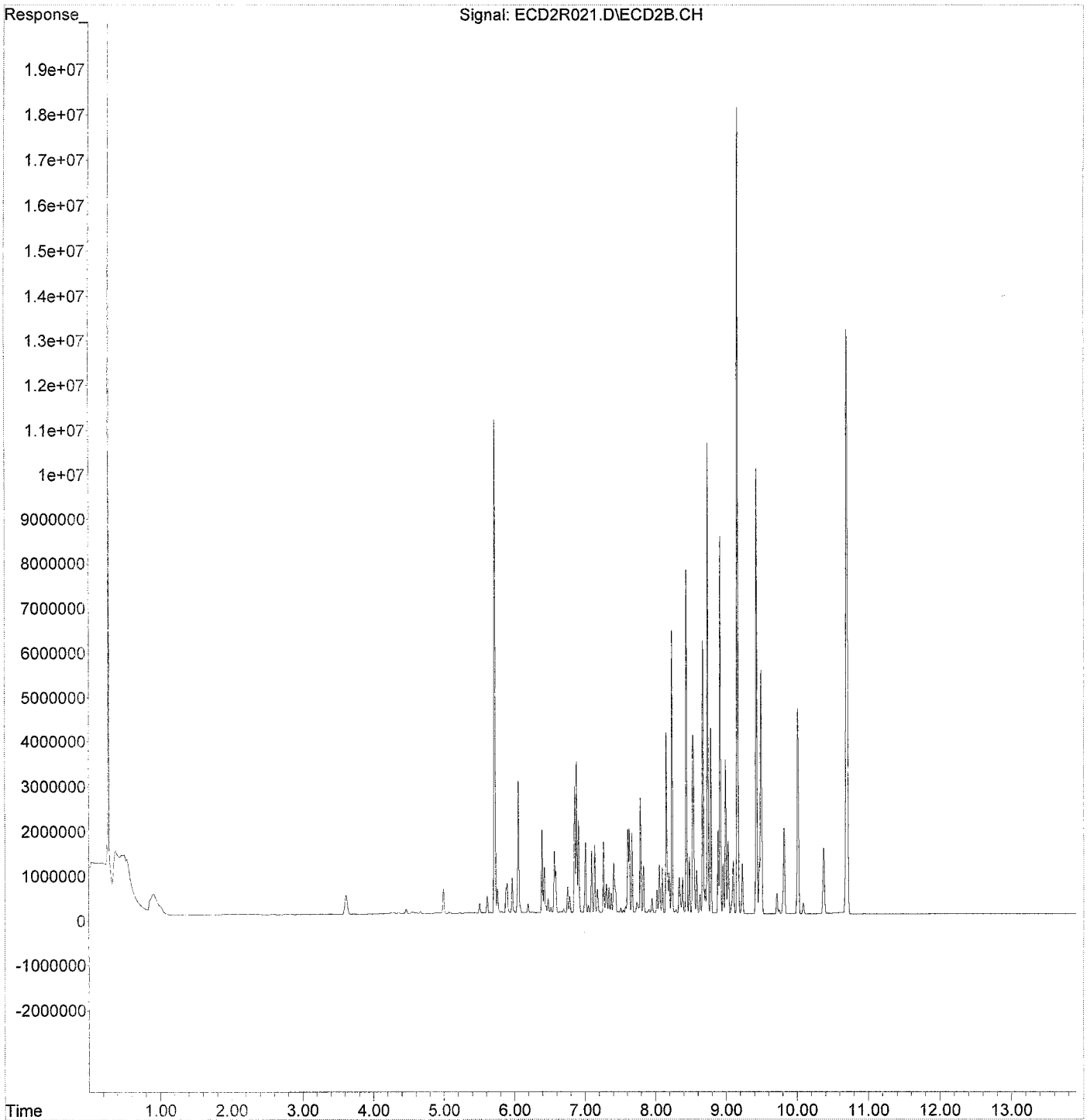
486.081

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:20
Operator : MJB / KAK
Sample : 9J25014-ICV3
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:37
Operator : MJB / KAK
Sample : 9J25014-ICV4
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

1242, 1268

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.720	11774556	44.884	ng/ml
62)	S DCBP (S)	10.700	5990375	40.809	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	3530071	397.392	ng/ml
3)	Aroclor 1016 (2)	6.880	6752199	412.644	ng/ml
4)	Aroclor 1016 (3)	7.006	2900921	393.835	ng/ml
5)	Aroclor 1016 (4)	7.093	2633333	353.121	ng/ml
6)	Aroclor 1016 (5)	7.138	3153322	382.172	ng/ml
7)	Aroclor 1016 (6)	7.263	3211296	390.142	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.895	239368	111.653	ng/ml
10)	Aroclor 1221 (2)	5.968	488990	223.692	ng/ml
11)	Aroclor 1221 (3)	6.056	2395944	338.659	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.056	2395944	418.530	ng/ml
14)	Aroclor 1232 (2)	6.391	3530071	1015.484	ng/ml
15)	Aroclor 1232 (3)	6.880	6752199	1042.931	ng/ml
16)	Aroclor 1232 (4)	7.093	2633333	1102.920	ng/ml
17)	Aroclor 1232 (5)	7.138	3153322	1154.070	ng/ml
18)	Aroclor 1232 (6)	7.263	3211296	1082.695	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.391	3530071	538.822	ng/ml
21)	Aroclor 1242 (2)	6.880	6752199	570.685	ng/ml
22)	Aroclor 1242 (3)	7.006	2900921	549.162	ng/ml
23)	Aroclor 1242 (4)	7.093	2633333	527.433	ng/ml
24)	Aroclor 1242 (5)	7.138	3153322	542.361	ng/ml
25)	Aroclor 1242 (6)	7.263	3211296	518.362	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.853	5238752	702.022	ng/ml
28)	Aroclor 1248 (2)	7.093	2633333	282.058	ng/ml
29)	Aroclor 1248 (3)	7.138	3153322	359.575	ng/ml
30)	Aroclor 1248 (4)	7.263	3211296	306.698	ng/ml
31)	Aroclor 1248 (5)	7.628	3630750	280.735	ng/ml
32)	Aroclor 1248 (6)	7.784	2898339	245.808	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.610	2531991	195.898	ng/ml
35)	Aroclor 1254 (2)	7.784	2898339	143.145	ng/ml
36)	Aroclor 1254 (3)	8.097	1092695	50.995	ng/ml
37)	Aroclor 1254 (4)	8.335	807742	48.905	ng/ml
38)	Aroclor 1254 (5)	8.671	225525	14.371	ng/ml
39)	Aroclor 1254 (6)	8.886	189258	38.702	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.232	104686	6.633	ng/ml
42)	Aroclor 1260 (2)	8.436	177183	9.052	ng/ml
43)	Aroclor 1260 (3)	8.671	225525	11.202	ng/ml
44)	Aroclor 1260 (4)	9.160	2092602	67.621	ng/ml
45)	Aroclor 1260 (5)	9.430	20491920	1144.979	ng/ml
46)	Aroclor 1260 (6)	10.013	5622341	815.004	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

541.138

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:37
Operator : MJB / KAK
Sample : 9J25014-ICV4
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.436	177183	11.708	ng/ml
49)	Aroclor 1262 (2)	8.739	4093586	193.511	ng/ml
50)	Aroclor 1262 (3)	8.917	329296	18.851	ng/ml
51)	Aroclor 1262 (4)	9.160	2092602	58.437	ng/ml
52)	Aroclor 1262 (5)	9.430	20491920	932.943	ng/ml
53)	Aroclor 1262 (6)	10.013	5622341	579.591	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.958	4616698	494.645	ng/ml
56)	Aroclor 1268 (2)	9.430	20491920	522.271	ng/ml
57)	Aroclor 1268 (3)	9.497	15875048	503.536	ng/ml
58)	Aroclor 1268 (4)	9.717	13592202	501.830	ng/ml
59)	Aroclor 1268 (5)	10.013	5622341	530.601	ng/ml
60)	Aroclor 1268 (6)	10.376	36963889	503.042	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

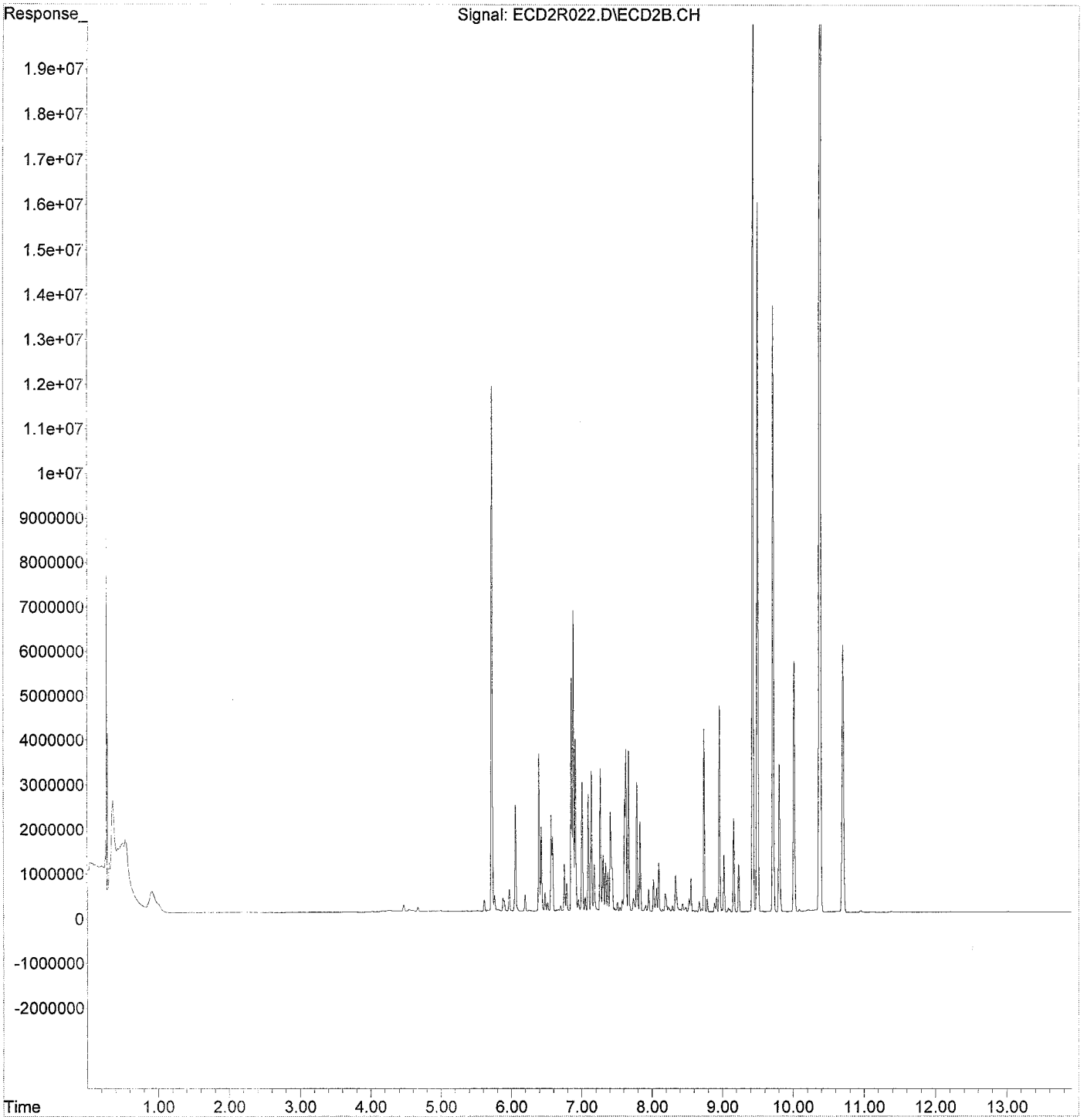
509.321

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:37
Operator : MJB / KAK
Sample : 9J25014-ICV4
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:51:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:55
Operator : MJB / KAK
Sample : 9J25014-ICV5
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:52:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/28/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.716	6919	0.026	ng/ml
62)	S DCBP (S)	10.699	2750	0.019	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	2023125	227.750	ng/ml
3)	Aroclor 1016 (2)	6.879	4050930	247.562	ng/ml
4)	Aroclor 1016 (3)	7.005	1768800	240.136	ng/ml
5)	Aroclor 1016 (4)	7.093	5217069	699.591	ng/ml
6)	Aroclor 1016 (5)	7.137	5113353	619.721	ng/ml
7)	Aroclor 1016 (6)	7.263	6074070	737.942	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.895	36930	17.226	ng/ml
10)	Aroclor 1221 (2)	5.967	60101	27.494	ng/ml
11)	Aroclor 1221 (3)	6.054	298823	42.238	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.054	298823	52.199	ng/ml
14)	Aroclor 1232 (2)	6.390	2023125	581.986	ng/ml
15)	Aroclor 1232 (3)	6.879	4050930	625.699	ng/ml
16)	Aroclor 1232 (4)	7.093	5217069	2185.068	ng/ml
17)	Aroclor 1232 (5)	7.137	5113353	1871.412	ng/ml
18)	Aroclor 1232 (6)	7.263	6074070	2047.886	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.390	2023125	308.805	ng/ml
21)	Aroclor 1242 (2)	6.879	4050930	342.378	ng/ml
22)	Aroclor 1242 (3)	7.005	1768800	334.845	ng/ml
23)	Aroclor 1242 (4)	7.093	5217069	1044.932	ng/ml
24)	Aroclor 1242 (5)	7.137	5113353	879.479	ng/ml
25)	Aroclor 1242 (6)	7.263	6074070	980.466	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.852	4118248	551.868	ng/ml
28)	Aroclor 1248 (2)	7.093	5217069	558.803	ng/ml
29)	Aroclor 1248 (3)	7.137	5113353	583.078	ng/ml
30)	Aroclor 1248 (4)	7.263	6074070	580.110	ng/ml
31)	Aroclor 1248 (5)	7.628	7782994	601.793	ng/ml
32)	Aroclor 1248 (6)	7.784	6754781	572.872	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.609	5215169	403.493	ng/ml
35)	Aroclor 1254 (2)	7.784	6754781	333.609	ng/ml
36)	Aroclor 1254 (3)	8.096	3731751	174.155	ng/ml
37)	Aroclor 1254 (4)	8.334	2682738	162.427	ng/ml
38)	Aroclor 1254 (5)	8.668	594359	37.874	ng/ml
39)	Aroclor 1254 (6)	8.899	233869	47.825	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.231	342998	21.732	ng/ml
42)	Aroclor 1260 (2)	8.434	477807	24.411	ng/ml
43)	Aroclor 1260 (3)	8.668	594359	29.523	ng/ml
44)	Aroclor 1260 (4)	9.159	114546	3.701	ng/ml
45)	Aroclor 1260 (5)	9.427	79254	4.428	ng/ml
46)	Aroclor 1260 (6)	10.012	22494	3.261	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

574.759

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:55
Operator : MJB / KAK
Sample : 9J25014-ICV5
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:52:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

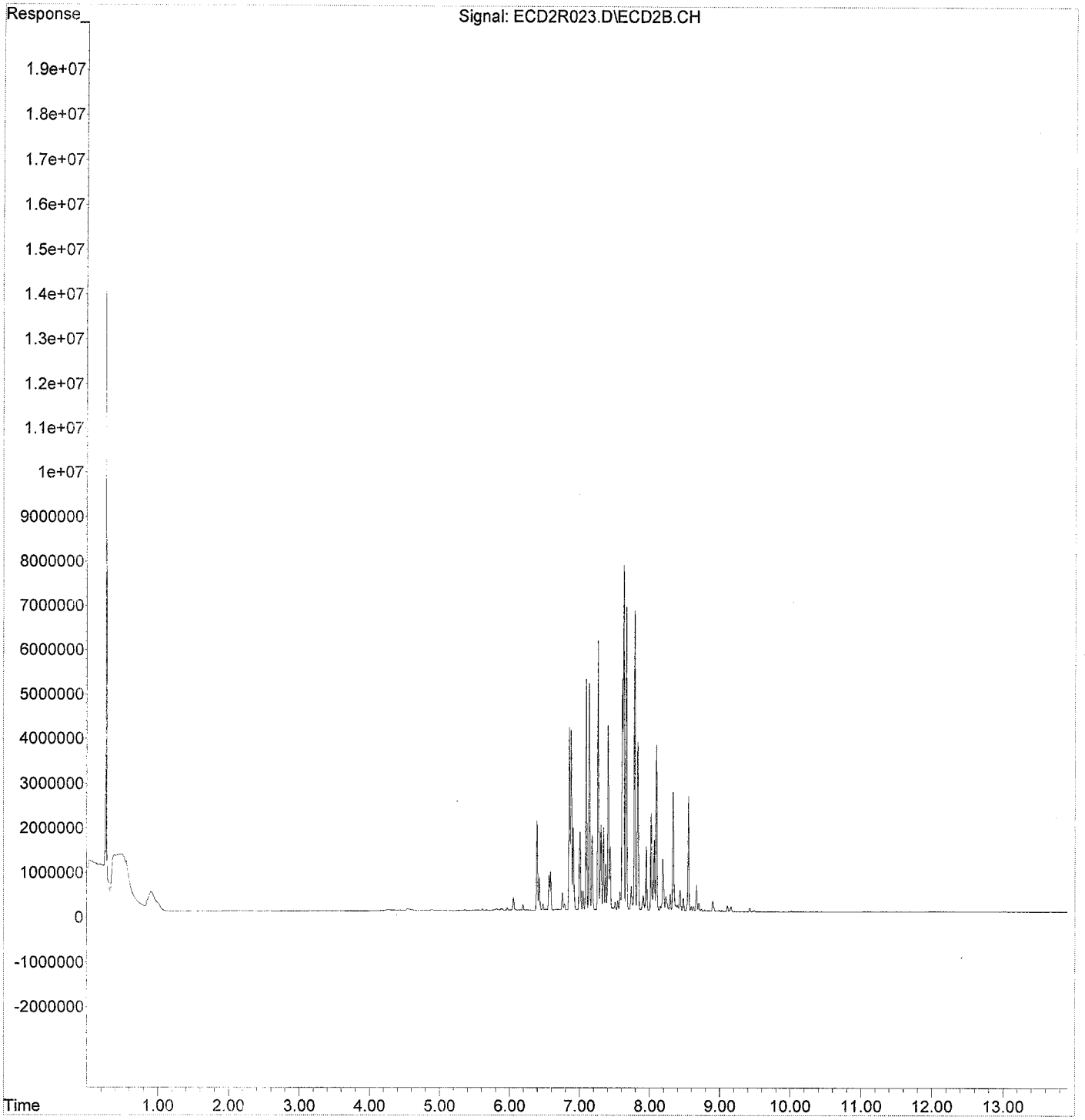
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.434	477807	31.573 ng/ml
49)	Aroclor 1262 (2)	8.738	58424	2.762 ng/ml
50)	Aroclor 1262 (3)	8.899	233869	13.388 ng/ml
51)	Aroclor 1262 (4)	9.159	114546	3.199 ng/ml
52)	Aroclor 1262 (5)	9.427	79254	3.608 ng/ml
53)	Aroclor 1262 (6)	10.012	22494	2.319 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.957	13896	1.489 ng/ml
56)	Aroclor 1268 (2)	9.427	79254	2.020 ng/ml
57)	Aroclor 1268 (3)	9.493	24357	0.773 ng/ml
58)	Aroclor 1268 (4)	9.717	2412	0.089 ng/ml
59)	Aroclor 1268 (5)	10.012	22494	2.123 ng/ml
60)	Aroclor 1268 (6)	10.373	8052	0.110 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 13:55
Operator : MJB / KAK
Sample : 9J25014-ICV5
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:52:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:17:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.717	2391999	9.118	ng/ml
62) S	DCBP (S)	10.698	1318659	8.983	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	203035	22.856	ng/ml
3)	Aroclor 1016 (2)	6.879	342549	20.934	ng/ml
4)	Aroclor 1016 (3)	7.006	170044	23.085	ng/ml
5)	Aroclor 1016 (4)	7.092	177152	23.755	ng/ml
6)	Aroclor 1016 (5)	7.137	189025	22.909	ng/ml
7)	Aroclor 1016 (6)	7.262	191737	23.294	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.232	337139	21.361	ng/ml
42)	Aroclor 1260 (2)	8.437	413345	21.117	ng/ml
43)	Aroclor 1260 (3)	8.670	418334	20.779	ng/ml
44)	Aroclor 1260 (4)	9.160	618662	19.992	ng/ml
45)	Aroclor 1260 (5)	9.427	361157	20.180	ng/ml
46)	Aroclor 1260 (6)	10.012	148612	21.542	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:17:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

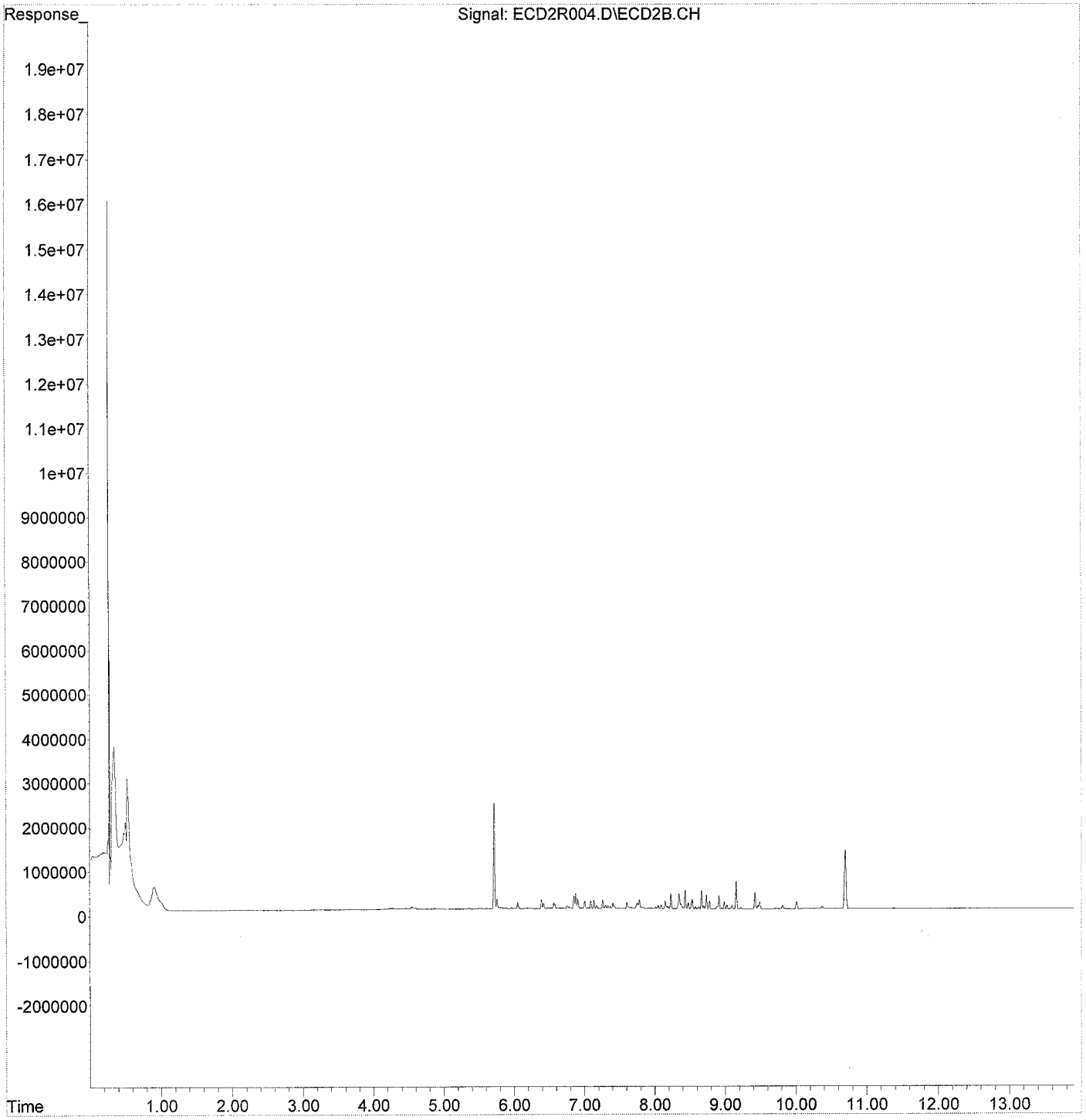
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:17:58 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:18 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.718	6329448	24.128 ng/ml
62) S	DCBP (S)	10.699	3507689	23.896 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.390	493668	55.574 ng/ml
3)	Aroclor 1016 (2)	6.878	850982	52.006 ng/ml
4)	Aroclor 1016 (3)	7.005	385301	52.309 ng/ml
5)	Aroclor 1016 (4)	7.092	408863	54.827 ng/ml
6)	Aroclor 1016 (5)	7.136	456813	55.364 ng/ml
7)	Aroclor 1016 (6)	7.261	452852	55.017 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.231	824221	52.223 ng/ml
42)	Aroclor 1260 (2)	8.436	1025756	52.405 ng/ml
43)	Aroclor 1260 (3)	8.669	1053008	52.305 ng/ml
44)	Aroclor 1260 (4)	9.159	1549626	50.075 ng/ml
45)	Aroclor 1260 (5)	9.426	930309	51.981 ng/ml
46)	Aroclor 1260 (6)	10.011	375099	54.374 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:18 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

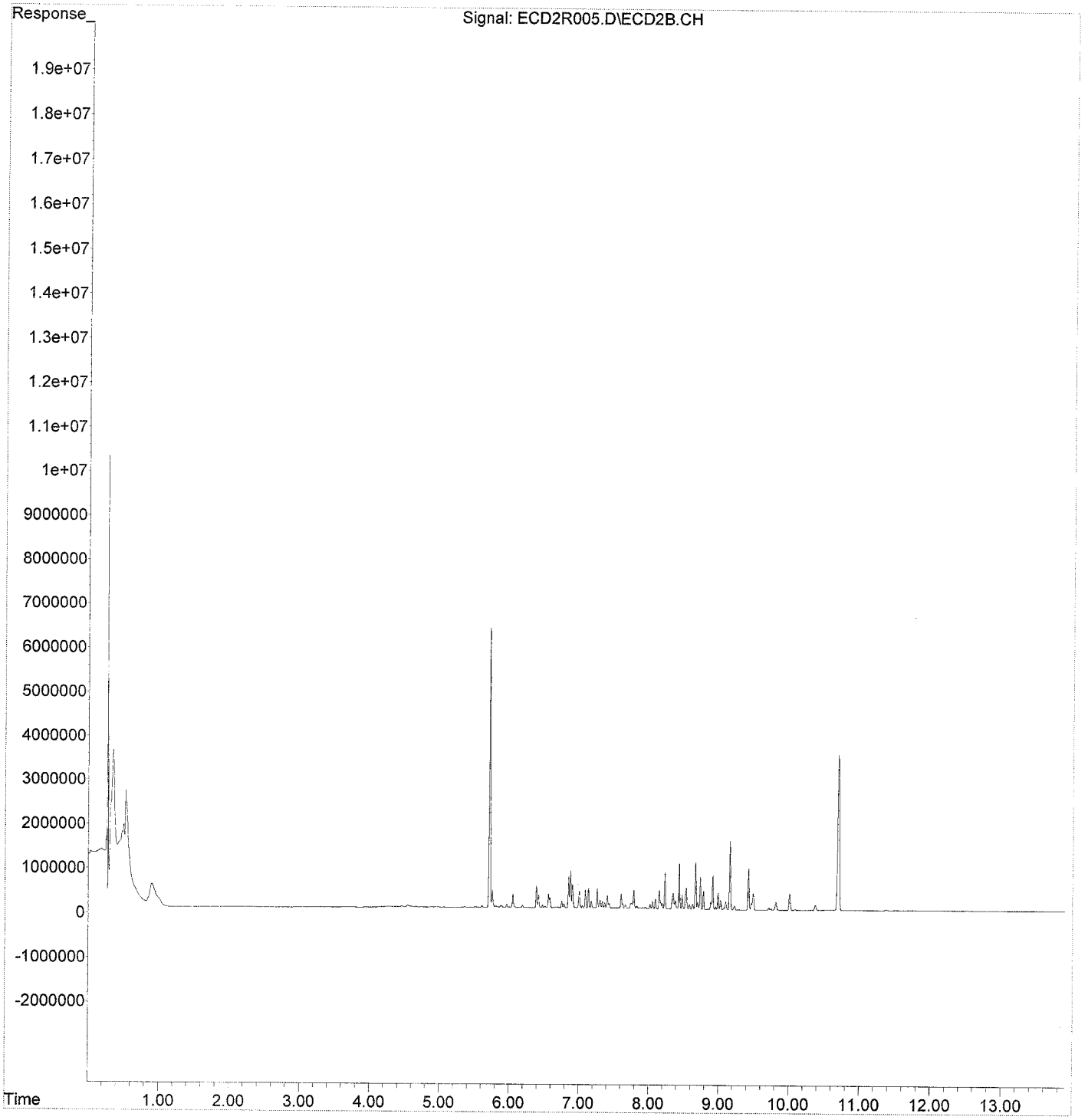
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:18 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.719	12908276	49.206	ng/ml
62) S	DCBP (S)	10.700	6866760	46.779	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	925201	104.153	ng/ml
3)	Aroclor 1016 (2)	6.879	1692274	103.419	ng/ml
4)	Aroclor 1016 (3)	7.006	755246	102.534	ng/ml
5)	Aroclor 1016 (4)	7.092	772578	103.600	ng/ml
6)	Aroclor 1016 (5)	7.137	847932	102.766	ng/ml
7)	Aroclor 1016 (6)	7.262	847087	102.913	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.231	1567269	99.302	ng/ml
42)	Aroclor 1260 (2)	8.437	1995660	101.956	ng/ml
43)	Aroclor 1260 (3)	8.669	1985447	98.621	ng/ml
44)	Aroclor 1260 (4)	9.160	3069980	99.204	ng/ml
45)	Aroclor 1260 (5)	9.427	1747257	97.627	ng/ml
46)	Aroclor 1260 (6)	10.013	694240	100.636	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

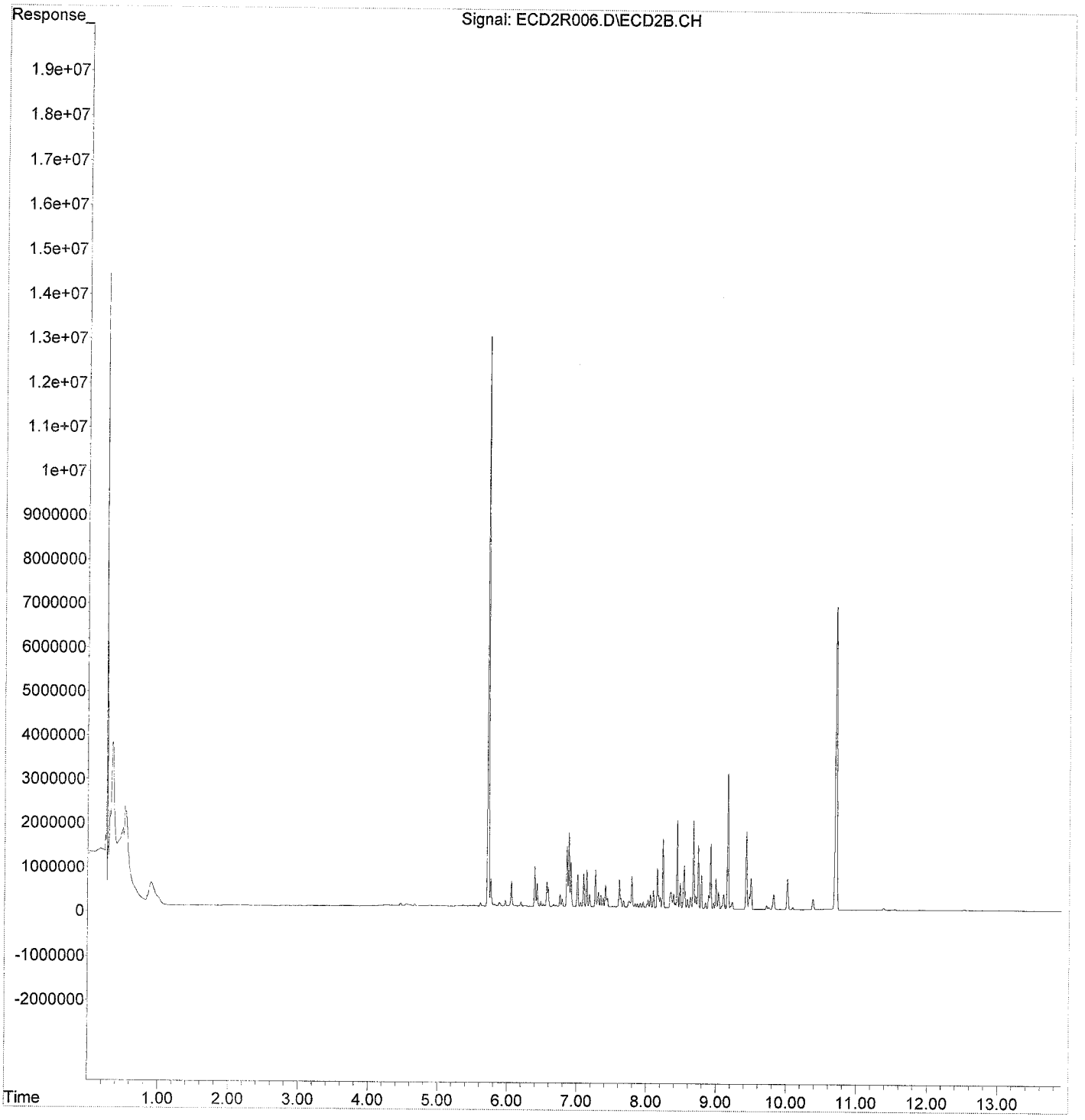
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
1)	S	TCMX (S)	5.719	25201953	96.069	ng/ml
62)	S	DCBP (S)	10.701	13542694	92.259	ng/ml
Target Compounds						
2)		Aroclor 1016 (1)	6.391	1681899	189.337	ng/ml
3)		Aroclor 1016 (2)	6.880	2950427	180.308	ng/ml
4)		Aroclor 1016 (3)	7.007	1339661	181.875	ng/ml
5)		Aroclor 1016 (4)	7.093	1371367	183.896	ng/ml
6)		Aroclor 1016 (5)	7.138	1545261	187.280	ng/ml
7)		Aroclor 1016 (6)	7.264	1488996	180.899	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)		Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)		Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)		Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)		Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)		Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)		Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)		Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)		Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)		Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)		Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)		Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)		Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)		Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)		Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)		Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)		Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)		Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)		Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)		Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)		Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)		Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)		Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)		Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)		Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)		Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)		Aroclor 1260 (1)	8.233	2941552	186.376	ng/ml
42)		Aroclor 1260 (2)	8.439	3541866	180.950	ng/ml
43)		Aroclor 1260 (3)	8.671	3824049	189.947	ng/ml
44)		Aroclor 1260 (4)	9.161	5726786	185.056	ng/ml
45)		Aroclor 1260 (5)	9.429	3291800	183.928	ng/ml
46)		Aroclor 1260 (6)	10.014	1229444	178.218	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

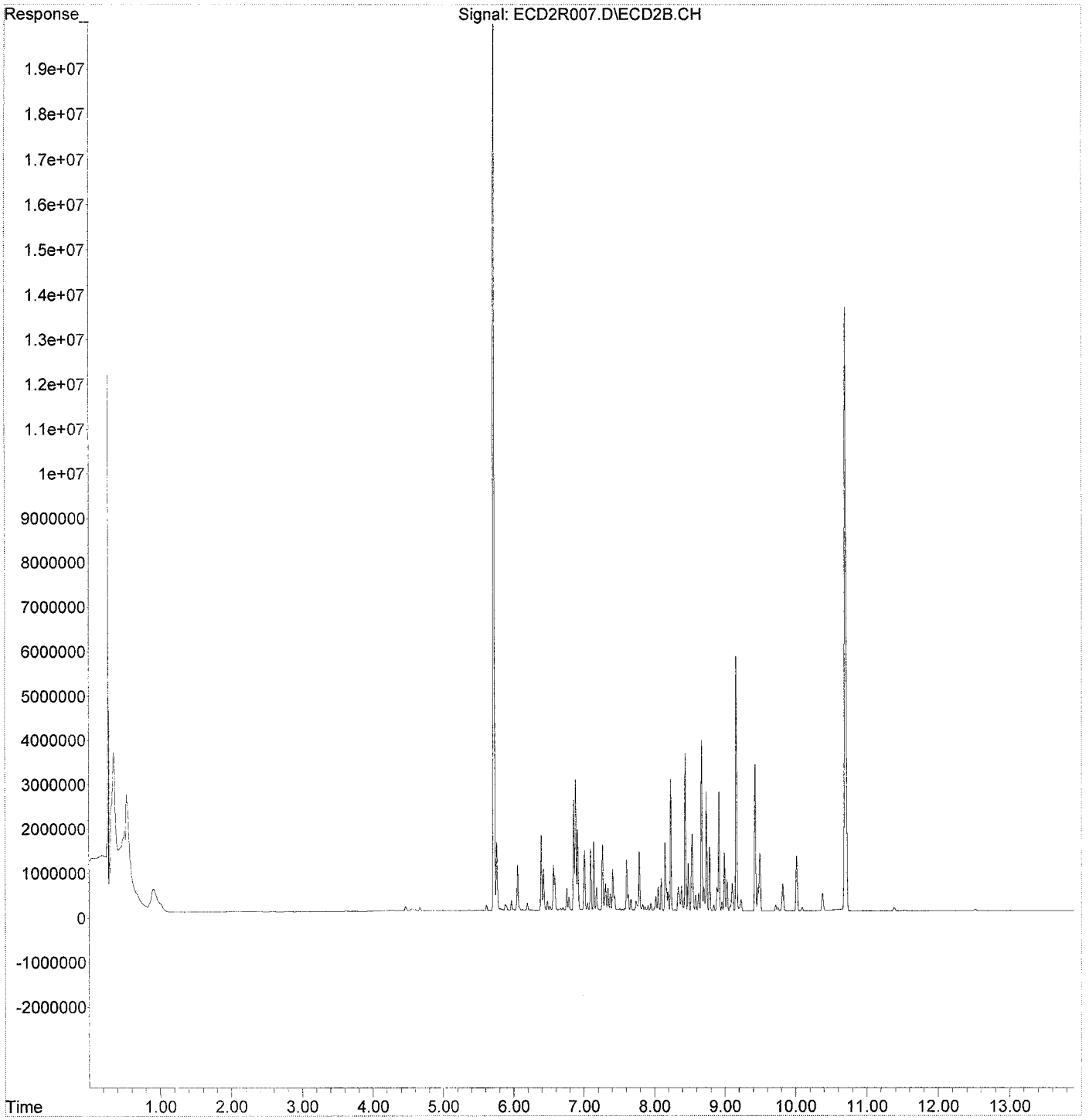
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:18:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.721	74750626	284.947	ng/ml
62) S	DCBP (S)	10.702	37826419	257.690	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.392	4042674	455.098	ng/ml
3)	Aroclor 1016 (2)	6.881	8040226	491.358	ng/ml
4)	Aroclor 1016 (3)	7.007	3506618	476.065	ng/ml
5)	Aroclor 1016 (4)	7.093	3443828	461.805	ng/ml
6)	Aroclor 1016 (5)	7.138	3937867	477.256	ng/ml
7)	Aroclor 1016 (6)	7.264	3952172	480.152	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	7847499	497.216	ng/ml
42)	Aroclor 1260 (2)	8.439	10138697	517.975	ng/ml
43)	Aroclor 1260 (3)	8.671	10067178	500.054	ng/ml
44)	Aroclor 1260 (4)	9.161	14996364	484.595	ng/ml
45)	Aroclor 1260 (5)	9.428	8974797	501.464	ng/ml
46)	Aroclor 1260 (6)	10.013	3236527	469.161	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

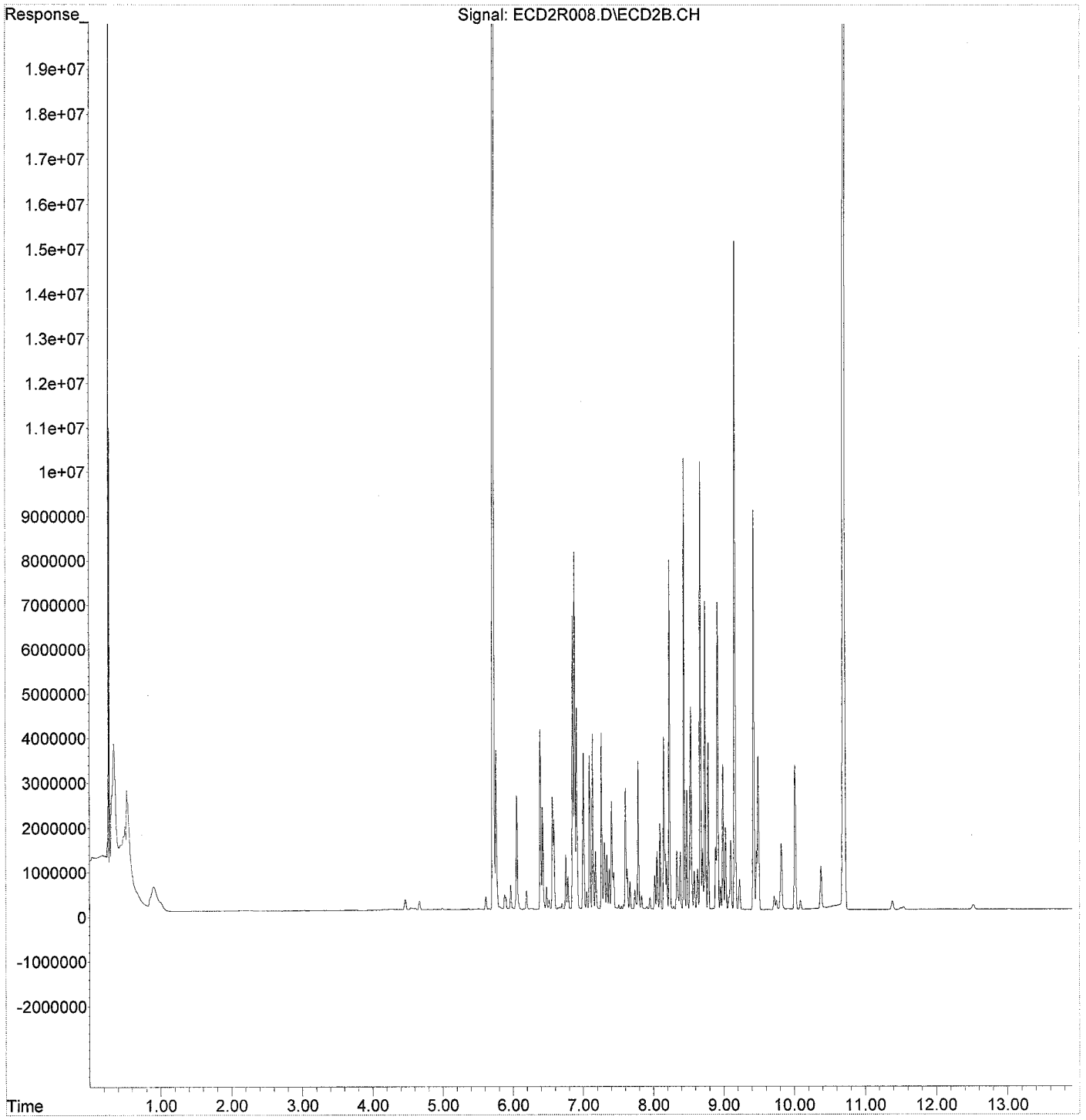
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.722	141150367	538.060	ng/ml
62)	S DCBP (S)	10.703	75851805	516.735	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	8009226	901.626	ng/ml
3)	Aroclor 1016 (2)	6.880	15600018	953.356	ng/ml
4)	Aroclor 1016 (3)	7.006	6715654	911.730	ng/ml
5)	Aroclor 1016 (4)	7.092	6545978	877.793	ng/ml
6)	Aroclor 1016 (5)	7.138	7260053	879.893	ng/ml
7)	Aroclor 1016 (6)	7.263	7304270	887.400	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	14942236	946.738	ng/ml
42)	Aroclor 1260 (2)	8.439	17867440	912.828	ng/ml
43)	Aroclor 1260 (3)	8.671	19036703	945.586	ng/ml
44)	Aroclor 1260 (4)	9.162	31228514	1009.123	ng/ml
45)	Aroclor 1260 (5)	9.429	17681701	987.959	ng/ml
46)	Aroclor 1260 (6)	10.013	6505242	942.988	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

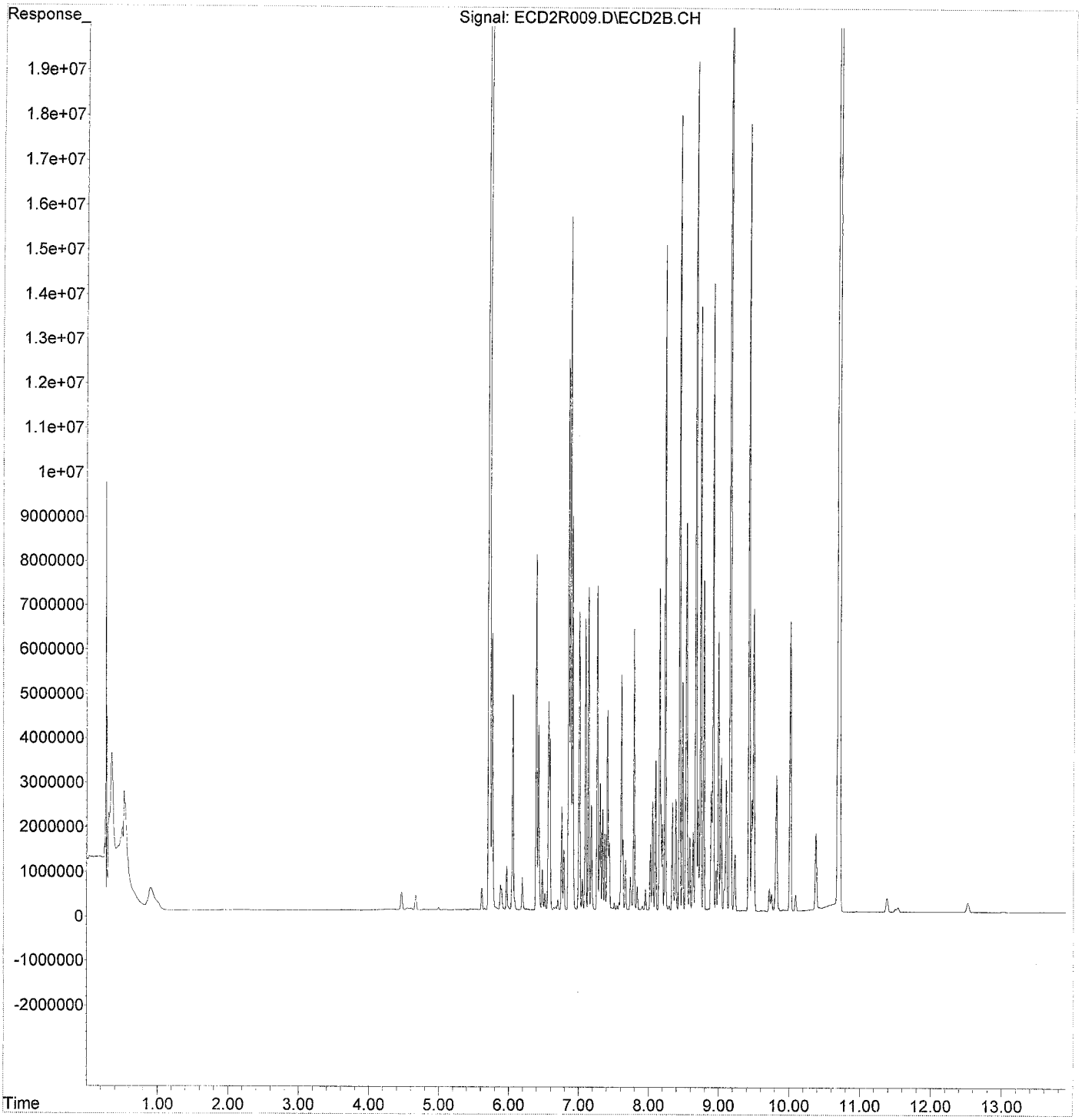
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

		Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds							
1)	S	TCMX (S)	5.728	201965239	769.885	ng/ml	✓
62)	S	DCBP (S)	10.704	143670457	978.745	ng/ml	✓
Target Compounds							
2)		Aroclor 1016 (1)	6.392	12600734	1418.507	ng/ml	
3)		Aroclor 1016 (2)	6.881	25560677	1562.077	ng/ml	
4)		Aroclor 1016 (3)	7.007	11059481	1501.456	ng/ml	✓
5)		Aroclor 1016 (4)	7.094	10725098	1438.199	ng/ml	
6)		Aroclor 1016 (5)	7.138	11742812	1423.188	ng/ml	
7)		Aroclor 1016 (6)	7.264	11773868	1430.414	ng/ml	
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)		Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)		Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)		Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)		Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)		Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)		Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)		Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)		Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)		Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)		Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)		Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)		Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)		Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)		Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)		Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)		Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)		Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)		Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)		Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)		Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)		Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)		Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)		Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)		Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)		Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)		Aroclor 1260 (1)	8.233	24181558	1532.139	ng/ml	
42)		Aroclor 1260 (2)	8.439	30034445	1534.426	ng/ml	
43)		Aroclor 1260 (3)	8.671	31203805	1549.947	ng/ml	✓
44)		Aroclor 1260 (4)	9.162	51214030	1654.938	ng/ml	
45)		Aroclor 1260 (5)	9.429	28580187	1596.909	ng/ml	
46)		Aroclor 1260 (6)	10.014	10934005	1584.973	ng/ml	
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

10/28/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

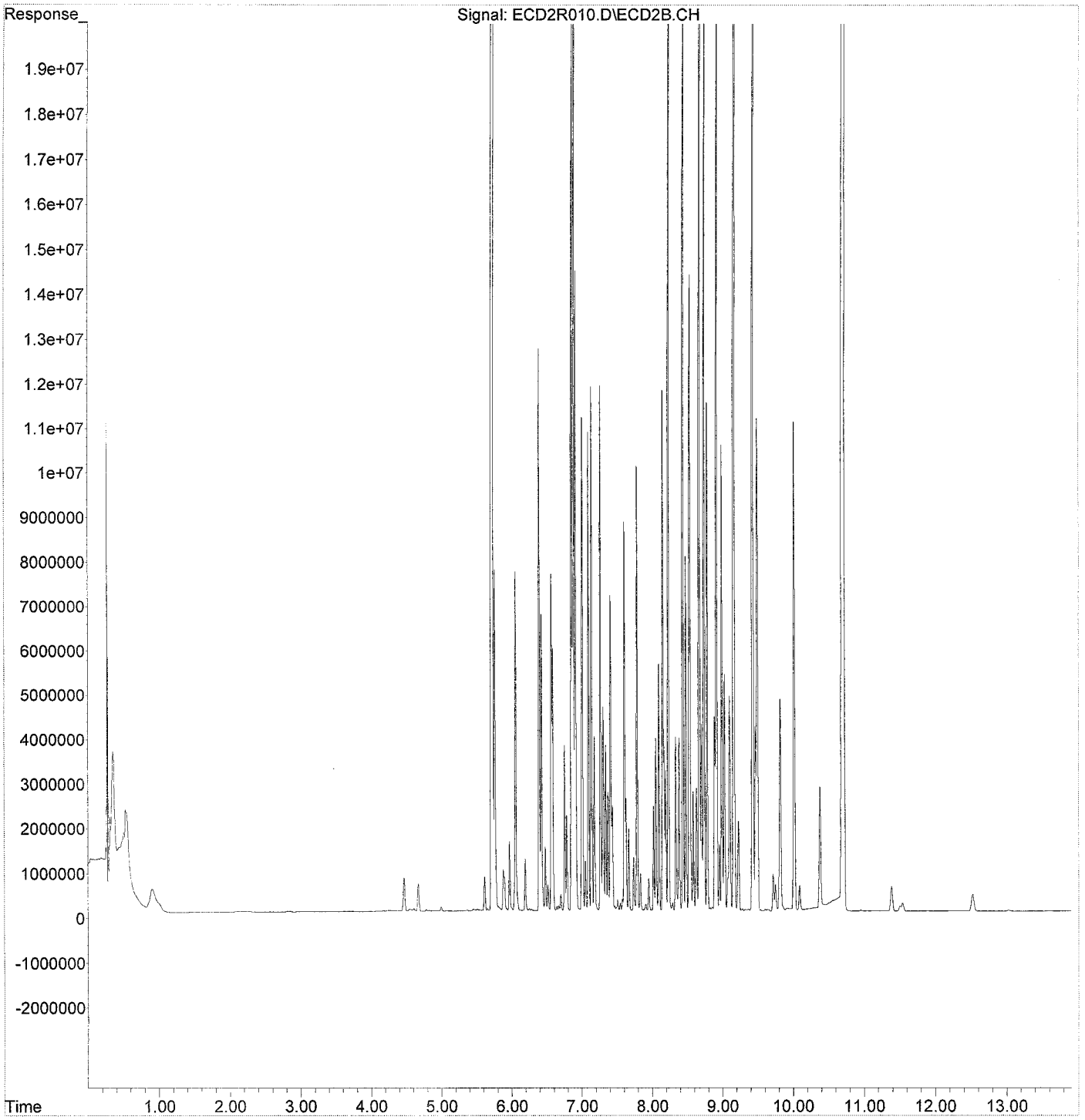
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 28 08:19:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:23:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\2\SEQUENCE\9J25013.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	Hexane	E2A21015	1	Sample		
2	Vial 1	Hexane	E2A21015	1	Sample		
3	Vial 2	9J25013-CCV1	E2A21015	1	Sample		
4	Vial 3	9J25013-CCB1	E2A21015	1	Sample		
5	Vial 4	9101522-BLK1	E2A21015	1	Sample		
6	Vial 5	9101522-BS1	E2A21015	1	Sample		
7	Vial 6	A9J0063-17RE2	E2A21015	1	Sample		
8	Vial 1	9J25013-IBL1	E2A21015	1	Sample		
9	Vial 7	A9J0315-23	E2A21015	1	Sample		
10	Vial 1	9J25013-IBL2	E2A21015	1	Sample		
11	Vial 8	A9J0357-01	E2A21015	1	Sample		
12	Vial 1	9J25013-IBL3	E2A21015	1	Sample		
13	Vial 9	A9J0357-02	E2A21015	1	Sample		
14	Vial 1	9J25013-IBL4	E2A21015	1	Sample		
15	Vial 10	A9J0357-09	E2A21015	1	Sample		
16	Vial 1	9J25013-IBL5	E2A21015	1	Sample		
17	Vial 11	A9J0357-10	E2A21015	1	Sample		
18	Vial 1	9J25013-IBL6	E2A21015	1	Sample		
19	Vial 12	A9J0357-14	E2A21015	1	Sample		
20	Vial 1	9J25013-IBL7	E2A21015	1	Sample		
21	Vial 2	9J25013-CCV2	E2A21015	1	Sample		
22	Vial 3	9J25013-CCB2	E2A21015	1	Sample		
23	Vial 1	Hexane	E2A21015	1	Sample		

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	Hexane	E2A21015	1	Sample		
2	Vial 51	Hexane	E2A21015	1	Sample		
3	Vial 52	9J25014-ICB1	E2A21015	1	Sample		
4	Vial 53	9J25014-CAL1	E2A21015	1	Sample		
5	Vial 54	9J25014-CAL2	E2A21015	1	Sample		
6	Vial 55	9J25014-CAL3	E2A21015	1	Sample		
7	Vial 56	9J25014-CAL4	E2A21015	1	Sample		
8	Vial 57	9J25014-CAL5	E2A21015	1	Sample		
9	Vial 58	9J25014-CAL6	E2A21015	1	Sample		
10	Vial 59	9J25014-CAL7	E2A21015	1	Sample		
11	Vial 51	9J25014-IBL1	E2A21015	1	Sample		
12	Vial 60	9J25014-ICV1	E2A21015	1	Sample		
13	Vial 61	9J25014-CAL8	E2A21015	1	Sample		
14	Vial 62	9J25014-CAL9	E2A21015	1	Sample		
15	Vial 63	9J25014-CALA	E2A21015	1	Sample		
16	Vial 64	9J25014-CALB	E2A21015	1	Sample		
17	Vial 65	9J25014-CALC	E2A21015	1	Sample		
18	Vial 66	9J25014-CALD	E2A21015	1	Sample		
19	Vial 67	9J25014-CALE	E2A21015	1	Sample		
20	Vial 68	9J25014-ICV2	E2A21015	1	Sample		
21	Vial 69	9J25014-ICV3	E2A21015	1	Sample		
22	Vial 70	9J25014-ICV4	E2A21015	1	Sample		
23	Vial 71	9J25014-ICV5	E2A21015	1	Sample		

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:22:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.717	2391999	9.624	ng/ml
62) S	DCBP (S)	10.698	1318659	10.532	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	203035	26.262	ng/ml
3)	Aroclor 1016 (2)	6.879	342549	24.487	ng/ml
4)	Aroclor 1016 (3)	7.006	170044	26.412	ng/ml
5)	Aroclor 1016 (4)	7.092	177152	28.277	ng/ml
6)	Aroclor 1016 (5)	7.137	189025	27.029	ng/ml
7)	Aroclor 1016 (6)	7.262	191737	27.461	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.232	337139	25.386	ng/ml
42)	Aroclor 1260 (2)	8.437	413345	24.782	ng/ml
43)	Aroclor 1260 (3)	8.670	418334	24.841	ng/ml
44)	Aroclor 1260 (4)	9.160	618662	23.878	ng/ml
45)	Aroclor 1260 (5)	9.427	361157	23.847	ng/ml
46)	Aroclor 1260 (6)	10.012	148612	25.385	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:22:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

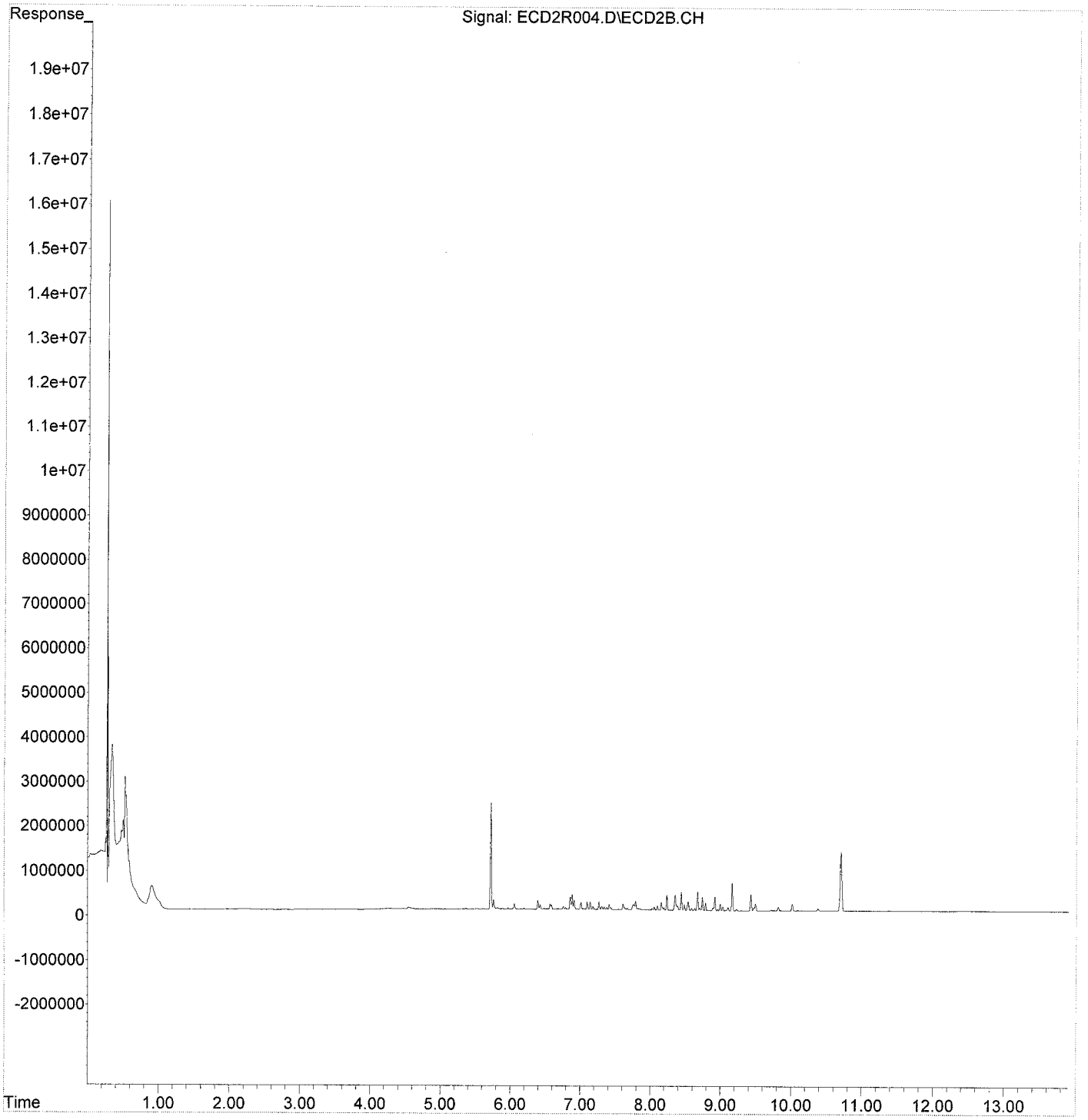
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:19
Operator : MJB / KAK
Sample : 9J25014-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:22:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:23:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.718	6329448	25.466	ng/ml
62) S	DCBP (S)	10.699	3507689	28.017	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	493668	63.854	ng/ml
3)	Aroclor 1016 (2)	6.878	850982	60.832	ng/ml
4)	Aroclor 1016 (3)	7.005	385301	59.847	ng/ml
5)	Aroclor 1016 (4)	7.092	408863	65.263	ng/ml
6)	Aroclor 1016 (5)	7.136	456813	65.321	ng/ml
7)	Aroclor 1016 (6)	7.261	452852	64.859	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.231	824221	62.062	ng/ml
42)	Aroclor 1260 (2)	8.436	1025756	61.499	ng/ml
43)	Aroclor 1260 (3)	8.669	1053008	62.529	ng/ml
44)	Aroclor 1260 (4)	9.159	1549626	59.810	ng/ml
45)	Aroclor 1260 (5)	9.426	930309	61.427	ng/ml
46)	Aroclor 1260 (6)	10.011	375099	64.073	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:23:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

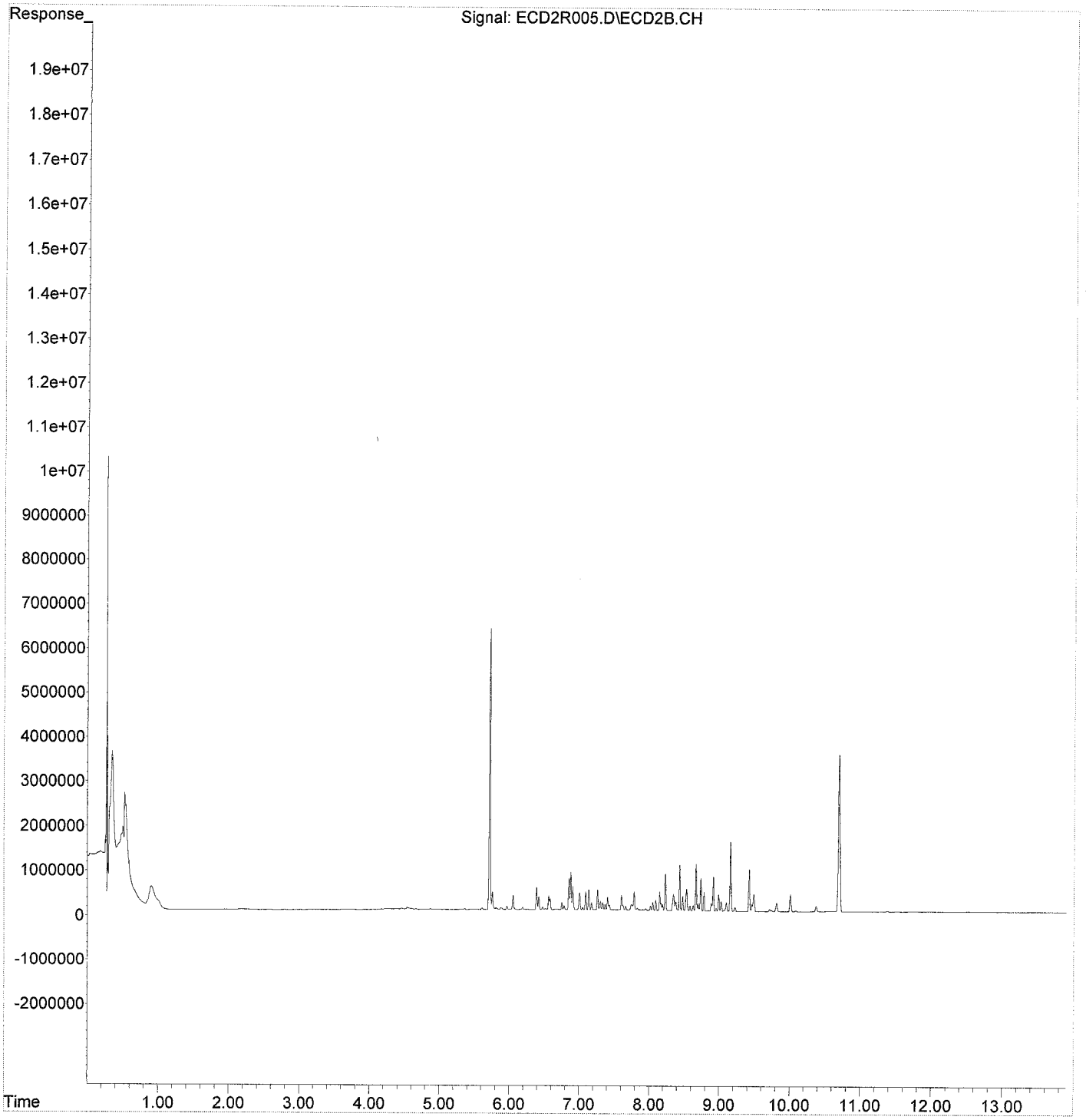
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:37
Operator : MJB / KAK
Sample : 9J25014-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:23:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:25:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.719	12908276	51.934	ng/ml
62) S	DCBP (S)	10.700	6866760	54.846	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.390	925201	119.671	ng/ml
3)	Aroclor 1016 (2)	6.879	1692274	120.970	ng/ml
4)	Aroclor 1016 (3)	7.006	755246	117.309	ng/ml
5)	Aroclor 1016 (4)	7.092	772578	123.320	ng/ml
6)	Aroclor 1016 (5)	7.137	847932	121.249	ng/ml
7)	Aroclor 1016 (6)	7.262	847087	121.323	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.231	1567269	118.012	ng/ml
42)	Aroclor 1260 (2)	8.437	1995660	119.649	ng/ml
43)	Aroclor 1260 (3)	8.669	1985447	117.899	ng/ml
44)	Aroclor 1260 (4)	9.160	3069980	118.491	ng/ml
45)	Aroclor 1260 (5)	9.427	1747257	115.368	ng/ml
46)	Aroclor 1260 (6)	10.013	694240	118.587	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:25:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

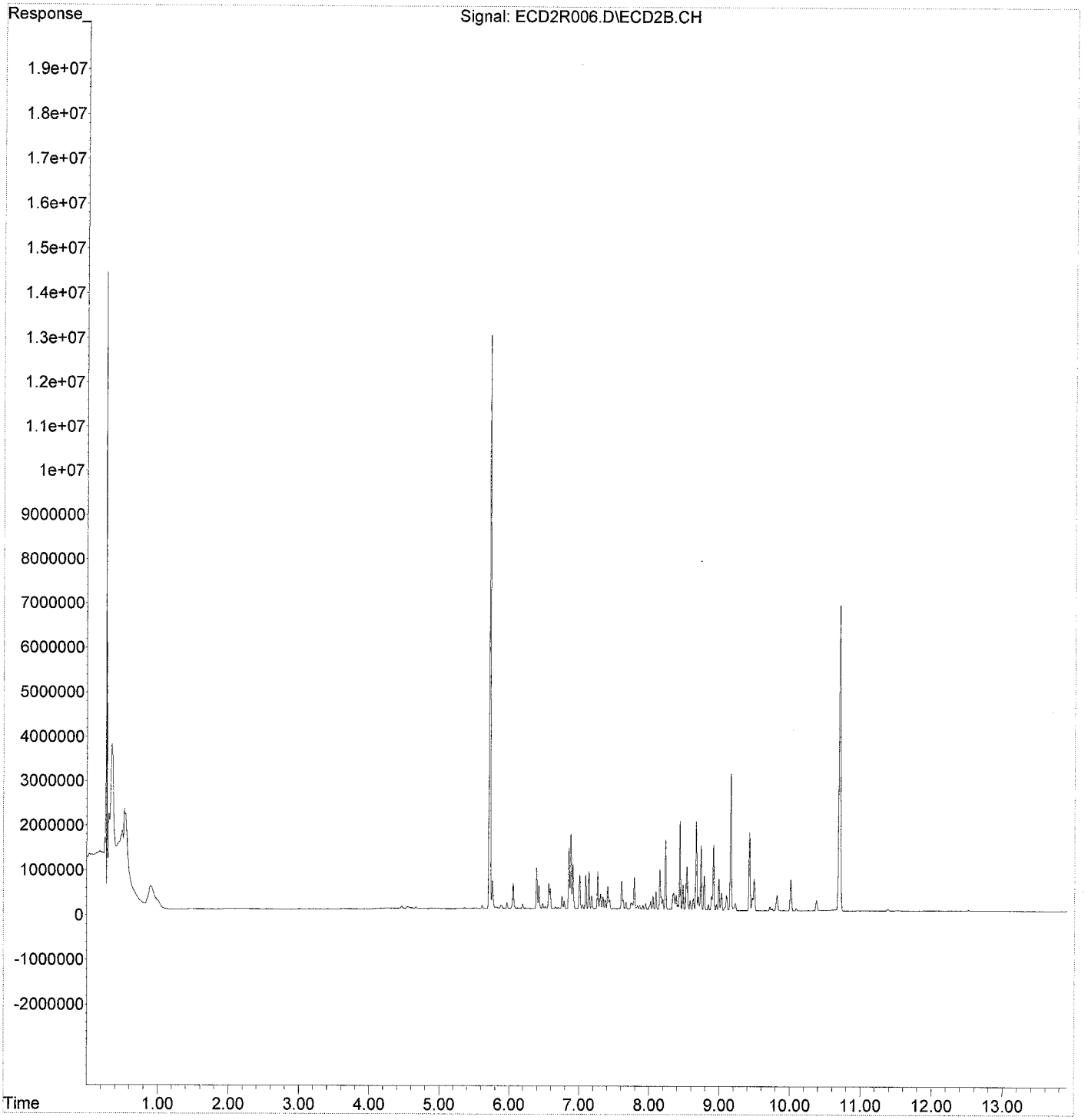
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 8:54
Operator : MJB / KAK
Sample : 9J25014-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:25:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:26:23 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.719	25201953	101.396	ng/ml
62) S	DCBP (S)	10.701	13542694	108.169	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	1681899	217.546	ng/ml
3)	Aroclor 1016 (2)	6.880	2950427	210.908	ng/ml
4)	Aroclor 1016 (3)	7.007	1339661	208.084	ng/ml
5)	Aroclor 1016 (4)	7.093	1371367	218.899	ng/ml
6)	Aroclor 1016 (5)	7.138	1545261	220.963	ng/ml
7)	Aroclor 1016 (6)	7.264	1488996	213.259	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	2941552	221.492	ng/ml
42)	Aroclor 1260 (2)	8.439	3541866	212.352	ng/ml
43)	Aroclor 1260 (3)	8.671	3824049	227.079	ng/ml
44)	Aroclor 1260 (4)	9.161	5726786	221.034	ng/ml
45)	Aroclor 1260 (5)	9.429	3291800	217.352	ng/ml
46)	Aroclor 1260 (6)	10.014	1229444	210.009	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:26:23 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

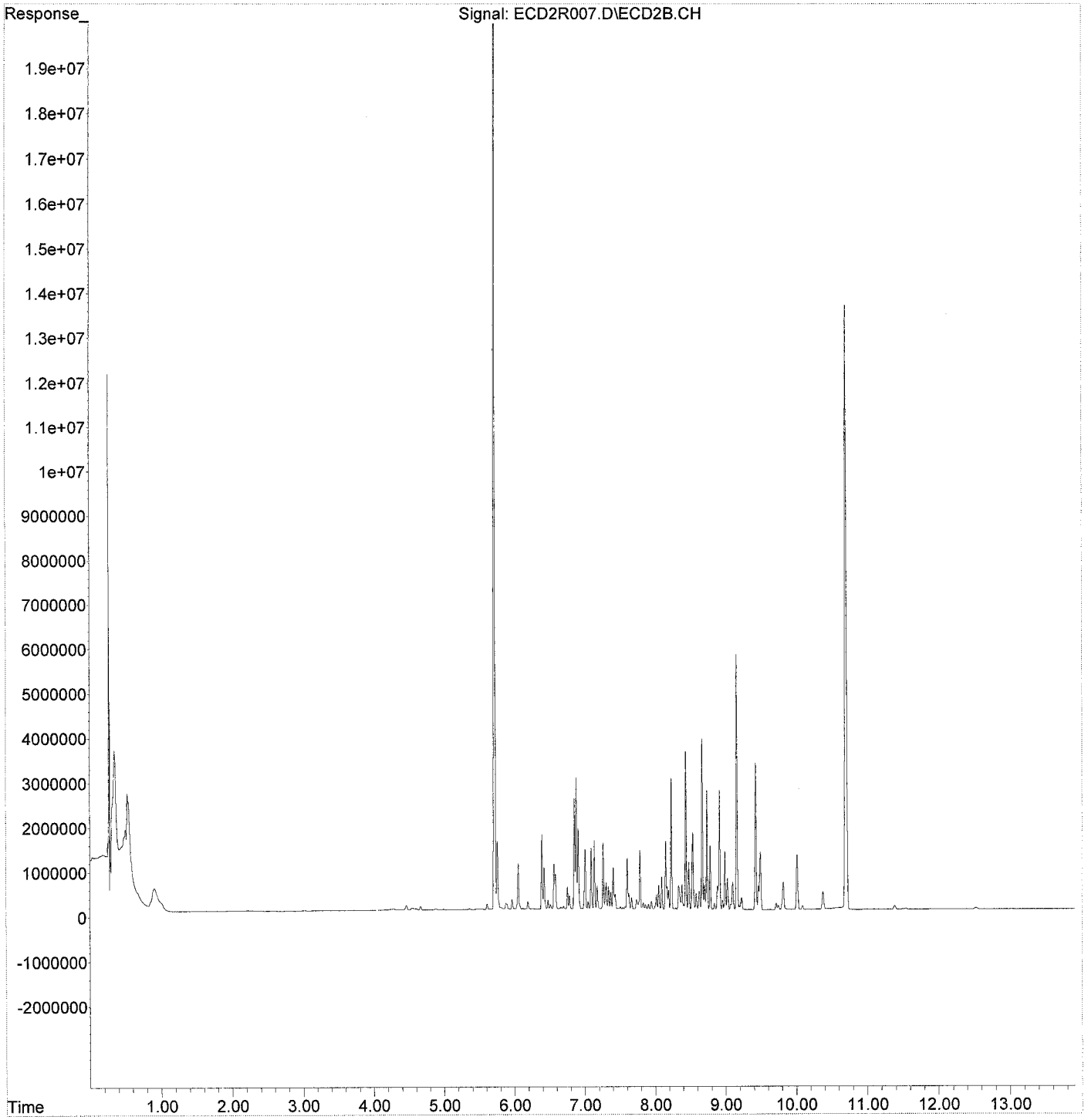
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:12
Operator : MJB / KAK
Sample : 9J25014-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:26:23 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:27:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.721	74750626	300.748	ng/ml
62) S	DCBP (S)	10.702	37826419	302.129	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.392	4042674	522.901	ng/ml
3)	Aroclor 1016 (2)	6.881	8040226	574.747	ng/ml
4)	Aroclor 1016 (3)	7.007	3506618	544.667	ng/ml
5)	Aroclor 1016 (4)	7.093	3443828	549.708	ng/ml
6)	Aroclor 1016 (5)	7.138	3937867	563.090	ng/ml
7)	Aroclor 1016 (6)	7.264	3952172	566.044	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	7847499	590.898	ng/ml
42)	Aroclor 1260 (2)	8.439	10138697	607.863	ng/ml
43)	Aroclor 1260 (3)	8.671	10067178	597.806	ng/ml
44)	Aroclor 1260 (4)	9.161	14996364	578.808	ng/ml
45)	Aroclor 1260 (5)	9.428	8974797	592.590	ng/ml
46)	Aroclor 1260 (6)	10.013	3236527	552.851	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:27:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

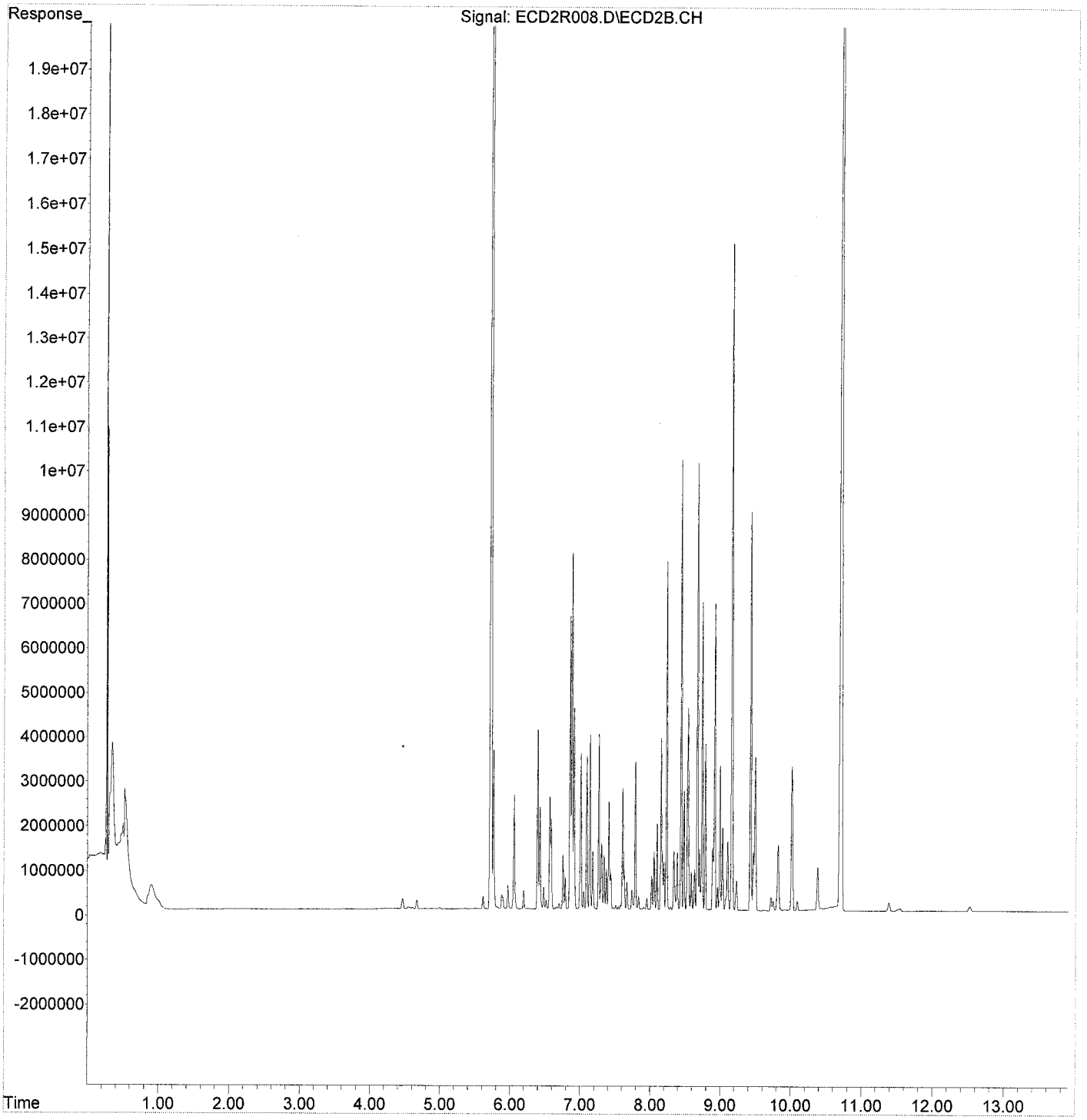
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:29
Operator : MJB / KAK
Sample : 9J25014-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:27:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:28:44 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.722	141150367	567.897	ng/ml
62) S	DCBP (S)	10.703	75851805	605.847	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.391	8009226	1035.957	ng/ml
3)	Aroclor 1016 (2)	6.880	15600018	1115.151	ng/ml
4)	Aroclor 1016 (3)	7.006	6715654	1043.112	ng/ml
5)	Aroclor 1016 (4)	7.092	6545978	1044.877	ng/ml
6)	Aroclor 1016 (5)	7.138	7260053	1038.141	ng/ml
7)	Aroclor 1016 (6)	7.263	7304270	1046.143	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	14942236	1125.115	ng/ml
42)	Aroclor 1260 (2)	8.439	17867440	1071.238	ng/ml
43)	Aroclor 1260 (3)	8.671	19036703	1130.432	ng/ml
44)	Aroclor 1260 (4)	9.162	31228514	1205.313	ng/ml
45)	Aroclor 1260 (5)	9.429	17681701	1167.492	ng/ml
46)	Aroclor 1260 (6)	10.013	6505242	1111.200	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:28:44 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

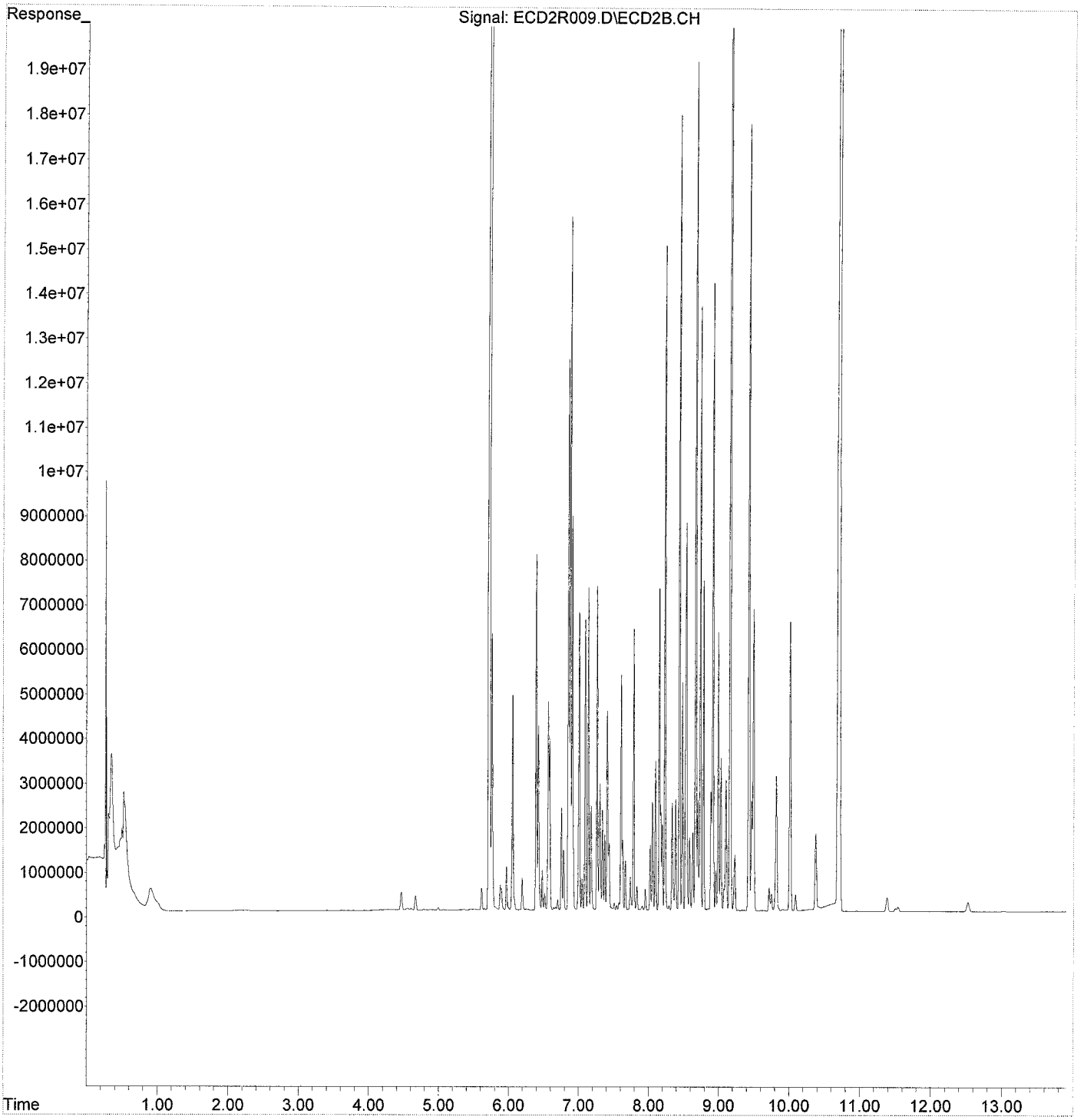
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 9:47
Operator : MJB / KAK
Sample : 9J25014-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:28:44 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:30:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.728	201965239	812.576	ng/ml
62) S	DCBP (S)	10.704	143670457	1147.530	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.392	12600734	1629.847	ng/ml
3)	Aroclor 1016 (2)	6.881	25560677	1827.179	ng/ml
4)	Aroclor 1016 (3)	7.007	11059481	1717.819	ng/ml
5)	Aroclor 1016 (4)	7.094	10725098	1711.953	ng/ml
6)	Aroclor 1016 (5)	7.138	11742812	1679.148	ng/ml
7)	Aroclor 1016 (6)	7.264	11773868	1686.295	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.233	24181558	1820.815	ng/ml
42)	Aroclor 1260 (2)	8.439	30034445	1800.708	ng/ml
43)	Aroclor 1260 (3)	8.671	31203805	1852.936	ng/ml
44)	Aroclor 1260 (4)	9.162	51214030	1976.685	ng/ml
45)	Aroclor 1260 (5)	9.429	28580187	1887.100	ng/ml
46)	Aroclor 1260 (6)	10.014	10934005	1867.704	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:30:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

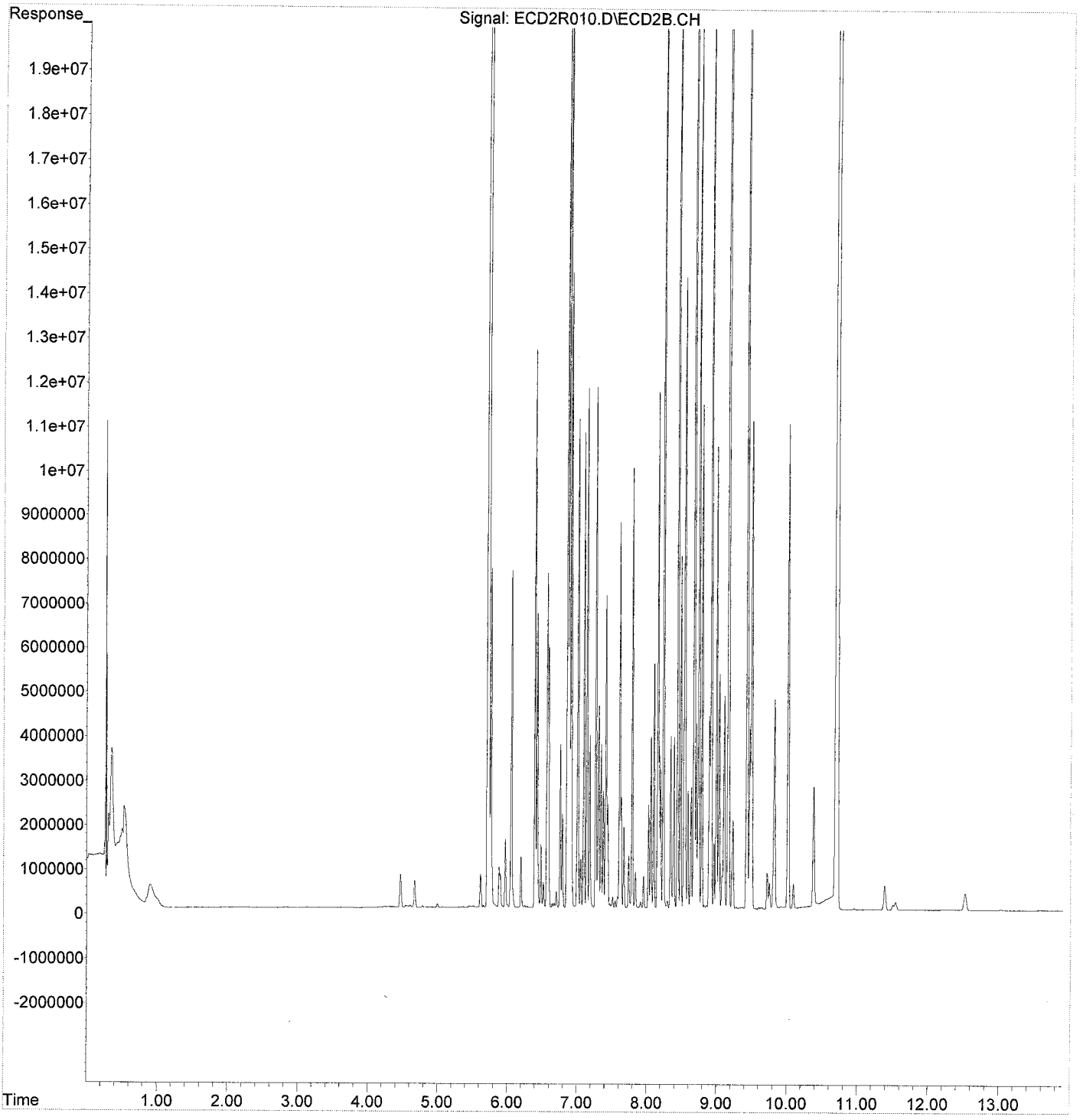
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:05
Operator : MJB / KAK
Sample : 9J25014-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 11:30:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jul 17 16:14:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:58
Operator : MJB / KAK
Sample : 9J25014-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:50:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	5.896	1071927	541.278	ng/ml
10)	Aroclor 1221 (2)	5.967	1093000	544.283	ng/ml
11)	Aroclor 1221 (3)	6.055	3537396	527.577	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:58
Operator : MJB / KAK
Sample : 9J25014-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:50:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

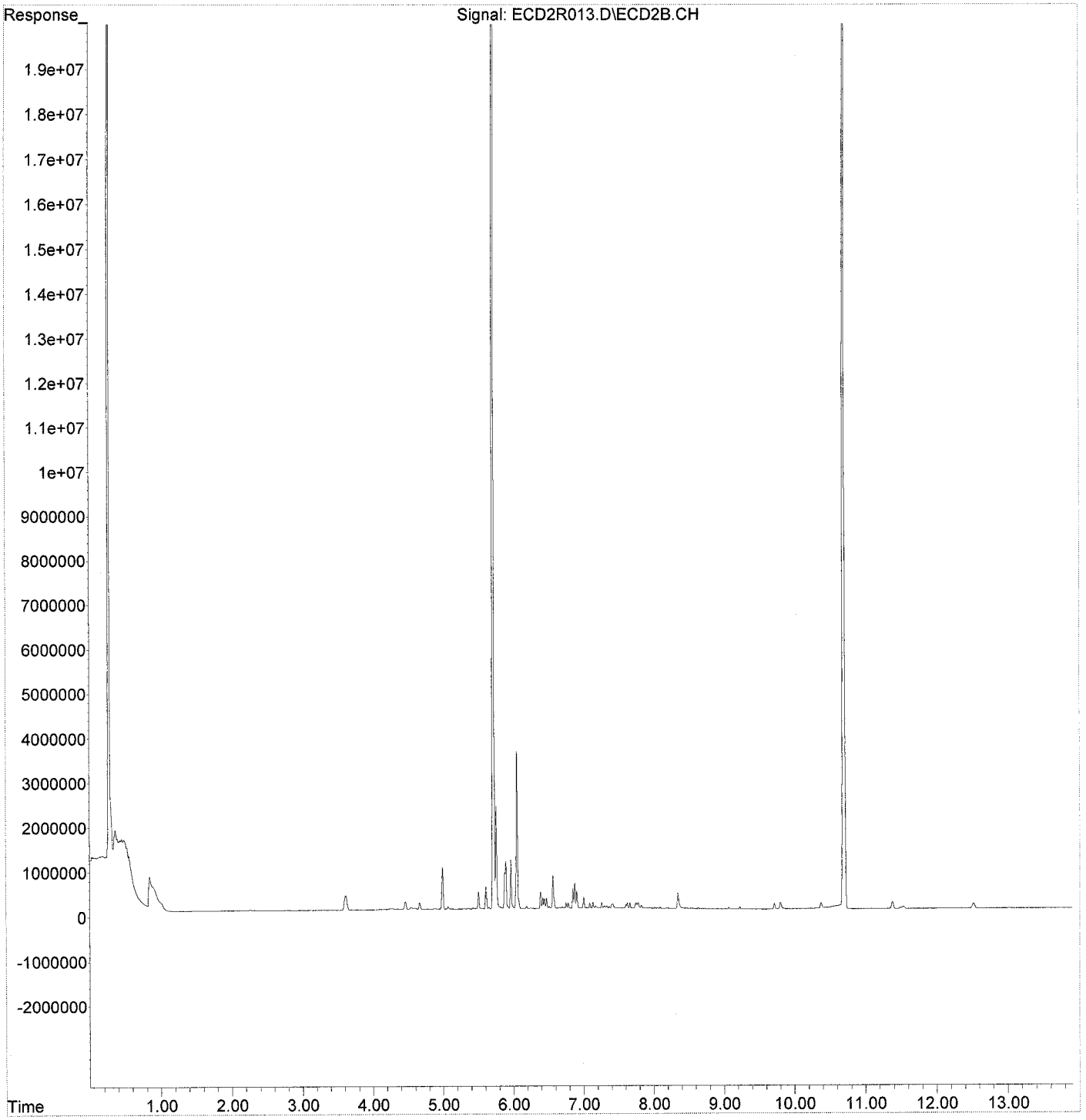
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 10:58
Operator : MJB / KAK
Sample : 9J25014-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:50:36 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:15
Operator : MJB / KAK
Sample : 9J25014-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:52:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:52:16 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	6.055	2862334	512.765	ng/ml
14)	Aroclor 1232 (2)	6.392	1738121	523.606	ng/ml
15)	Aroclor 1232 (3)	6.880	3237126	517.302	ng/ml
16)	Aroclor 1232 (4)	7.093	1193800	530.360	ng/ml
17)	Aroclor 1232 (5)	7.138	1366175	523.404	ng/ml
18)	Aroclor 1232 (6)	7.264	1483010	544.466	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Data Path : K:\DATA\9J25014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:15
Operator : MJB / KAK
Sample : 9J25014-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:52:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:52:16 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

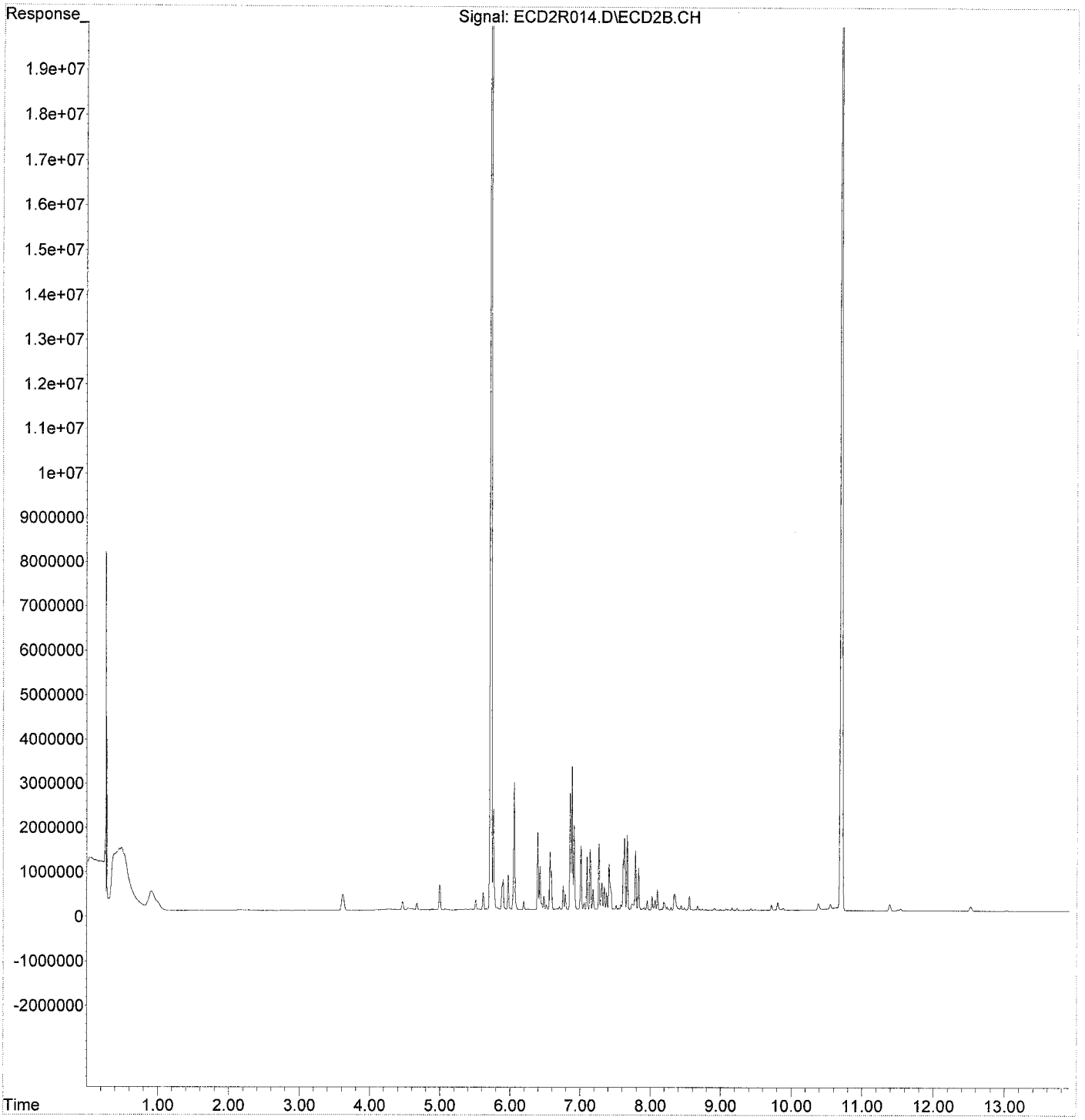
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:15
Operator : MJB / KAK
Sample : 9J25014-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:52:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:52:16 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:33
Operator : MJB / KAK
Sample : 9J25014-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:54:05 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:53:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	6.391	3275732	540.797	ng/ml
21)	Aroclor 1242 (2)	6.879	5915868	519.731	ng/ml
22)	Aroclor 1242 (3)	7.007	2641225	532.815	ng/ml
23)	Aroclor 1242 (4)	7.093	2496367	547.768	ng/ml
24)	Aroclor 1242 (5)	7.137	2907034	542.201	ng/ml
25)	Aroclor 1242 (6)	7.263	3097542	562.536	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:33
Operator : MJB / KAK
Sample : 9J25014-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:54:05 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:53:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

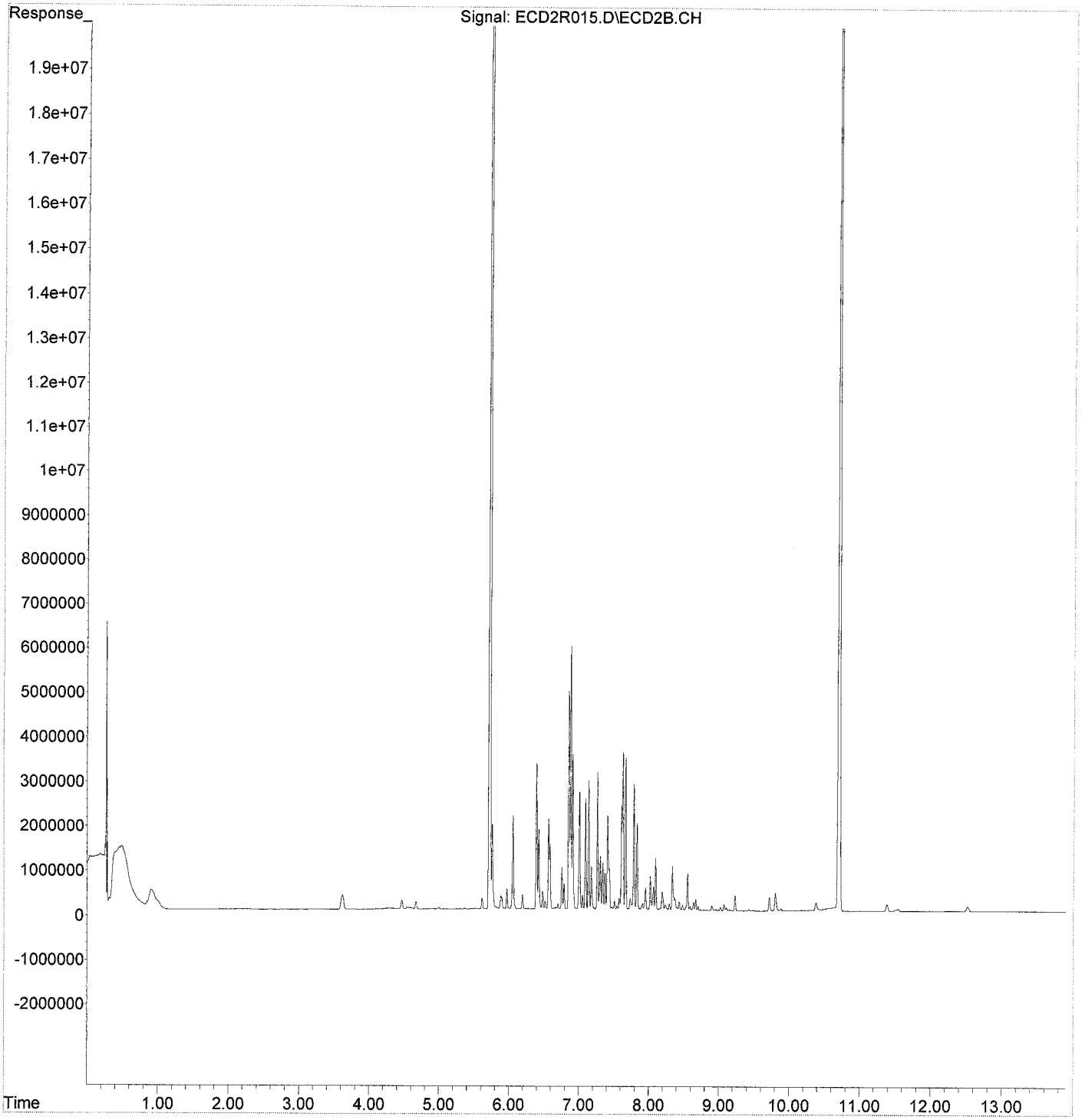
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:33
Operator : MJB / KAK
Sample : 9J25014-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:54:05 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:53:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:50
Operator : MJB / KAK
Sample : 9J25014-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:55:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:55:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	6.852	3731186	559.086	ng/ml
28)	Aroclor 1248 (2)	7.093	4668078	579.689	ng/ml
29)	Aroclor 1248 (3)	7.138	4384791	565.533	ng/ml
30)	Aroclor 1248 (4)	7.263	5235273	560.126	ng/ml
31)	Aroclor 1248 (5)	7.628	6466500	548.888	ng/ml
32)	Aroclor 1248 (6)	7.785	5895544	559.858	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:50
Operator : MJB / KAK
Sample : 9J25014-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:55:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:55:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

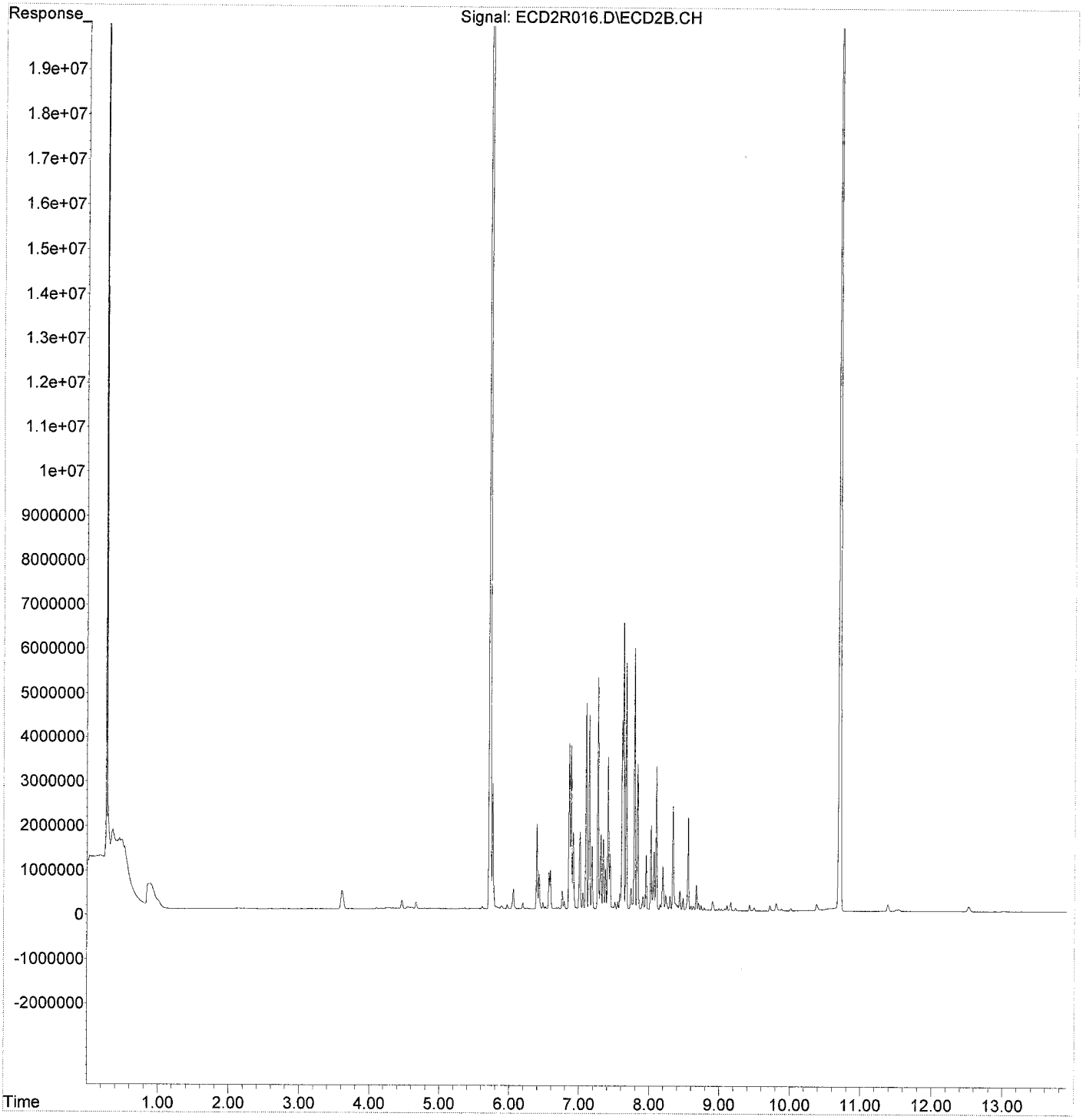
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 11:50
Operator : MJB / KAK
Sample : 9J25014-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:55:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:55:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:08
Operator : MJB / KAK
Sample : 9J25014-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:57:27 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:57:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	7.605	6462528	527.720	ng/ml
35)	Aroclor 1254 (2)	7.786	10123790	518.150	ng/ml
36)	Aroclor 1254 (3)	8.098	10713849	514.082	ng/ml
37)	Aroclor 1254 (4)	8.335	8258291	539.006	ng/ml
38)	Aroclor 1254 (5)	8.669	7846578	503.917	ng/ml
39)	Aroclor 1254 (6)	8.900	2445074	511.632	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:08
Operator : MJB / KAK
Sample : 9J25014-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:57:27 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:57:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

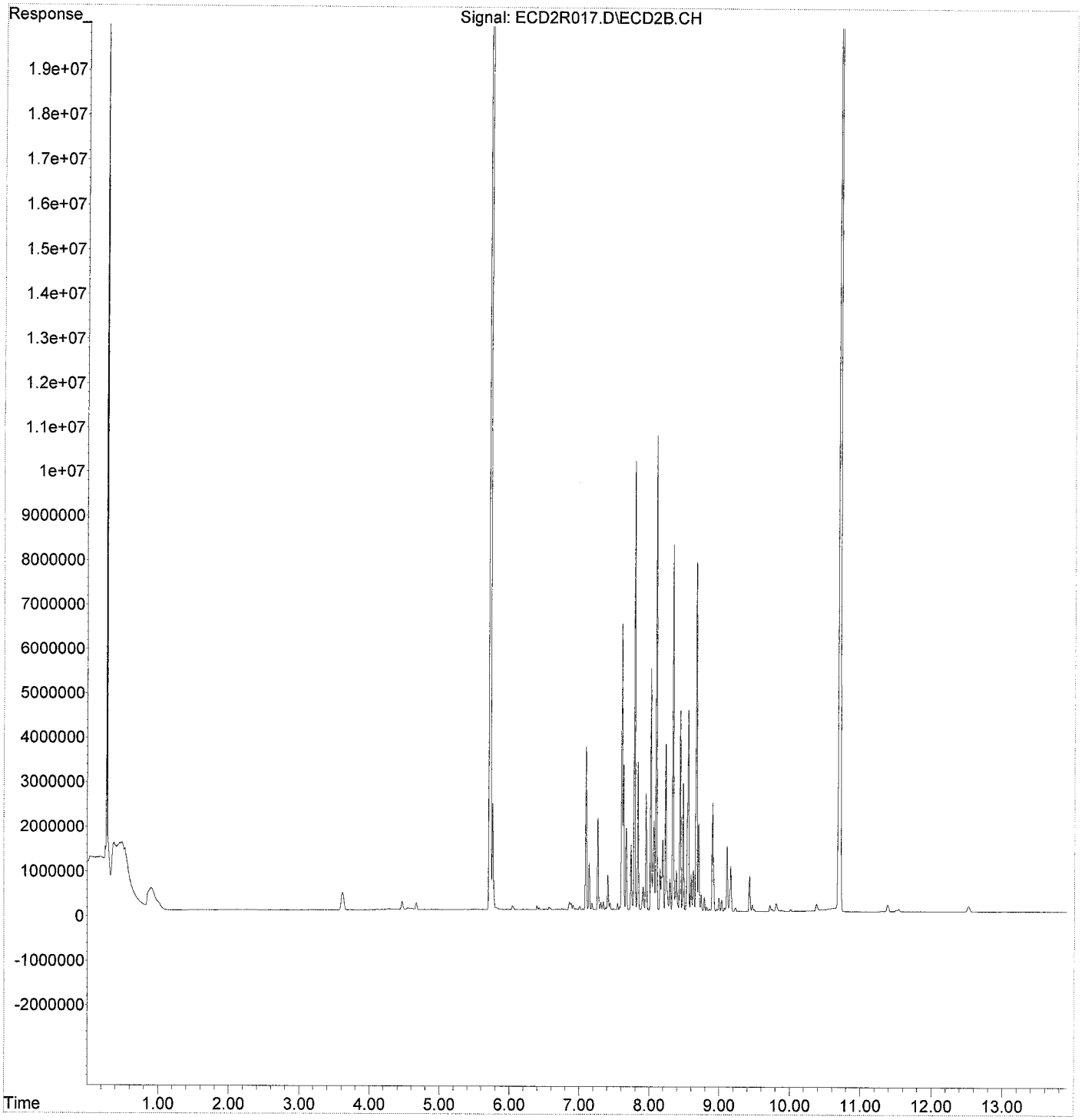
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:08
Operator : MJB / KAK
Sample : 9J25014-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:57:27 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:57:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:26
Operator : MJB / KAK
Sample : 9J25014-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:59:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:59:07 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/25/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:26
Operator : MJB / KAK
Sample : 9J25014-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:59:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:59:07 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.437	7566758	569.057	ng/ml
49)	Aroclor 1262 (2)	8.738	10577131	597.440	ng/ml
50)	Aroclor 1262 (3)	8.916	8734138	584.406	ng/ml
51)	Aroclor 1262 (4)	9.160	17904668	558.345	ng/ml
52)	Aroclor 1262 (5)	9.427	10982410	583.745	ng/ml
53)	Aroclor 1262 (6)	10.013	4850265	594.558	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

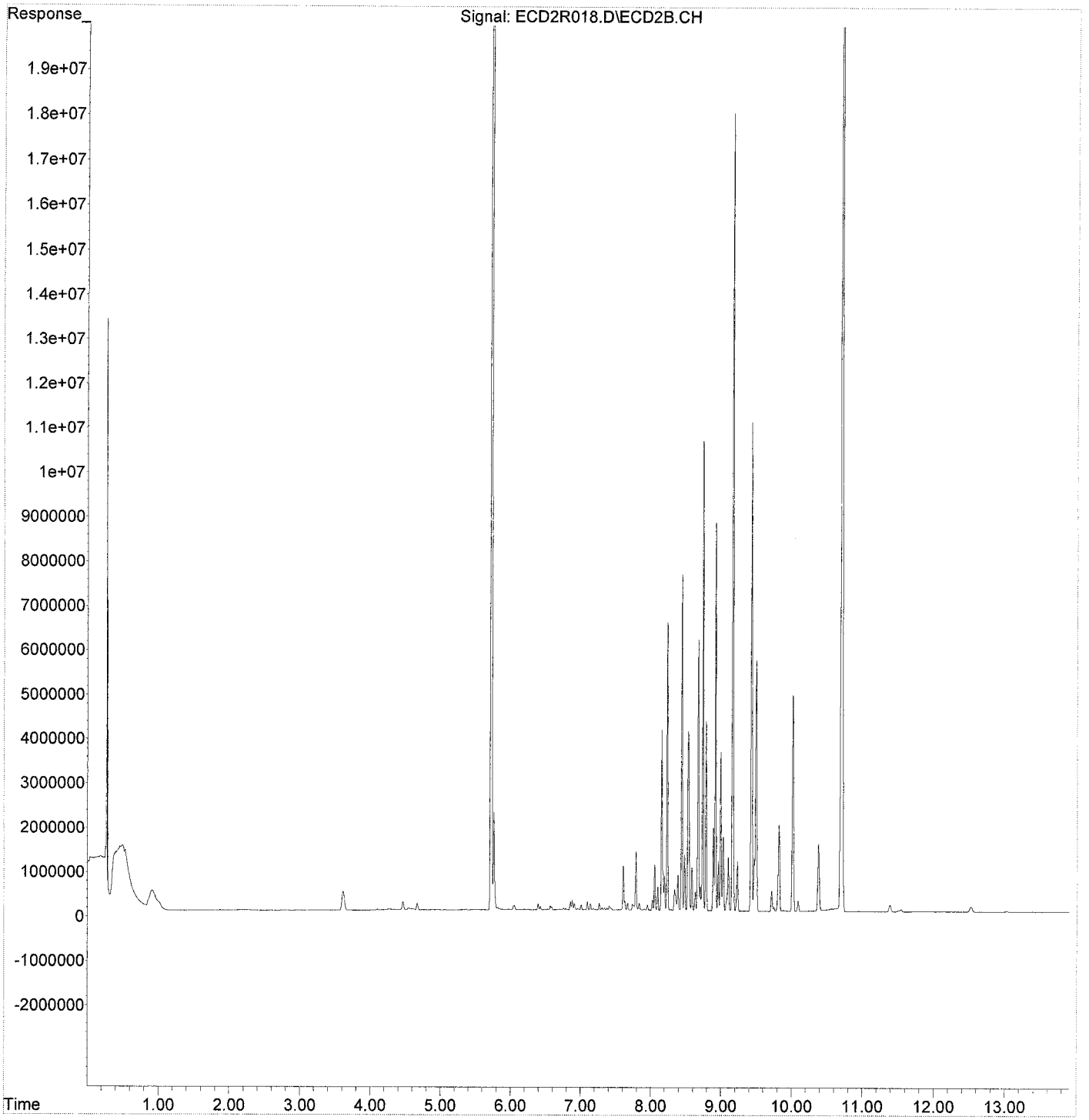
(f)=RT Delta > 1/2 Window (m)=manual int.

10/25/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:26
Operator : MJB / KAK
Sample : 9J25014-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 12:59:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 12:59:07 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:43
Operator : MJB / KAK
Sample : 9J25014-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 14:20:35 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:20:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

10/25/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:43
Operator : MJB / KAK
Sample : 9J25014-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 14:20:35 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:20:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	8.958	4666678	573.449	ng/ml
56)	Aroclor 1268 (2)	9.429	19618102	533.965	ng/ml
57)	Aroclor 1268 (3)	9.497	15763573	535.219	ng/ml
58)	Aroclor 1268 (4)	9.717	13542645	536.357	ng/ml
59)	Aroclor 1268 (5)	10.014	5298091	544.214	ng/ml
60)	Aroclor 1268 (6)	10.377	36740370	535.605	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

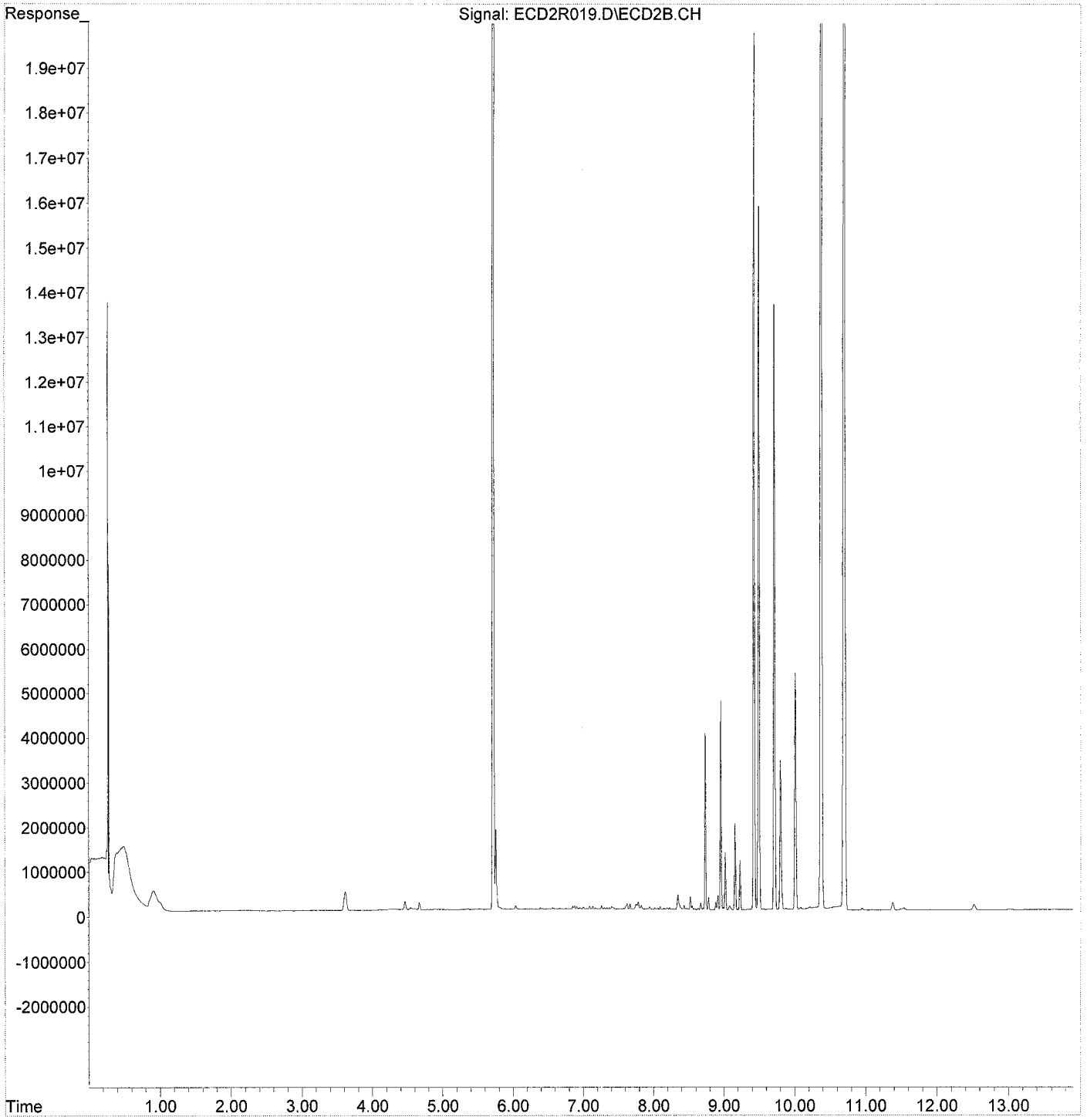
10/25/19

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9J25014\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 25 Oct 2019 12:43
Operator : MJB / KAK
Sample : 9J25014-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 25 14:20:35 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_191025.M
Quant Title : PCB Data Analysis
QLast Update : Fri Oct 25 14:20:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9K05021 (Cal ID A9K0701) DUALECD2F

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9K05021** Instrument: **DUALECD2F**

Date: **11/05/19 07:38** Calibration: **A9K0701**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K05021-ICB1	Water	QC	QC				A19J194
2	9K05021-CAL1	Water	QC	QC				A19F250
3	9K05021-CAL2	Water	QC	QC				A19F251
4	9K05021-CAL3	Water	QC	QC				A19F252
5	9K05021-CAL4	Water	QC	QC				A19F253
6	9K05021-CAL5	Water	QC	QC				A19F247
7	9K05021-CAL6	Water	QC	QC				A19F248
8	9K05021-CAL7	Water	QC	QC				A19F249
9	9K05021-IBL1	Water	QC	QC				
10	9K05021-ICV1	Water	QC	QC				A19H459
11	9K05021-CAL8	Water	QC	QC				A19H447
12	9K05021-CAL9	Water	QC	QC				A19H448
13	9K05021-CALA	Water	QC	QC				A19H449
14	9K05021-CALB	Water	QC	QC				A19H450
15	9K05021-CALC	Water	QC	QC				A19H451
16	9K05021-CALD	Water	QC	QC				A19H452
17	9K05021-CALE	Water	QC	QC				A19H453
18	9K05021-ICV2	Water	QC	QC				A19H405
19	9K05021-ICV3	Water	QC	QC				A19J367
20	9K05021-ICV4	Water	QC	QC				A19H406
21	9K05021-ICV5	Water	QC	QC				A19E303

Comments:

Data Entered By: 11/7/19

Data Reviewed By: 11/8/19

Calibration Status Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_191105.M
Title : PCB Data Analysis
Last Update : Wed Nov 06 10:27:00 2019
Response Via : Initial Calibration

11/7/19

A9K0701

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	K:\DATA\9K05021\ECD2F007.D
2	2	25	0	K:\DATA\9K05021\ECD2F008.D
3	3	50	0	K:\DATA\9K05021\ECD2F009.D
4	4	100	0	K:\DATA\9K05021\ECD2F010.D
5	5	250	0	K:\DATA\9K05021\ECD2F022.D
6	6	500	0	K:\DATA\9K05021\ECD2F012.D
7	7	800	0	K:\DATA\9K05021\ECD2F013.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Nov 06 10:24 2019	Nov 06 10:02 2019	05 Nov 2019 16:27
2	2	Nov 06 10:24 2019	Nov 06 10:03 2019	05 Nov 2019 16:45
3	3	Nov 06 10:24 2019	Nov 06 10:04 2019	05 Nov 2019 17:02
4	4	Nov 06 10:25 2019	Nov 06 10:06 2019	05 Nov 2019 17:20
5	5	Nov 06 10:27 2019	Nov 06 10:23 2019	05 Nov 2019 20:51
6	6	Nov 06 10:25 2019	Nov 06 10:08 2019	05 Nov 2019 17:55
7	7	Nov 06 10:25 2019	Nov 06 10:08 2019	05 Nov 2019 18:13

FECD2_QUANTPCB_191105.M Wed Nov 06 10:28:19 2019

Response Factor Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_191105.M
Title : PCB Data Analysis
Last Update : Wed Nov 06 10:27:00 2019
Response Via : Initial Calibration

11/7/19

Calibration Files
1 =ECD2F007.D 2 =ECD2F008.D 3 =ECD2F009.D
4 =ECD2F010.D 5 =ECD2F022.D 6 =ECD2F012.D

		Compound	1	2	3	4	5	6	Avg		%RSD	
1)	S	TCMX (S)	5.400	5.517	5.401	5.578	6.251	6.162	5.875	E4	9.26	✓
2)		Aroclor 1016 ...	4.007	3.652	3.294	3.042	3.142	2.941	3.295	E3	12.00	✓
3)		Aroclor 1016 ...	6.991	6.510	6.292	6.148	6.489	6.280	6.453	E3	4.21	✓
4)		Aroclor 1016 ...	4.202	3.868	3.436	3.274	3.259	3.312	3.522	E3	10.44	✓
5)		Aroclor 1016 ...	3.825	3.321	3.157	2.839	2.801	2.732	3.066	E3	13.04	✓
6)		Aroclor 1016 ...	4.373	3.998	3.596	3.331	3.467	3.285	3.625	E3	11.36	✓
7)		Aroclor 1016 (6)	3.126	2.737	2.470	2.378	2.447	2.197	2.530	E3	12.23	✓
8)		Aroclor 1016 ...							0.000		-1.00	
9)		Aroclor 1221 (1)					9.865		9.865	E2	0.00	
10)		Aroclor 1221 (2)					6.525		6.525	E2	0.00	
11)		Aroclor 1221 (3)					2.137		2.137	E3	0.00	
12)		Aroclor 1221 ...							0.000		-1.00	
13)		Aroclor 1232 (1)					1.726		1.726	E3	0.00	
14)		Aroclor 1232 (2)					2.542		2.542	E3	0.00	
15)		Aroclor 1232 (3)					1.391		1.391	E3	0.00	
16)		Aroclor 1232 (4)					9.945		9.945	E2	0.00	
17)		Aroclor 1232 (5)					1.267		1.267	E3	0.00	
18)		Aroclor 1232 (6)					1.034		1.034	E3	0.00	
19)		Aroclor 1232 ...							0.000		-1.00	
20)		Aroclor 1242 ...					2.292		2.292	E3	0.00	
21)		Aroclor 1242 ...					4.614		4.614	E3	0.00	
22)		Aroclor 1242 ...					2.426		2.426	E3	0.00	
23)		Aroclor 1242 ...					2.044		2.044	E3	0.00	
24)		Aroclor 1242 ...					2.613		2.613	E3	0.00	
25)		Aroclor 1242 (6)					2.129		2.129	E3	0.00	
26)		Aroclor 1242 ...							0.000		-1.00	
27)		Aroclor 1248 ...					2.968		2.968	E3	0.00	
28)		Aroclor 1248 ...					3.652		3.652	E3	0.00	
29)		Aroclor 1248 ...					4.362		4.362	E3	0.00	
30)		Aroclor 1248 ...					5.005		5.005	E3	0.00	
31)		Aroclor 1248 ...					5.132		5.132	E3	0.00	
32)		Aroclor 1248 (6)					2.790		2.790	E3	0.00	
33)		Aroclor 1248 ...							0.000		-1.00	
34)		Aroclor 1254 ...					5.295		5.295	E3	0.00	
35)		Aroclor 1254 ...					6.305		6.305	E3	0.00	
36)		Aroclor 1254 ...					9.508		9.508	E3	0.00	
37)		Aroclor 1254 ...					6.374		6.374	E3	0.00	
38)		Aroclor 1254 ...					6.568		6.568	E3	0.00	
39)		Aroclor 1254 (6)					2.083		2.083	E3	0.00	
40)		Aroclor 1254 ...							0.000		-1.00	
41)		Aroclor 1260 ...	8.182	7.444	7.027	6.590	6.746	6.475	7.001	E3	8.87	✓
42)		Aroclor 1260 ...	9.971	9.357	8.756	8.467	9.048	8.367	8.901	E3	6.78	✓
43)		Aroclor 1260 (3)	7.645	6.783	6.775	6.244	6.503	6.159	6.661	E3	7.42	✓
44)		Aroclor 1260 (4)	1.622	1.631	1.558	1.512	1.656	1.514	1.580	E4	3.64	✓
45)		Aroclor 1260 (5)	1.127	1.067	1.035	1.004	1.010	0.981	1.031	E4	4.90	✓
46)		Aroclor 1260 (6)	5.120	4.555	4.237	4.026	4.176	3.911	4.308	E3	9.53	✓
47)		Aroclor 1260 ...							0.000		-1.00	
48)		Aroclor 1262 (1)					6.665		6.665	E3	0.00	
49)		Aroclor 1262 (2)					9.333		9.333	E3	0.00	
50)		Aroclor 1262 (3)					7.936		7.936	E3	0.00	
51)		Aroclor 1262 (4)					1.758		1.758	E4	0.00	
52)		Aroclor 1262 (5)					1.076		1.076	E4	0.00	
53)		Aroclor 1262 (6)					5.695		5.695	E3	0.00	
54)		Aroclor 1262 ...							0.000		-1.00	
55)		Aroclor 1268 (1)					4.111		4.111	E3	0.00	
56)		Aroclor 1268 (2)					2.032		2.032	E4	0.00	
57)		Aroclor 1268 (3)					1.677		1.677	E4	0.00	
58)		Aroclor 1268 (4)					1.522		1.522	E4	0.00	
59)		Aroclor 1268 (5)					6.295		6.295	E3	0.00	
60)		Aroclor 1268 (6)					4.331		4.331	E4	0.00	

Response Factor Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_191105.M
Title : PCB Data Analysis
Last Update : Wed Nov 06 10:27:00 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2F007.D 2 =ECD2F008.D 3 =ECD2F009.D
4 =ECD2F010.D 5 =ECD2F022.D 6 =ECD2F012.D

	Compound	1	2	3	4	5	6	Avg	%RSD
61)	Aroclor 1268 ...							0.000	-1.00
62) S	DCBP (S)	9.191	8.927	8.970	8.736	9.427	8.718	9.026 E4	2.91

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_191105.M
Title : PCB Data Analysis
Last Update : Wed Nov 06 10:27:00 2019
Response Via : Initial Calibration

Total Cpnds : 62

11/7/19

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	4.807	1.000	A	H	L
2		Aroclor 1016 (1)	5.727	1.000	A	H	R
3		Aroclor 1016 (2)	6.141	1.000	A	H	R
4		Aroclor 1016 (3)	6.223	1.000	A	H	R
5		Aroclor 1016 (4)	6.381	1.000	A	H	R
6		Aroclor 1016 (5)	6.603	1.000	A	H	R
7		Aroclor 1016 (6)	6.729	1.000	A	H	R
8		Aroclor 1016 - AVE	0.749	1.000	A	H	R
9		Aroclor 1221 (1)	5.167	1.000	A	H	R
10		Aroclor 1221 (2)	5.285	1.000	A	H	R
11		Aroclor 1221 (3)	5.366	1.000	A	H	R
12		Aroclor 1221 - AVE	0.749	1.000	A	H	R
13		Aroclor 1232 (1)	5.366	1.000	A	H	R
14		Aroclor 1232 (2)	6.141	1.000	A	H	R
15		Aroclor 1232 (3)	6.223	1.000	A	H	R
16		Aroclor 1232 (4)	6.380	1.000	A	H	R
17		Aroclor 1232 (5)	6.602	1.000	A	H	R
18		Aroclor 1232 (6)	6.729	1.000	A	H	R
19		Aroclor 1232 - AVE	0.749	1.000	A	H	R
20		Aroclor 1242 (1)	5.727	1.000	A	H	R
21		Aroclor 1242 (2)	6.141	1.000	A	H	R
22		Aroclor 1242 (3)	6.223	1.000	A	H	R
23		Aroclor 1242 (4)	6.380	1.000	A	H	R
24		Aroclor 1242 (5)	6.603	1.000	A	H	R
25		Aroclor 1242 (6)	6.729	1.000	A	H	R
26		Aroclor 1242 - AVE	0.749	1.000	A	H	R
27		Aroclor 1248 (1)	6.140	1.000	A	H	R
28		Aroclor 1248 (2)	6.380	1.000	A	H	R
29		Aroclor 1248 (3)	6.602	1.000	A	H	R
30		Aroclor 1248 (4)	6.897	1.000	A	H	R
31		Aroclor 1248 (5)	6.934	1.000	A	H	R
32		Aroclor 1248 (6)	7.411	1.000	A	H	R
33		Aroclor 1248 - AVE	0.749	1.000	A	H	R
34		Aroclor 1254 (1)	6.930	1.000	A	H	R
35		Aroclor 1254 (2)	7.041	1.000	A	H	R
36		Aroclor 1254 (3)	7.412	1.000	A	H	R
37		Aroclor 1254 (4)	7.578	1.000	A	H	R
38		Aroclor 1254 (5)	7.959	1.000	A	H	R
39		Aroclor 1254 (6)	8.251	1.000	A	H	R
40		Aroclor 1254 - AVE	0.749	1.000	A	H	R
41		Aroclor 1260 (1)	7.532	1.000	A	H	R
42		Aroclor 1260 (2)	7.665	1.000	A	H	R
43		Aroclor 1260 (3)	8.222	1.000	A	H	R
44		Aroclor 1260 (4)	8.391	1.000	A	H	R
45		Aroclor 1260 (5)	8.691	1.000	A	H	R
46		Aroclor 1260 (6)	9.082	1.000	A	H	R
47		Aroclor 1260 - AVE	0.749	1.000	A	H	R
48		Aroclor 1262 (1)	7.663	1.000	A	H	R
49		Aroclor 1262 (2)	7.987	1.000	A	H	R
50		Aroclor 1262 (3)	8.219	1.000	A	H	R
51		Aroclor 1262 (4)	8.390	1.000	A	H	R
52		Aroclor 1262 (5)	8.688	1.000	A	H	R
53		Aroclor 1262 (6)	9.080	1.000	A	H	R
54		Aroclor 1262 - AVE	0.749	1.000	A	H	R
55		Aroclor 1268 (1)	8.212	1.000	A	H	R
56		Aroclor 1268 (2)	8.638	1.000	A	H	R

57		Aroclor 1268 (3)	8.685	1.000	A	H	R
58		Aroclor 1268 (4)	8.867	1.000	A	H	R
59		Aroclor 1268 (5)	9.081	1.000	A	H	R
60		Aroclor 1268 (6)	9.340	1.000	A	H	R
61		Aroclor 1268 - AVE	0.752	1.000	A	H	R
62	S	DCBP (S)	9.578	1.000	A	H	R

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

FECD2_QUANTPCB_191105.M Wed Nov 06 10:28:09 2019

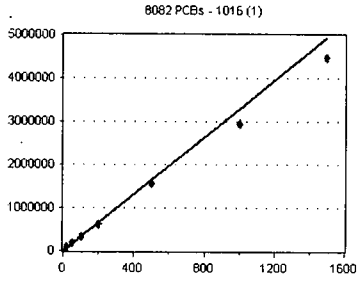
Element Calibration Review Sheet

Calibration ID: **A9K0701** Instrument: **DUALECD2F** Calibration Date: **11/07/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19110**

1016 (1)

Curve Fit: **AVERAGE RF**

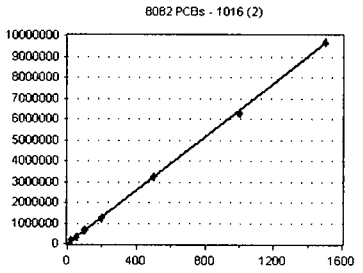


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	80130	4006.500	5.73
9K05021-CAL2	50	182577	3651.540	5.73
9K05021-CAL3	100	329363	3293.630	5.73
9K05021-CAL4	200	608465	3042.325	5.73
9K05021-CAL5	500	1570795	3141.590	5.73
9K05021-CAL6	1000	2940535	2940.535	5.73
9K05021-CAL7	1500	4486587	2991.058	5.73

AVE RF **3295.311** RF RSD **12.00** AVE RT **5.73**

1016 (2)

Curve Fit: **AVERAGE RF**

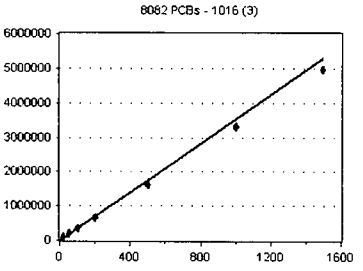


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	139827	6991.350	6.14
9K05021-CAL2	50	325502	6510.040	6.14
9K05021-CAL3	100	629184	6291.840	6.14
9K05021-CAL4	200	1229631	6148.155	6.14
9K05021-CAL5	500	3244481	6488.962	6.14
9K05021-CAL6	1000	6279795	6279.795	6.14
9K05021-CAL7	1500	9691786	6461.190	6.14

AVE RF **6453.047** RF RSD **4.21** AVE RT **6.14**

1016 (3)

Curve Fit: **AVERAGE RF**

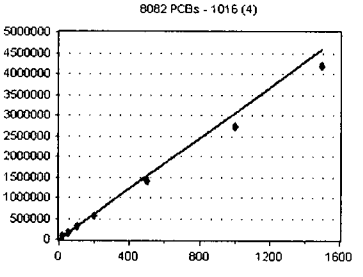


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	84035	4201.750	6.22
9K05021-CAL2	50	193384	3867.680	6.22
9K05021-CAL3	100	343631	3436.310	6.22
9K05021-CAL4	200	654810	3274.050	6.22
9K05021-CAL5	500	1629506	3259.012	6.22
9K05021-CAL6	1000	3312159	3312.159	6.22
9K05021-CAL7	1500	4953928	3302.619	6.22

AVE RF **3521.940** RF RSD **10.44** AVE RT **6.22**

1016 (4)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	76507	3825.350	6.38
9K05021-CAL2	50	166030	3320.600	6.38
9K05021-CAL3	100	315672	3156.720	6.38
9K05021-CAL4	200	567708	2838.540	6.38
9K05021-CAL5	500	1400274	2800.548	6.38
9K05021-CAL6	1000	2732170	2732.170	6.38
9K05021-CAL7	1500	4186279	2790.853	6.38

AVE RF **3066.397** RF RSD **13.04** AVE RT **6.38**

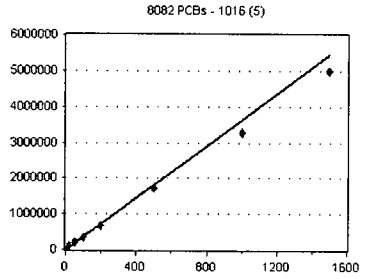
Element Calibration Review Sheet

Calibration ID: **A9K0701** Instrument: **DUALECD2F** Calibration Date: **11/07/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19110**

1016 (5)

Curve Fit: **AVERAGE RF**

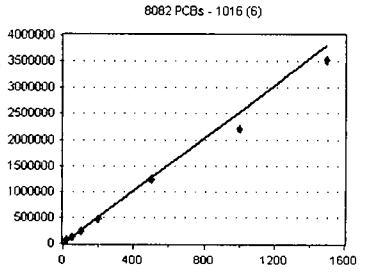


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	87463	4373.150	6.60
9K05021-CAL2	50	199889	3997.780	6.60
9K05021-CAL3	100	359625	3596.250	6.60
9K05021-CAL4	200	666112	3330.560	6.60
9K05021-CAL5	500	1733524	3467.048	6.60
9K05021-CAL6	1000	3284938	3284.938	6.60
9K05021-CAL7	1500	4986600	3324.400	6.60

AVE RF **3624.875** RF RSD **11.36** AVE RT **6.60**

1016 (6)

Curve Fit: **AVERAGE RF**

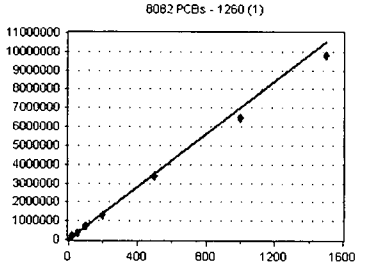


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	62528	3126.400	6.73
9K05021-CAL2	50	136869	2737.380	6.73
9K05021-CAL3	100	247045	2470.450	6.73
9K05021-CAL4	200	475570	2377.850	6.73
9K05021-CAL5	500	1223284	2446.568	6.73
9K05021-CAL6	1000	2196746	2196.746	6.73
9K05021-CAL7	1500	3532274	2354.849	6.73

AVE RF **2530.035** RF RSD **12.23** AVE RT **6.73**

1260 (1)

Curve Fit: **AVERAGE RF**

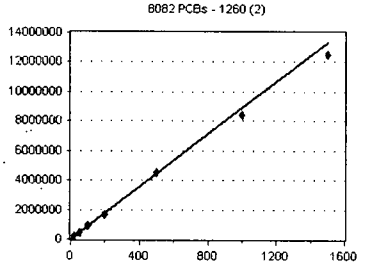


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	163647	8182.350	7.53
9K05021-CAL2	50	372185	7443.700	7.53
9K05021-CAL3	100	702701	7027.010	7.53
9K05021-CAL4	200	1317960	6589.800	7.53
9K05021-CAL5	500	3372903	6745.806	7.53
9K05021-CAL6	1000	6475085	6475.085	7.53
9K05021-CAL7	1500	9814234	6542.823	7.53

AVE RF **7000.939** RF RSD **8.87** AVE RT **7.53**

1260 (2)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	199418	9970.900	7.67
9K05021-CAL2	50	467846	9356.920	7.67
9K05021-CAL3	100	875625	8756.250	7.67
9K05021-CAL4	200	1693317	8466.585	7.67
9K05021-CAL5	500	4524027	9048.054	7.67
9K05021-CAL6	1000	8366550	8366.550	7.67
9K05021-CAL7	1500	250835E+07	8338.900	7.66

AVE RF **8900.594** RF RSD **6.78** AVE RT **7.66**

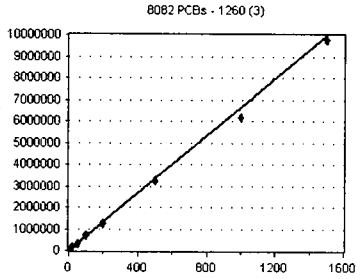
Element Calibration Review Sheet

Calibration ID: **A9K0701** Instrument: **DUALECD2F** Calibration Date: **11/07/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19110**

1260 (3)

Curve Fit: **AVERAGE RF**

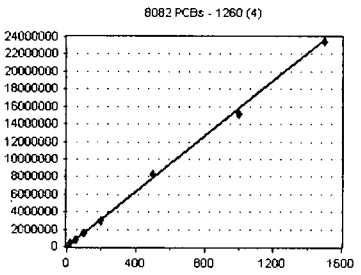


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	152902	7645.100	8.22
9K05021-CAL2	50	339148	6782.960	8.22
9K05021-CAL3	100	677462	6774.620	8.22
9K05021-CAL4	200	1248868	6244.340	8.22
9K05021-CAL5	500	3251302	6502.604	8.22
9K05021-CAL6	1000	6159348	6159.348	8.22
9K05021-CAL7	1500	9779054	6519.369	8.22

AVE RF **6661.192** RF RSD **7.42** AVE RT **8.22**

1260 (4)

Curve Fit: **AVERAGE RF**

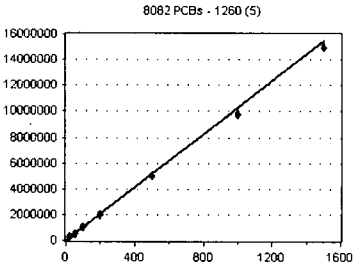


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	324380	16219.000	8.39
9K05021-CAL2	50	815447	16308.940	8.39
9K05021-CAL3	100	1558054	15580.540	8.39
9K05021-CAL4	200	3024167	15120.830	8.39
9K05021-CAL5	500	8281983	16563.970	8.39
9K05021-CAL6	1000	513684E+07	15136.840	8.39
9K05021-CAL7	1500	352932E+07	15686.210	8.39

AVE RF **15802.330** RF RSD **3.64** AVE RT **8.39**

1260 (5)

Curve Fit: **AVERAGE RF**

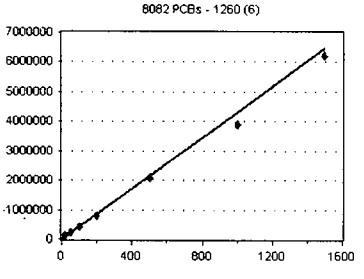


Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	225342	11267.100	8.69
9K05021-CAL2	50	533434	10668.680	8.69
9K05021-CAL3	100	1034585	10345.850	8.69
9K05021-CAL4	200	2007748	10038.740	8.69
9K05021-CAL5	500	5051780	10103.560	8.69
9K05021-CAL6	1000	9811564	9811.564	8.69
9K05021-CAL7	1500	494505E+07	9963.366	8.69

AVE RF **10314.120** RF RSD **4.90** AVE RT **8.69**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	20	102393	5119.650	9.08
9K05021-CAL2	50	227739	4554.780	9.08
9K05021-CAL3	100	423747	4237.470	9.08
9K05021-CAL4	200	805160	4025.800	9.08
9K05021-CAL5	500	2088239	4176.478	9.08
9K05021-CAL6	1000	3911056	3911.056	9.08
9K05021-CAL7	1500	6194753	4129.835	9.08

AVE RF **4307.867** RF RSD **9.53** AVE RT **9.08**

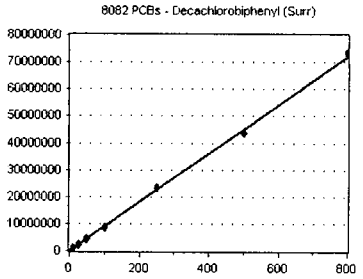
Element Calibration Review Sheet

Calibration ID: **A9K0701** Instrument: **DUALECD2F** Calibration Date: **11/07/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19110**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K05021-CAL1	10	919094	91909.400	9.58
9K05021-CAL2	25	2231799	89271.960	9.58
9K05021-CAL3	50	4485138	89702.760	9.58
9K05021-CAL4	100	8735809	87358.090	9.58
9K05021-CAL5	250	356641E+07	94265.640	9.58
9K05021-CAL6	500	358958E+07	87179.160	9.58
9K05021-CAL7	800	'.36919E+07	92114.880	9.58

AVE RF **90257.410** RF RSD **2.91** AVE RT **9.58**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K05021

Analysis Included

1311/8082 TCLP PCBs
608 PCBs
608 PCBs - LL (1000/1mL) +1262/68
8082 PCBs
8082 PCBs - Low Level (2mL FV)
8082 PCBs - Low Level (2mL FV) +1262/68
8082 PCBs - Low Level (1000/1mL)
8082 PCBs - Low Level (1000/1mL) +1262/68
8082 PCBs - Low Level (30g/2mL)
8082 PCBs + 1262/1268
8082 PCBs in Trans. Oil - LL

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9K05021-ICB1	Initial Cal Blank	Water	A19J194		11/5/2019 4:09:00PM
9K05021-CAL1	Cal Standard	Water	A19F250	"	11/5/2019 4:27:00PM
9K05021-CAL2	Cal Standard	Water	A19F251	"	11/5/2019 4:45:00PM
9K05021-CAL3	Cal Standard	Water	A19F252	"	11/5/2019 5:02:00PM
9K05021-CAL4	Cal Standard	Water	A19F253	"	11/5/2019 5:20:00PM
9K05021-CAL5	Cal Standard	Water	A19F247	"	11/5/2019 5:37:00PM
9K05021-CAL6	Cal Standard	Water	A19F248	"	11/5/2019 5:55:00PM
9K05021-CAL7	Cal Standard	Water	A19F249	"	11/5/2019 6:13:00PM
9K05021-ICV1	Initial Cal Check	Water	A19H459	"	11/5/2019 6:48:00PM
9K05021-CAL8	Cal Standard	Water	A19H447	"	11/5/2019 7:06:00PM
9K05021-CAL9	Cal Standard	Water	A19H448	"	11/5/2019 7:23:00PM
9K05021-CALA	Cal Standard	Water	A19H449	"	11/5/2019 7:41:00PM
9K05021-CALB	Cal Standard	Water	A19H450	"	11/5/2019 7:58:00PM
9K05021-CALC	Cal Standard	Water	A19H451	"	11/5/2019 8:16:00PM
9K05021-CALD	Cal Standard	Water	A19H452	"	11/5/2019 8:34:00PM
9K05021-CALE	Cal Standard	Water	A19H453	"	11/5/2019 8:51:00PM
9K05021-ICV2	Initial Cal Check	Water	A19H405	"	11/5/2019 9:09:00PM
9K05021-ICV3	Initial Cal Check	Water	A19J367	"	11/5/2019 9:26:00PM
9K05021-ICV4	Initial Cal Check	Water	A19H406	"	11/5/2019 9:44:00PM
9K05021-ICV5	Initial Cal Check	Water	A19E303	"	11/5/2019 10:01:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9K0701** Instrument: **DUALECD2F**

1311/8082 TCLP PCBs Sequence: **9K05021** Matrix: **Water**

9K05021-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	

9K05021-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K05021

Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	
9K05021-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
9K05021-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
9K05021-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
9K05021-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1000	0	
Aroclor 1260	800.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
9K05021-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1500	0	
Aroclor 1260	800.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
9K05021-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1221	0.0000	0.00	500	0	
Aroclor 1221	0.0000	0.00	500	0	
9K05021-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1232	0.0000	0.00	500	0	
Aroclor 1232	0.0000	0.00	500	0	
9K05021-CALA	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1242	0.0000	0.00	500	0	
Aroclor 1242	0.0000	0.00	500	0	
9K05021-CALB	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1248	0.0000	0.00	500	0	
Aroclor 1248	0.0000	0.00	500	0	
9K05021-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1254	0.0000	0.00	500	0	
Aroclor 1254	0.0000	0.00	500	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K05021

9K05021-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1262	0.0000	0.00	500	0	
Aroclor 1262	0.0000	0.00	500	0	

9K05021-CALE	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1268	0.0000	0.00	500	0	
Aroclor 1268	0.0000	0.00	500	0	

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: **A9K0701** Instrument: **DUALECD2F**

608 PCBs - LL (1000/1mL) +1 Sequence: **9K05021** Matrix: **Water**

9K05021-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
1260 (6)	20	500	**350.47**	70	
1260 (6)	20	500	350.47	70	
1260 (6)	20	500	350.47	70	
1260 (6)	20	500	350.47	70	
1260 (6)	20	500	**350.47**	70	
1260 (6)		500	350.47	70	
1260 (6)	20	500	350.47	70	
1260 (6)		500	350.47	70	
1260 (6)	20	500	350.47	70	
1260 (6)	20	500	350.47	70	
1260 (6)	20	500	350.47	70	

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.

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K05021-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:47:42 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19 clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.808	5763914	98.112 ng/ml
62) S	DCBP (S)	9.579	8645198	95.784 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.732	686	0.208 ng/ml
3)	Aroclor 1016 (2)	6.139	496	0.077 ng/ml
4)	Aroclor 1016 (3)	6.218	289	0.082 ng/ml
5)	Aroclor 1016 (4)	6.379	371	0.121 ng/ml
6)	Aroclor 1016 (5)	6.602	664	0.183 ng/ml
7)	Aroclor 1016 (6)	6.729	697	0.276 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.169	12049	12.214 ng/ml
10)	Aroclor 1221 (2)	5.333f	4699	7.202 ng/ml
11)	Aroclor 1221 (3)	5.359	3642	1.704 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.359	3642	2.110 ng/ml
14)	Aroclor 1232 (2)	6.139	496	0.195 ng/ml
15)	Aroclor 1232 (3)	6.218	289	0.208 ng/ml
16)	Aroclor 1232 (4)	6.379	371	0.373 ng/ml
17)	Aroclor 1232 (5)	6.602	664	0.524 ng/ml
18)	Aroclor 1232 (6)	6.729	697	0.675 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.732	686	0.299 ng/ml
21)	Aroclor 1242 (2)	6.139	496	0.108 ng/ml
22)	Aroclor 1242 (3)	6.218	289	0.119 ng/ml
23)	Aroclor 1242 (4)	6.379	371	0.182 ng/ml
24)	Aroclor 1242 (5)	6.602	664	0.254 ng/ml
25)	Aroclor 1242 (6)	6.729	697	0.328 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.139	496	0.167 ng/ml
28)	Aroclor 1248 (2)	6.379	371	0.102 ng/ml
29)	Aroclor 1248 (3)	6.602	664	0.152 ng/ml
30)	Aroclor 1248 (4)	6.892	629	0.126 ng/ml
31)	Aroclor 1248 (5)	6.936	495	0.096 ng/ml
32)	Aroclor 1248 (6)	7.407	3446	1.235 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.929	584	0.110 ng/ml
35)	Aroclor 1254 (2)	7.043	218	0.035 ng/ml
36)	Aroclor 1254 (3)	7.407	3446	0.362 ng/ml
37)	Aroclor 1254 (4)	7.580	1374	0.216 ng/ml
38)	Aroclor 1254 (5)	7.971	3990	0.607 ng/ml
39)	Aroclor 1254 (6)	8.253	414	0.199 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.524	2225	0.318 ng/ml
42)	Aroclor 1260 (2)	7.661	769	0.086 ng/ml
43)	Aroclor 1260 (3)	8.217	854	0.128 ng/ml
44)	Aroclor 1260 (4)	8.387	6316	0.400 ng/ml
45)	Aroclor 1260 (5)	8.694	2314	0.224 ng/ml
46)	Aroclor 1260 (6)	9.070	3324	0.772 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K05021-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:47:42 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

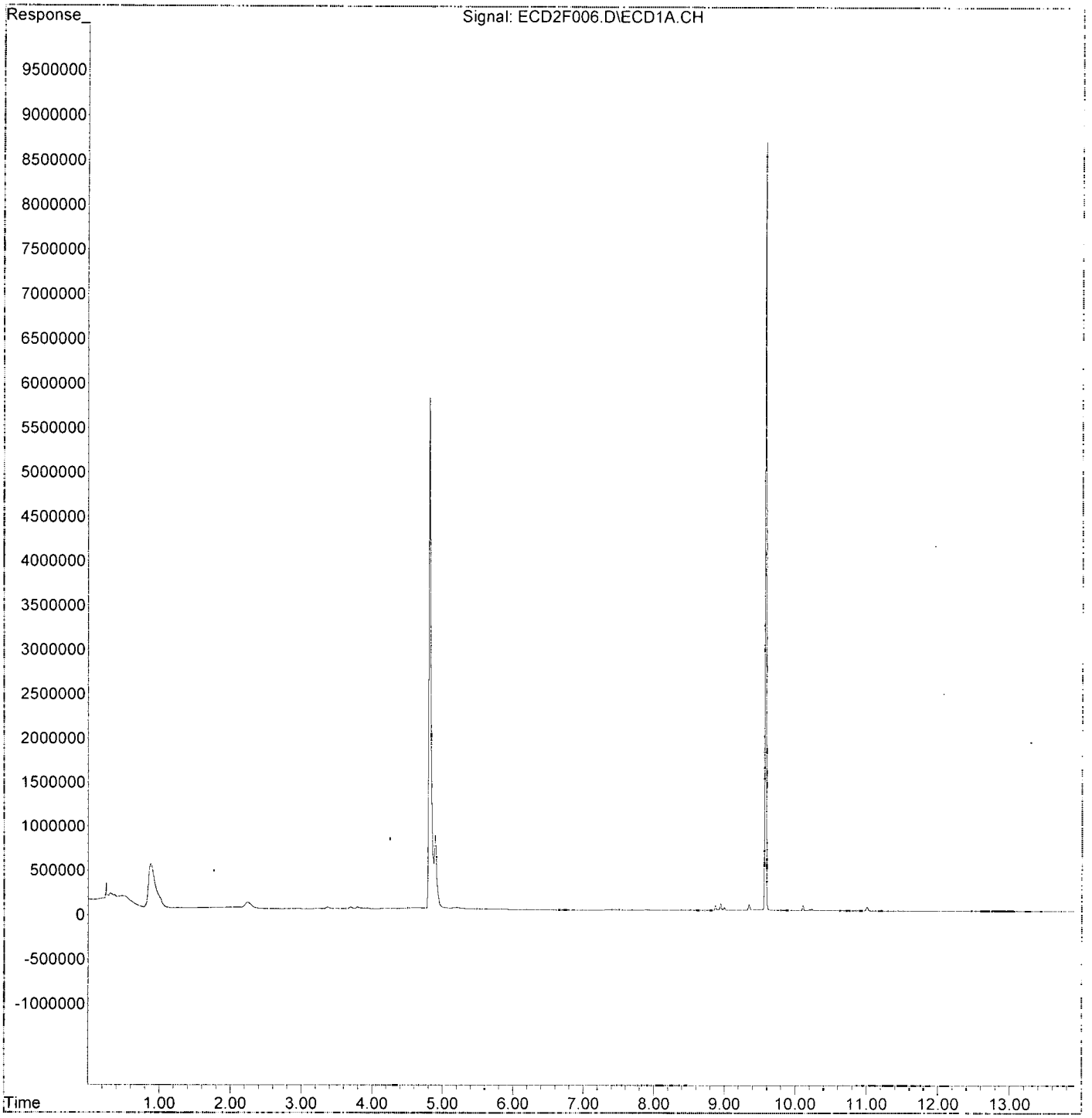
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.661	769	0.115 ng/ml
49)	Aroclor 1262 (2)	7.971	3990	0.427 ng/ml
50)	Aroclor 1262 (3)	8.217	854	0.108 ng/ml
51)	Aroclor 1262 (4)	8.387	6316	0.359 ng/ml
52)	Aroclor 1262 (5)	8.694	2314	0.215 ng/ml
53)	Aroclor 1262 (6)	9.070	3324	0.584 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.211	838	0.204 ng/ml
56)	Aroclor 1268 (2)	8.642	1692	0.083 ng/ml
57)	Aroclor 1268 (3)	8.694	2314	0.138 ng/ml
58)	Aroclor 1268 (4)	8.870	54955	3.610 ng/ml
59)	Aroclor 1268 (5)	9.070	3324	0.528 ng/ml
60)	Aroclor 1268 (6)	9.344	66409	1.533 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:09
Operator : MJB / KAK
Sample : 9K05021-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:47:42 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:30
Operator : MJB / KAK
Sample : 9K05021-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19 clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.733f	7401	0.126 ng/ml
62) S	DCBP (S)	9.577	13825	0.153 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.728	1547	0.470 ng/ml
3)	Aroclor 1016 (2)	6.146	3892	0.603 ng/ml
4)	Aroclor 1016 (3)	6.219	808	0.230 ng/ml
5)	Aroclor 1016 (4)	6.392	1638	0.534 ng/ml
6)	Aroclor 1016 (5)	6.610	2474	0.683 ng/ml
7)	Aroclor 1016 (6)	6.737	1122	0.443 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.171	9148	9.273 ng/ml
10)	Aroclor 1221 (2)	5.294	5400	8.276 ng/ml
11)	Aroclor 1221 (3)	5.361	2877	1.346 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.361	2877	1.666 ng/ml
14)	Aroclor 1232 (2)	6.146	3892	1.531 ng/ml
15)	Aroclor 1232 (3)	6.219	808	0.581 ng/ml
16)	Aroclor 1232 (4)	6.392	1638	1.648 ng/ml
17)	Aroclor 1232 (5)	6.610	2474	1.952 ng/ml
18)	Aroclor 1232 (6)	6.737	1122	1.085 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.728	1547	0.675 ng/ml
21)	Aroclor 1242 (2)	6.146	3892	0.843 ng/ml
22)	Aroclor 1242 (3)	6.219	808	0.333 ng/ml
23)	Aroclor 1242 (4)	6.392	1638	0.802 ng/ml
24)	Aroclor 1242 (5)	6.610	2474	0.947 ng/ml
25)	Aroclor 1242 (6)	6.737	1122	0.527 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.146	3892	1.311 ng/ml
28)	Aroclor 1248 (2)	6.392	1638	0.449 ng/ml
29)	Aroclor 1248 (3)	6.610	2474	0.567 ng/ml
30)	Aroclor 1248 (4)	6.899	1741	0.348 ng/ml
31)	Aroclor 1248 (5)	6.936	1887	0.368 ng/ml
32)	Aroclor 1248 (6)	7.421	5179	1.856 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.936	1887	0.356 ng/ml
35)	Aroclor 1254 (2)	7.045	1395	0.221 ng/ml
36)	Aroclor 1254 (3)	7.421	5179	0.545 ng/ml
37)	Aroclor 1254 (4)	7.579	2772	0.435 ng/ml
38)	Aroclor 1254 (5)	7.961	5427	0.826 ng/ml
39)	Aroclor 1254 (6)	8.250	949	0.455 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.533	6930	0.990 ng/ml
42)	Aroclor 1260 (2)	7.666	5948	0.668 ng/ml
43)	Aroclor 1260 (3)	8.222	3969	0.596 ng/ml
44)	Aroclor 1260 (4)	8.391	9059	0.573 ng/ml
45)	Aroclor 1260 (5)	8.691	6110	0.592 ng/ml
46)	Aroclor 1260 (6)	9.082	2208	0.513 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:30
Operator : MJB / KAK
Sample : 9K05021-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

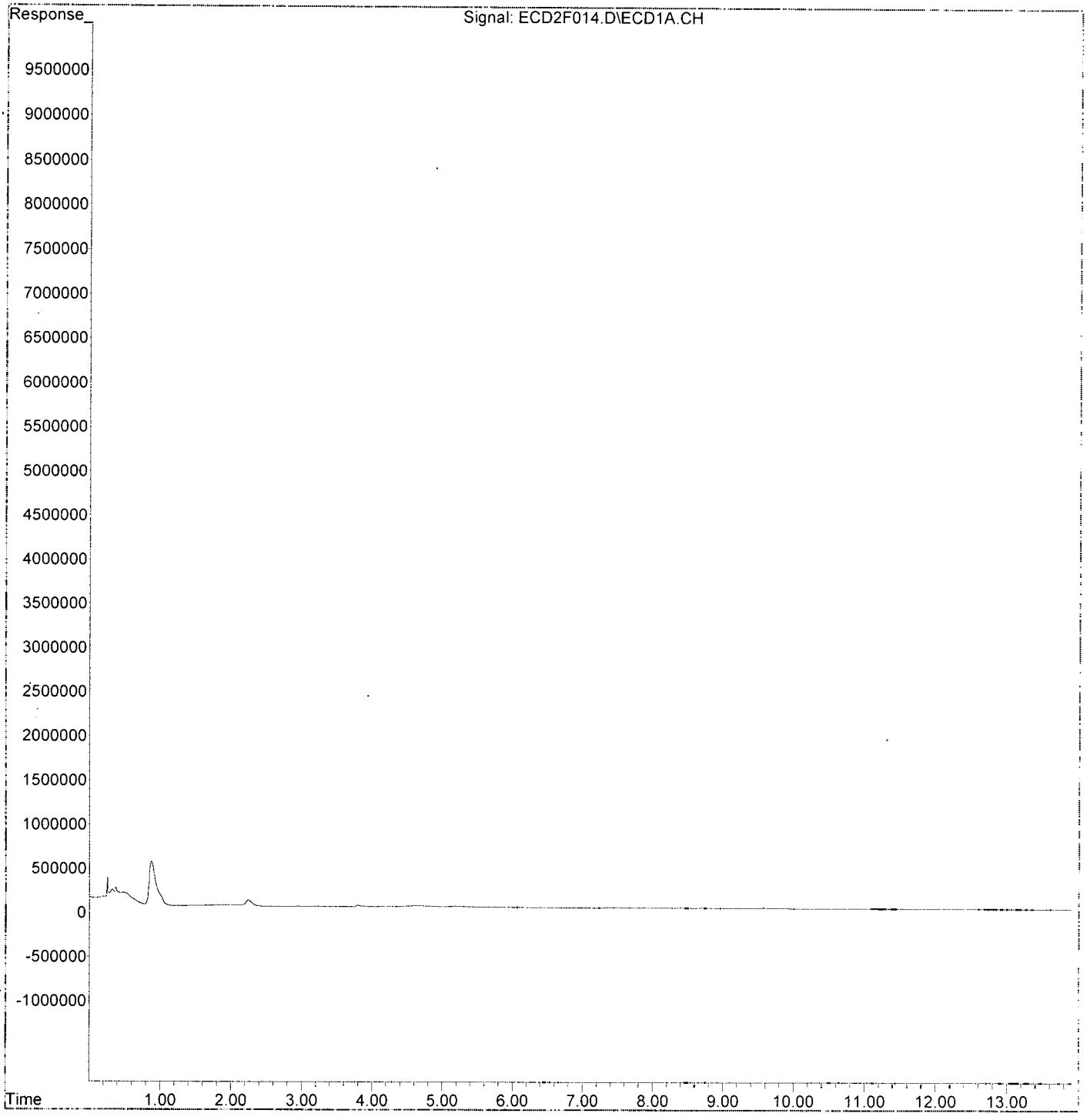
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.666	5948	0.892 ng/ml
49)	Aroclor 1262 (2)	7.990	4414	0.473 ng/ml
50)	Aroclor 1262 (3)	8.222	3969	0.500 ng/ml
51)	Aroclor 1262 (4)	8.391	9059	0.515 ng/ml
52)	Aroclor 1262 (5)	8.691	6110	0.568 ng/ml
53)	Aroclor 1262 (6)	9.082	2208	0.388 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.222	3969	0.965 ng/ml
56)	Aroclor 1268 (2)	8.640	2426	0.119 ng/ml
57)	Aroclor 1268 (3)	8.691	6110	0.364 ng/ml
58)	Aroclor 1268 (4)	8.870	756	0.050 ng/ml
59)	Aroclor 1268 (5)	9.082	2208	0.351 ng/ml
60)	Aroclor 1268 (6)	9.338	880	0.020 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:30
Operator : MJB / KAK
Sample : 9K05021-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:48
Operator : MJB / KAK
Sample : 9K05021-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19

1016, 1260

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.806	10814006	184.074	ng/ml	
62) S	DCBP (S)	9.578	16901321	187.257	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.727	1453969	441.224	ng/ml	445.12
3)	Aroclor 1016 (2)	6.141	3009271	466.333	ng/ml	
4)	Aroclor 1016 (3)	6.223	1584377	449.859	ng/ml	
5)	Aroclor 1016 (4)	6.380	1338660	436.558	ng/ml	
6)	Aroclor 1016 (5)	6.603	1584779	437.195	ng/ml	
7)	Aroclor 1016 (6)	6.729	1112095	439.557	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.166	143863	145.825	ng/ml	
10)	Aroclor 1221 (2)	5.285	162503	249.041	ng/ml	
11)	Aroclor 1221 (3)	5.365	730438	341.833	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.365	730438	423.133	ng/ml	
14)	Aroclor 1232 (2)	6.141	3009271	1183.991	ng/ml	
15)	Aroclor 1232 (3)	6.223	1584377	1138.827	ng/ml	
16)	Aroclor 1232 (4)	6.380	1338660	1346.089	ng/ml	
17)	Aroclor 1232 (5)	6.603	1584779	1250.492	ng/ml	
18)	Aroclor 1232 (6)	6.729	1112095	1075.728	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.727	1453969	634.338	ng/ml	
21)	Aroclor 1242 (2)	6.141	3009271	652.158	ng/ml	
22)	Aroclor 1242 (3)	6.223	1584377	653.065	ng/ml	
23)	Aroclor 1242 (4)	6.380	1338660	654.981	ng/ml	
24)	Aroclor 1242 (5)	6.603	1584779	606.517	ng/ml	
25)	Aroclor 1242 (6)	6.729	1112095	522.405	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.141	3009271	1013.999	ng/ml	
28)	Aroclor 1248 (2)	6.380	1338660	366.559	ng/ml	
29)	Aroclor 1248 (3)	6.603	1584779	363.286	ng/ml	
30)	Aroclor 1248 (4)	6.897	278260	55.602	ng/ml	
31)	Aroclor 1248 (5)	6.930	1284715	250.314	ng/ml	
32)	Aroclor 1248 (6)	7.418	2572774	922.044	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.930	1284715	242.646	ng/ml	
35)	Aroclor 1254 (2)	7.041	1325808	210.267	ng/ml	
36)	Aroclor 1254 (3)	7.418	2572774	270.594	ng/ml	
37)	Aroclor 1254 (4)	7.578	278556	43.705	ng/ml	
38)	Aroclor 1254 (5)	7.958	3867884	588.938	ng/ml	
39)	Aroclor 1254 (6)	8.250	411034	197.316	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.531	3446778	492.331	ng/ml	445.35
42)	Aroclor 1260 (2)	7.665	4483440	503.724	ng/ml	
43)	Aroclor 1260 (3)	8.221	2894069	434.467	ng/ml	
44)	Aroclor 1260 (4)	8.391	7086835	448.468	ng/ml	
45)	Aroclor 1260 (5)	8.690	4565600	442.655	ng/ml	
46)	Aroclor 1260 (6)	9.080	1509783	350.471	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:48
Operator : MJB / KAK
Sample : 9K05021-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

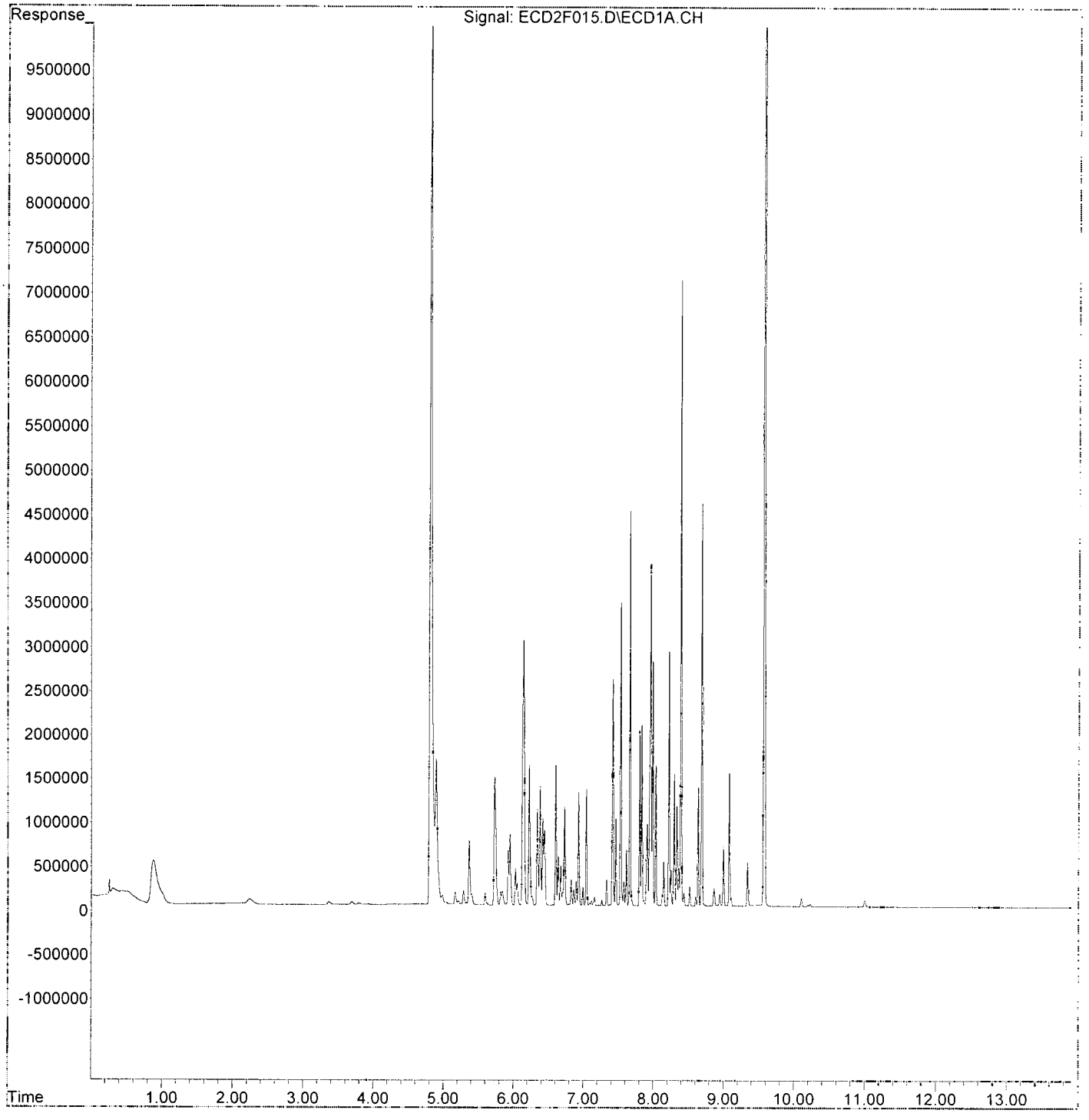
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.665	4483440	672.681 ng/ml
49)	Aroclor 1262 (2)	7.989	2774441	297.258 ng/ml
50)	Aroclor 1262 (3)	8.221	2894069	364.675 ng/ml
51)	Aroclor 1262 (4)	8.391	7086835	403.129 ng/ml
52)	Aroclor 1262 (5)	8.690	4565600	424.479 ng/ml
53)	Aroclor 1262 (6)	9.080	1509783	265.091 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.221	2894069	703.916 ng/ml
56)	Aroclor 1268 (2)	8.638	1346227	66.254 ng/ml
57)	Aroclor 1268 (3)	8.690	4565600	272.272 ng/ml
58)	Aroclor 1268 (4)	8.866	205210	13.481 ng/ml
59)	Aroclor 1268 (5)	9.080	1509783	239.833 ng/ml
60)	Aroclor 1268 (6)	9.340	500651	11.559 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:48
Operator : MJB / KAK
Sample : 9K05021-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:09
Operator : MJB / KAK
Sample : 9K05021-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19

1221, 1254

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	4.805	2310764	39.333	ng/ml	
62)	S DCBP (S)	9.576	7658912	84.856	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.726	358062	108.658	ng/ml	
3)	Aroclor 1016 (2)	6.139	477991	74.072	ng/ml	
4)	Aroclor 1016 (3)	6.221	276016	78.371	ng/ml	
5)	Aroclor 1016 (4)	6.379	1573270	513.068	ng/ml	
6)	Aroclor 1016 (5)	6.601	953050	262.919	ng/ml	
7)	Aroclor 1016 (6)	6.728	441762	174.607	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.164	939611	952.427	ng/ml	956.26
10)	Aroclor 1221 (2)	5.283	623167	955.024	ng/ml	
11)	Aroclor 1221 (3)	5.364	2054227	961.344	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.364	2054227	1189.988	ng/ml	
14)	Aroclor 1232 (2)	6.139	477991	188.065	ng/ml	
15)	Aroclor 1232 (3)	6.221	276016	198.397	ng/ml	
16)	Aroclor 1232 (4)	6.379	1573270	1582.001	ng/ml	
17)	Aroclor 1232 (5)	6.601	953050	752.017	ng/ml	
18)	Aroclor 1232 (6)	6.728	441762	427.316	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.726	358062	156.215	ng/ml	
21)	Aroclor 1242 (2)	6.139	477991	103.589	ng/ml	
22)	Aroclor 1242 (3)	6.221	276016	113.771	ng/ml	
23)	Aroclor 1242 (4)	6.379	1573270	769.772	ng/ml	
24)	Aroclor 1242 (5)	6.601	953050	364.746	ng/ml	
25)	Aroclor 1242 (6)	6.728	441762	207.517	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.139	477991	161.063	ng/ml	
28)	Aroclor 1248 (2)	6.379	1573270	430.801	ng/ml	
29)	Aroclor 1248 (3)	6.601	953050	218.472	ng/ml	
30)	Aroclor 1248 (4)	6.895	1477560	295.246	ng/ml	
31)	Aroclor 1248 (5)	6.929	2679262	522.028	ng/ml	
32)	Aroclor 1248 (6)	7.411	4613462	1653.396	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.929	2679262	506.036	ng/ml	492.23
35)	Aroclor 1254 (2)	7.039	3182029	504.654	ng/ml	
36)	Aroclor 1254 (3)	7.411	4613462	485.225	ng/ml	
37)	Aroclor 1254 (4)	7.576	3032962	475.863	ng/ml	
38)	Aroclor 1254 (5)	7.957	3164588	481.852	ng/ml	
39)	Aroclor 1254 (6)	8.249	1040995	499.727	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.530	1777043	253.829	ng/ml	
42)	Aroclor 1260 (2)	7.662	2112941	237.393	ng/ml	
43)	Aroclor 1260 (3)	8.220	287606	43.176	ng/ml	
44)	Aroclor 1260 (4)	8.389	679682	43.011	ng/ml	
45)	Aroclor 1260 (5)	8.689	594950	57.683	ng/ml	
46)	Aroclor 1260 (6)	9.081	50912	11.818	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:09
Operator : MJB / KAK
Sample : 9K05021-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

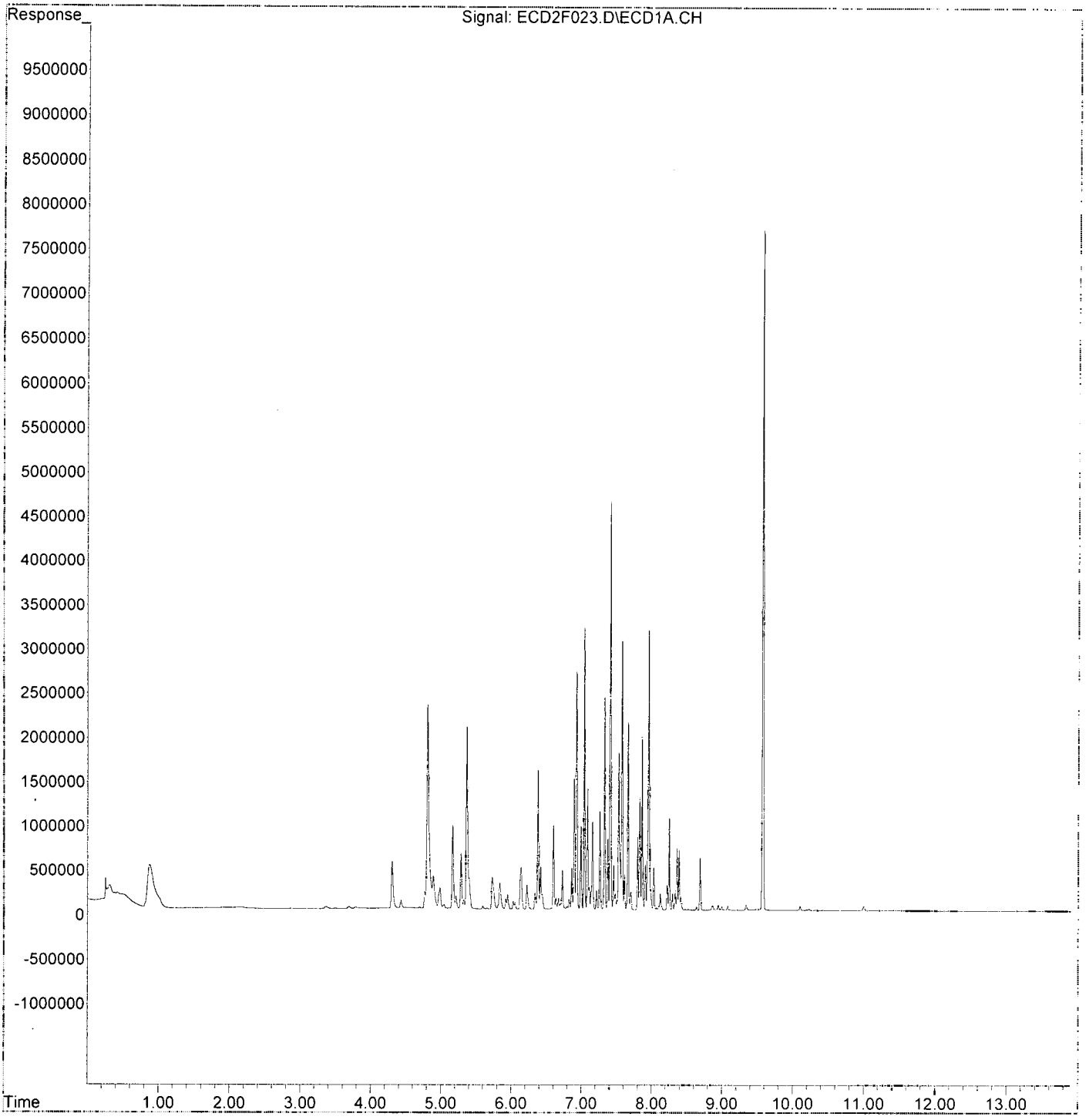
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.662	2112941	317.019	ng/ml
49)	Aroclor 1262 (2)	7.986	240380	25.755	ng/ml
50)	Aroclor 1262 (3)	8.220	287606	36.240	ng/ml
51)	Aroclor 1262 (4)	8.389	679682	38.663	ng/ml
52)	Aroclor 1262 (5)	8.689	594950	55.314	ng/ml
53)	Aroclor 1262 (6)	9.081	50912	8.939	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.220	287606	69.953	ng/ml
56)	Aroclor 1268 (2)	8.637	41815	2.058	ng/ml
57)	Aroclor 1268 (3)	8.689	594950	35.480	ng/ml
58)	Aroclor 1268 (4)	8.867	50054	3.288	ng/ml
59)	Aroclor 1268 (5)	9.081	50912	8.088	ng/ml
60)	Aroclor 1268 (6)	9.341	62033	1.432	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:09
Operator : MJB / KAK
Sample : 9K05021-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:30 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:26
Operator : MJB / KAK
Sample : 9K05021-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:45 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19

1232, 1262

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	4.807	2133471	36.316	ng/ml
62)	S	DCBP (S)	9.577	7702363	85.338	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	5.727	675899	205.109	ng/ml
3)		Aroclor 1016 (2)	6.141	1331843	206.390	ng/ml
4)		Aroclor 1016 (3)	6.223	701466	199.170	ng/ml
5)		Aroclor 1016 (4)	6.380	552650	180.228	ng/ml
6)		Aroclor 1016 (5)	6.602	682468	188.273	ng/ml
7)		Aroclor 1016 (6)	6.728	551963	218.164	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.166	315288	319.589	ng/ml
10)		Aroclor 1221 (2)	5.285	243185	372.689	ng/ml
11)		Aroclor 1221 (3)	5.366	875687	409.807	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.366	875687	507.274	ng/ml
14)		Aroclor 1232 (2)	6.141	1331843	524.011	ng/ml
15)		Aroclor 1232 (3)	6.223	701466	504.203	ng/ml
16)		Aroclor 1232 (4)	6.380	552650	555.717	ng/ml
17)		Aroclor 1232 (5)	6.602	682468	538.511	ng/ml
18)		Aroclor 1232 (6)	6.728	551963	533.913	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	5.727	675899	294.881	ng/ml
21)		Aroclor 1242 (2)	6.141	1331843	288.632	ng/ml
22)		Aroclor 1242 (3)	6.223	701466	289.138	ng/ml
23)		Aroclor 1242 (4)	6.380	552650	270.401	ng/ml
24)		Aroclor 1242 (5)	6.602	682468	261.190	ng/ml
25)		Aroclor 1242 (6)	6.728	551963	259.284	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.141	1331843	448.776	ng/ml
28)		Aroclor 1248 (2)	6.380	552650	151.330	ng/ml
29)		Aroclor 1248 (3)	6.602	682468	156.445	ng/ml
30)		Aroclor 1248 (4)	6.896	720074	143.885	ng/ml
31)		Aroclor 1248 (5)	6.933	989711	192.835	ng/ml
32)		Aroclor 1248 (6)	7.419	2343024	839.705	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	6.933	989711	186.928	ng/ml
35)		Aroclor 1254 (2)	7.040	619287	98.216	ng/ml
36)		Aroclor 1254 (3)	7.419	2343024	246.430	ng/ml
37)		Aroclor 1254 (4)	7.578	252229	39.574	ng/ml
38)		Aroclor 1254 (5)	7.958	1632797	248.616	ng/ml
39)		Aroclor 1254 (6)	8.250	112559	54.034	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	7.531	2757491	393.875	ng/ml
42)		Aroclor 1260 (2)	7.665	3404140	382.462	ng/ml
43)		Aroclor 1260 (3)	8.221	3834955	575.716	ng/ml
44)		Aroclor 1260 (4)	8.391	8725915	552.192	ng/ml
45)		Aroclor 1260 (5)	8.689	5217124	505.823	ng/ml
46)		Aroclor 1260 (6)	9.081	2857236	663.260	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

527.27

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:26
Operator : MJB / KAK
Sample : 9K05021-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:45 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.665	3404140	510.746	ng/ml
49)	Aroclor 1262 (2)	7.989	4710623	504.704	ng/ml
50)	Aroclor 1262 (3)	8.221	3834955	483.233	ng/ml
51)	Aroclor 1262 (4)	8.391	8725915	496.367	ng/ml
52)	Aroclor 1262 (5)	8.689	5217124	485.053	ng/ml
53)	Aroclor 1262 (6)	9.081	2857236	501.679	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.221	3834955	932.765	ng/ml
56)	Aroclor 1268 (2)	8.638	3194291	157.207	ng/ml
57)	Aroclor 1268 (3)	8.689	5217124	311.126	ng/ml
58)	Aroclor 1268 (4)	8.867	267928	17.601	ng/ml
59)	Aroclor 1268 (5)	9.081	2857236	453.880	ng/ml
60)	Aroclor 1268 (6)	9.340	903355	20.857	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

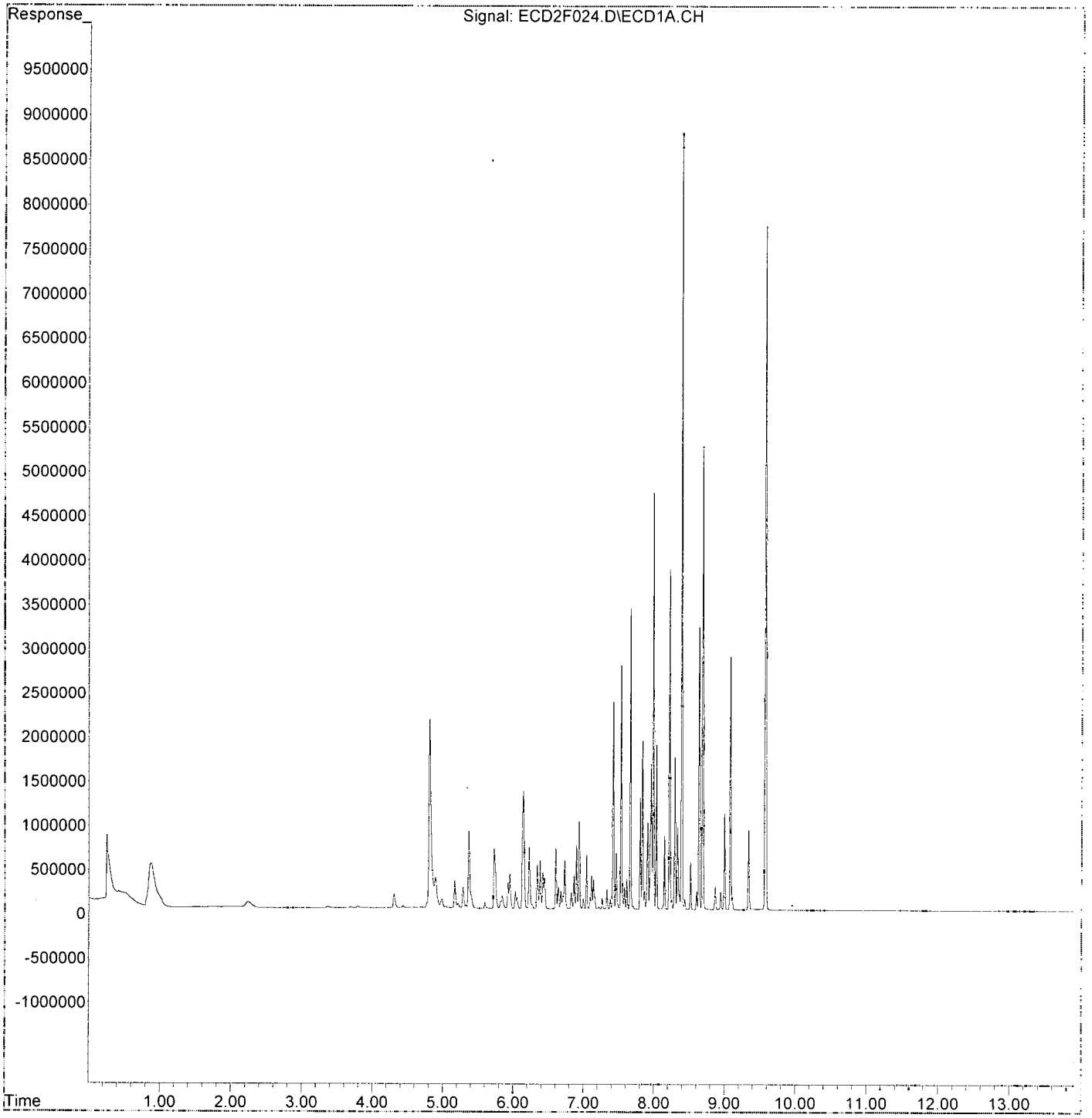
496.96

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:26
Operator : MJB / KAK
Sample : 9K05021-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:48:45 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:44
Operator : MJB / KAK
Sample : 9K05021-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19
1242, 1268

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.806	2389665	40.676	ng/ml
62)	S DCBP (S)	9.576	3744624	41.488	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.726	1272126	386.041	ng/ml
3)	Aroclor 1016 (2)	6.140	2560220	396.746	ng/ml
4)	Aroclor 1016 (3)	6.222	1363039	387.014	ng/ml
5)	Aroclor 1016 (4)	6.380	1087136	354.532	ng/ml
6)	Aroclor 1016 (5)	6.602	1369031	377.677	ng/ml
7)	Aroclor 1016 (6)	6.728	1121054	443.098	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.164	127880	129.624	ng/ml
10)	Aroclor 1221 (2)	5.284	143296	219.606	ng/ml
11)	Aroclor 1221 (3)	5.364	644703	301.710	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.364	644703	373.468	ng/ml
14)	Aroclor 1232 (2)	6.140	2560220	1007.313	ng/ml
15)	Aroclor 1232 (3)	6.222	1363039	979.732	ng/ml
16)	Aroclor 1232 (4)	6.380	1087136	1093.169	ng/ml
17)	Aroclor 1232 (5)	6.602	1369031	1080.253	ng/ml
18)	Aroclor 1232 (6)	6.728	1121054	1084.394	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.726	1272126	555.004	ng/ml
21)	Aroclor 1242 (2)	6.140	2560220	554.842	ng/ml
22)	Aroclor 1242 (3)	6.222	1363039	561.832	ng/ml
23)	Aroclor 1242 (4)	6.380	1087136	531.915	ng/ml
24)	Aroclor 1242 (5)	6.602	1369031	523.948	ng/ml
25)	Aroclor 1242 (6)	6.728	1121054	526.613	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.140	2560220	862.688	ng/ml
28)	Aroclor 1248 (2)	6.380	1087136	297.685	ng/ml
29)	Aroclor 1248 (3)	6.602	1369031	313.829	ng/ml
30)	Aroclor 1248 (4)	6.896	1391814	278.112	ng/ml
31)	Aroclor 1248 (5)	6.934	1457939	284.065	ng/ml
32)	Aroclor 1248 (6)	7.411	456905	163.748	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.934	1457939	275.363	ng/ml
35)	Aroclor 1254 (2)	7.040	333465	52.886	ng/ml
36)	Aroclor 1254 (3)	7.411	456905	48.055	ng/ml
37)	Aroclor 1254 (4)	7.578	320776	50.329	ng/ml
38)	Aroclor 1254 (5)	7.958	63680	9.696	ng/ml
39)	Aroclor 1254 (6)	8.249	30783	14.777	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.535	75688	10.811	ng/ml
42)	Aroclor 1260 (2)	7.663	66846	7.510	ng/ml
43)	Aroclor 1260 (3)	8.212	2105438	316.075	ng/ml
44)	Aroclor 1260 (4)	8.390	1026755	64.975	ng/ml
45)	Aroclor 1260 (5)	8.685	8400524	814.468	ng/ml
46)	Aroclor 1260 (6)	9.081	3361565	780.332	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

542.36

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:44
Operator : MJB / KAK
Sample : 9K05021-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.663	66846	10.029	ng/ml
49)	Aroclor 1262 (2)	7.988	1823087	195.329	ng/ml
50)	Aroclor 1262 (3)	8.212	2105438	265.301	ng/ml
51)	Aroclor 1262 (4)	8.390	1026755	58.406	ng/ml
52)	Aroclor 1262 (5)	8.685	8400524	781.024	ng/ml
53)	Aroclor 1262 (6)	9.081	3361565	590.231	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.212	2105438	512.100	ng/ml
56)	Aroclor 1268 (2)	8.638	10170429	500.536	ng/ml
57)	Aroclor 1268 (3)	8.685	8400524	500.970	ng/ml
58)	Aroclor 1268 (4)	8.868	7675531	504.220	ng/ml
59)	Aroclor 1268 (5)	9.081	3361565	533.994	ng/ml
60)	Aroclor 1268 (6)	9.341	21673224	500.399	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

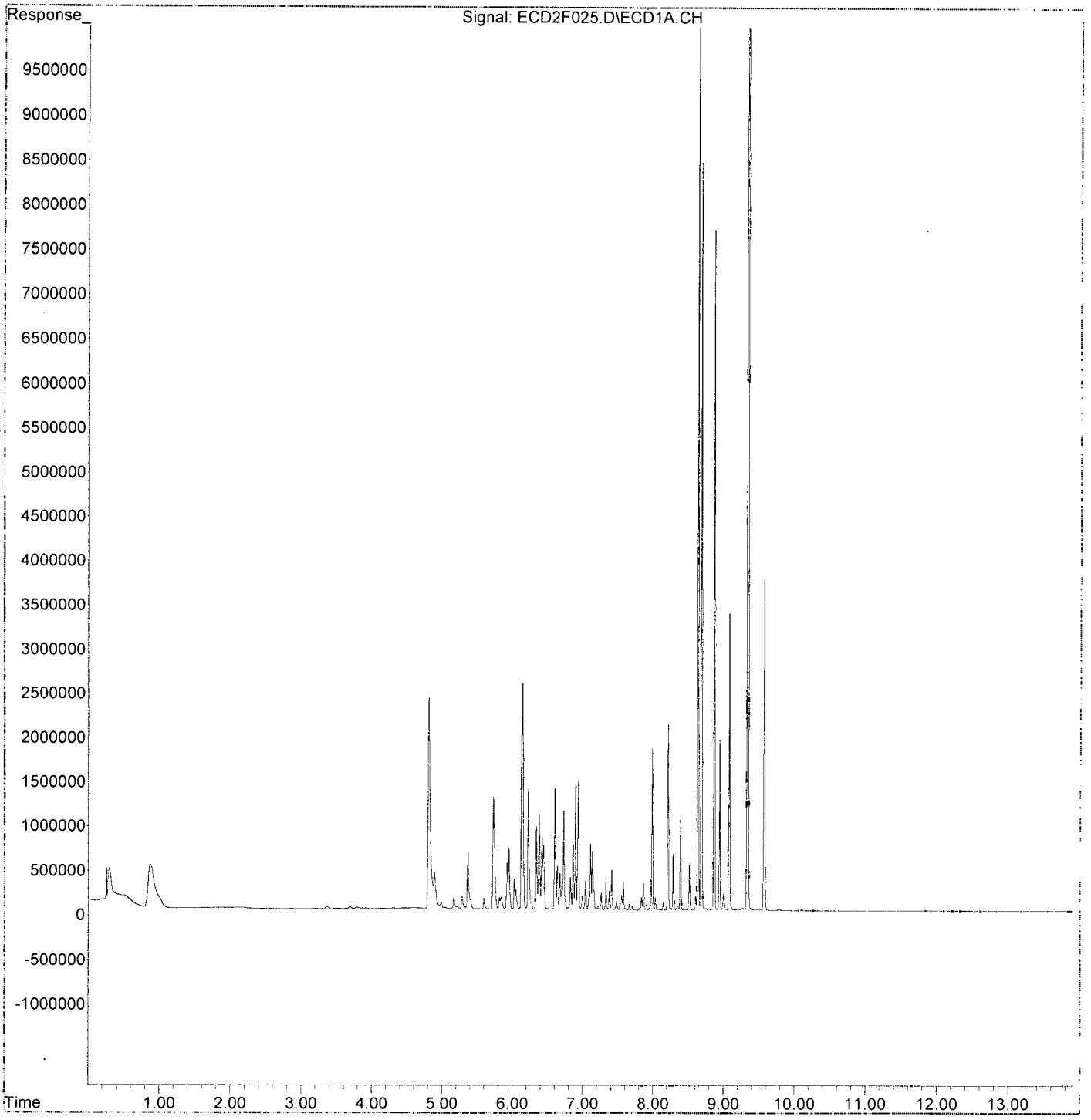
568.70

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 21:44
Operator : MJB / KAK
Sample : 9K05021-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 22:01
Operator : MJB / KAK
Sample : 9K05021-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/7/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.738f	6318	0.108	ng/ml
62)	S DCBP (S)	9.576	5724	0.063	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.726	649758	197.176	ng/ml
3)	Aroclor 1016 (2)	6.141	1521549	235.788	ng/ml
4)	Aroclor 1016 (3)	6.222	810955	230.258	ng/ml
5)	Aroclor 1016 (4)	6.380	2057641	671.029	ng/ml
6)	Aroclor 1016 (5)	6.602	2344882	646.886	ng/ml
7)	Aroclor 1016 (6)	6.728	1801091	711.885	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.167	17942	18.186	ng/ml
10)	Aroclor 1221 (2)	5.284	17701	27.127	ng/ml
11)	Aroclor 1221 (3)	5.365	74523	34.876	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.365	74523	43.170	ng/ml
14)	Aroclor 1232 (2)	6.141	1521549	598.650	ng/ml
15)	Aroclor 1232 (3)	6.222	810955	582.902	ng/ml
16)	Aroclor 1232 (4)	6.380	2057641	2069.060	ng/ml
17)	Aroclor 1232 (5)	6.602	2344882	1850.262	ng/ml
18)	Aroclor 1232 (6)	6.728	1801091	1742.194	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.726	649758	283.476	ng/ml
21)	Aroclor 1242 (2)	6.141	1521549	329.745	ng/ml
22)	Aroclor 1242 (3)	6.222	810955	334.268	ng/ml
23)	Aroclor 1242 (4)	6.380	2057641	1006.765	ng/ml
24)	Aroclor 1242 (5)	6.602	2344882	897.419	ng/ml
25)	Aroclor 1242 (6)	6.728	1801091	846.060	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.141	1521549	512.699	ng/ml
28)	Aroclor 1248 (2)	6.380	2057641	563.434	ng/ml
29)	Aroclor 1248 (3)	6.602	2344882	537.528	ng/ml
30)	Aroclor 1248 (4)	6.896	2864965	572.477	ng/ml
31)	Aroclor 1248 (5)	6.934	2876141	560.388	ng/ml
32)	Aroclor 1248 (6)	7.411	1544509	553.529	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.934	2876141	543.221	ng/ml
35)	Aroclor 1254 (2)	7.040	926617	146.957	ng/ml
36)	Aroclor 1254 (3)	7.411	1544509	162.445	ng/ml
37)	Aroclor 1254 (4)	7.578	1078756	169.254	ng/ml
38)	Aroclor 1254 (5)	7.958	240876	36.677	ng/ml
39)	Aroclor 1254 (6)	8.250	97606	46.855	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.533	228468	32.634	ng/ml
42)	Aroclor 1260 (2)	7.663	150353	16.892	ng/ml
43)	Aroclor 1260 (3)	8.220	24794	3.722	ng/ml
44)	Aroclor 1260 (4)	8.389	61091	3.866	ng/ml
45)	Aroclor 1260 (5)	8.689	49895	4.838	ng/ml
46)	Aroclor 1260 (6)	9.081	16262	3.775	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

550.01

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 22:01
Operator : MJB / KAK
Sample : 9K05021-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

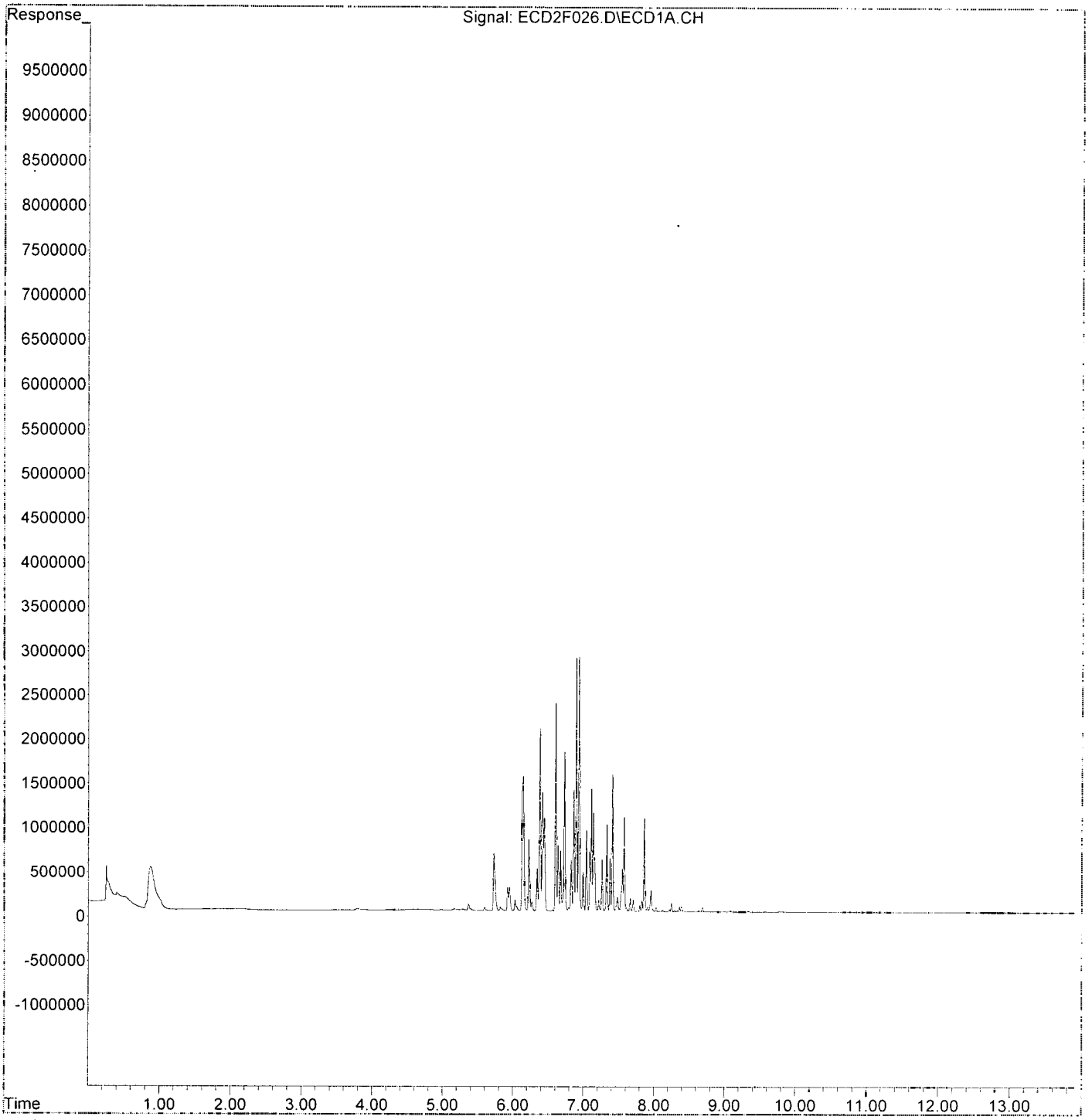
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.663	150353	22.558 ng/ml
49)	Aroclor 1262 (2)	7.987	25094	2.689 ng/ml
50)	Aroclor 1262 (3)	8.220	24794	3.124 ng/ml
51)	Aroclor 1262 (4)	8.389	61091	3.475 ng/ml
52)	Aroclor 1262 (5)	8.689	49895	4.639 ng/ml
53)	Aroclor 1262 (6)	9.081	16262	2.855 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.220	24794	6.031 ng/ml
56)	Aroclor 1268 (2)	8.638	16994	0.836 ng/ml
57)	Aroclor 1268 (3)	8.689	49895	2.976 ng/ml
58)	Aroclor 1268 (4)	8.866	3945	0.259 ng/ml
59)	Aroclor 1268 (5)	9.081	16262	2.583 ng/ml
60)	Aroclor 1268 (6)	9.341	12309	0.284 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 22:01
Operator : MJB / KAK
Sample : 9K05021-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 07 09:49:21 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:42:34 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.807	539955	9.191	ng/ml
62) S	DCBP (S)	9.578	919094	10.183	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.727	80130	24.316	ng/ml
3)	Aroclor 1016 (2)	6.142	139827	21.668	ng/ml
4)	Aroclor 1016 (3)	6.224	84035	23.860	ng/ml
5)	Aroclor 1016 (4)	6.381	76507	24.950	ng/ml
6)	Aroclor 1016 (5)	6.603	87463	24.129	ng/ml
7)	Aroclor 1016 (6)	6.730	62528	24.714	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.531	163647	23.375	ng/ml
42)	Aroclor 1260 (2)	7.665	199418	22.405	ng/ml
43)	Aroclor 1260 (3)	8.221	152902	22.954	ng/ml
44)	Aroclor 1260 (4)	8.392	324380	20.527	ng/ml
45)	Aroclor 1260 (5)	8.691	225342	21.848	ng/ml
46)	Aroclor 1260 (6)	9.082	102393	23.769	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:42:34 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

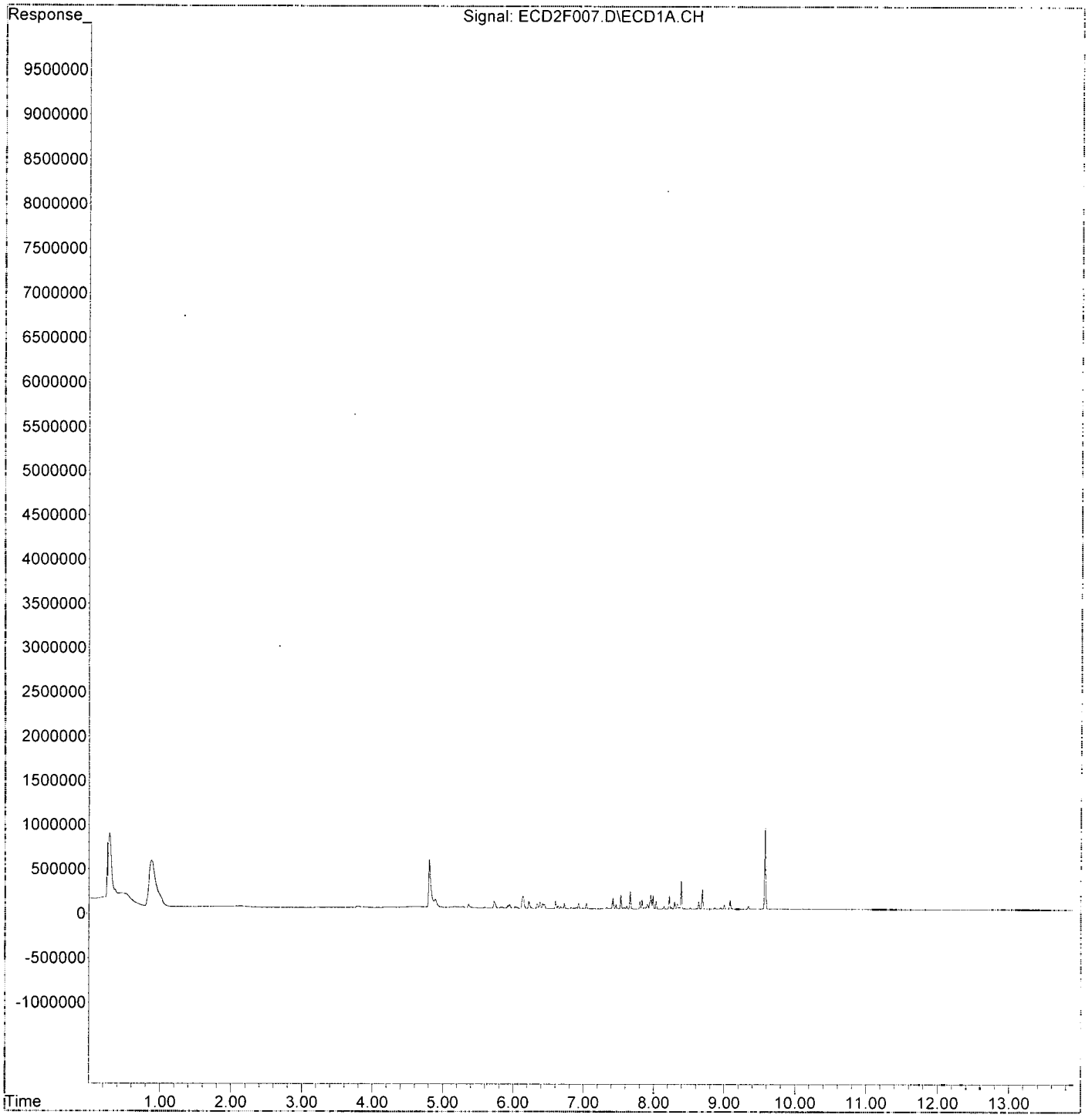
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:42:34 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:43:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.809	1379199	23.476	ng/ml
62) S	DCBP (S)	9.579	2231799	24.727	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.729	182577	55.405	ng/ml
3)	Aroclor 1016 (2)	6.142	325502	50.442	ng/ml
4)	Aroclor 1016 (3)	6.224	193384	54.908	ng/ml
5)	Aroclor 1016 (4)	6.382	166030	54.145	ng/ml
6)	Aroclor 1016 (5)	6.603	199889	55.144	ng/ml
7)	Aroclor 1016 (6)	6.730	136869	54.098	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.532	372185	53.162	ng/ml
42)	Aroclor 1260 (2)	7.665	467846	52.563	ng/ml
43)	Aroclor 1260 (3)	8.222	339148	50.914	ng/ml
44)	Aroclor 1260 (4)	8.392	815447	51.603	ng/ml
45)	Aroclor 1260 (5)	8.691	533434	51.719	ng/ml
46)	Aroclor 1260 (6)	9.083	227739	52.866	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:43:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

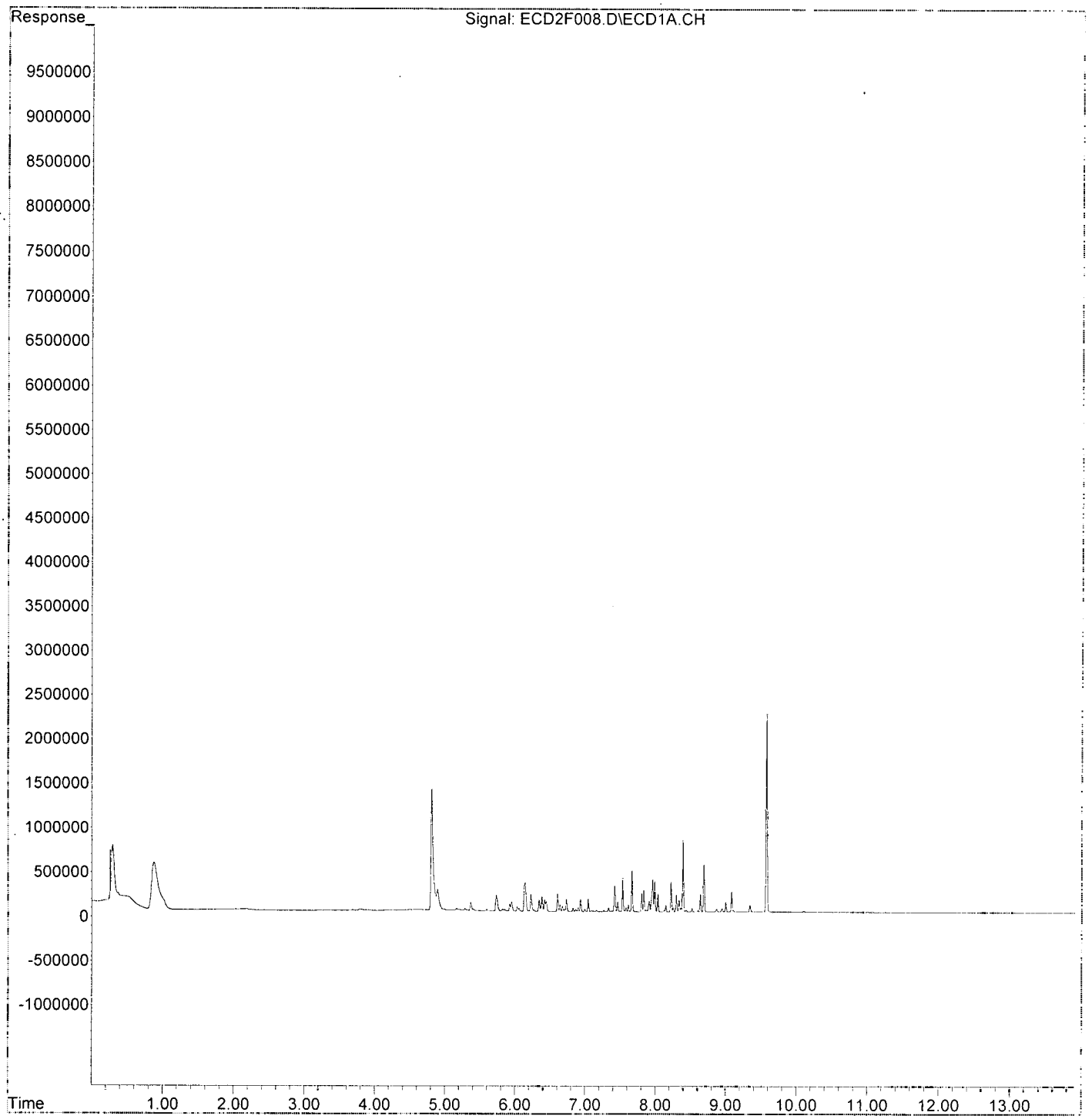
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:43:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

		Compound	R.T.	Response	Conc	Units	
		System Monitoring Compounds					
1)	S	TCMX (S)	4.807	2700271	45.964	ng/ml	✓
62)	S	DCBP (S)	9.578	4485138	49.693	ng/ml	✓
		Target Compounds					
2)		Aroclor 1016 (1)	5.728	329363	99.949	ng/ml	
3)		Aroclor 1016 (2)	6.141	629184	97.502	ng/ml	
4)		Aroclor 1016 (3)	6.224	343631	97.569	ng/ml	✓
5)		Aroclor 1016 (4)	6.381	315672	102.946	ng/ml	
6)		Aroclor 1016 (5)	6.603	359625	99.210	ng/ml	
7)		Aroclor 1016 (6)	6.730	247045	97.645	ng/ml	
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)		Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)		Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)		Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)		Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)		Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)		Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)		Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)		Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)		Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)		Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)		Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)		Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)		Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)		Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)		Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)		Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)		Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)		Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)		Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)		Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)		Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)		Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)		Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)		Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)		Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)		Aroclor 1260 (1)	7.531	702701	100.372	ng/ml	
42)		Aroclor 1260 (2)	7.665	875625	98.378	ng/ml	
43)		Aroclor 1260 (3)	8.222	677462	101.703	ng/ml	✓
44)		Aroclor 1260 (4)	8.392	1558054	98.596	ng/ml	
45)		Aroclor 1260 (5)	8.691	1034585	100.308	ng/ml	
46)		Aroclor 1260 (6)	9.082	423747	98.366	ng/ml	
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

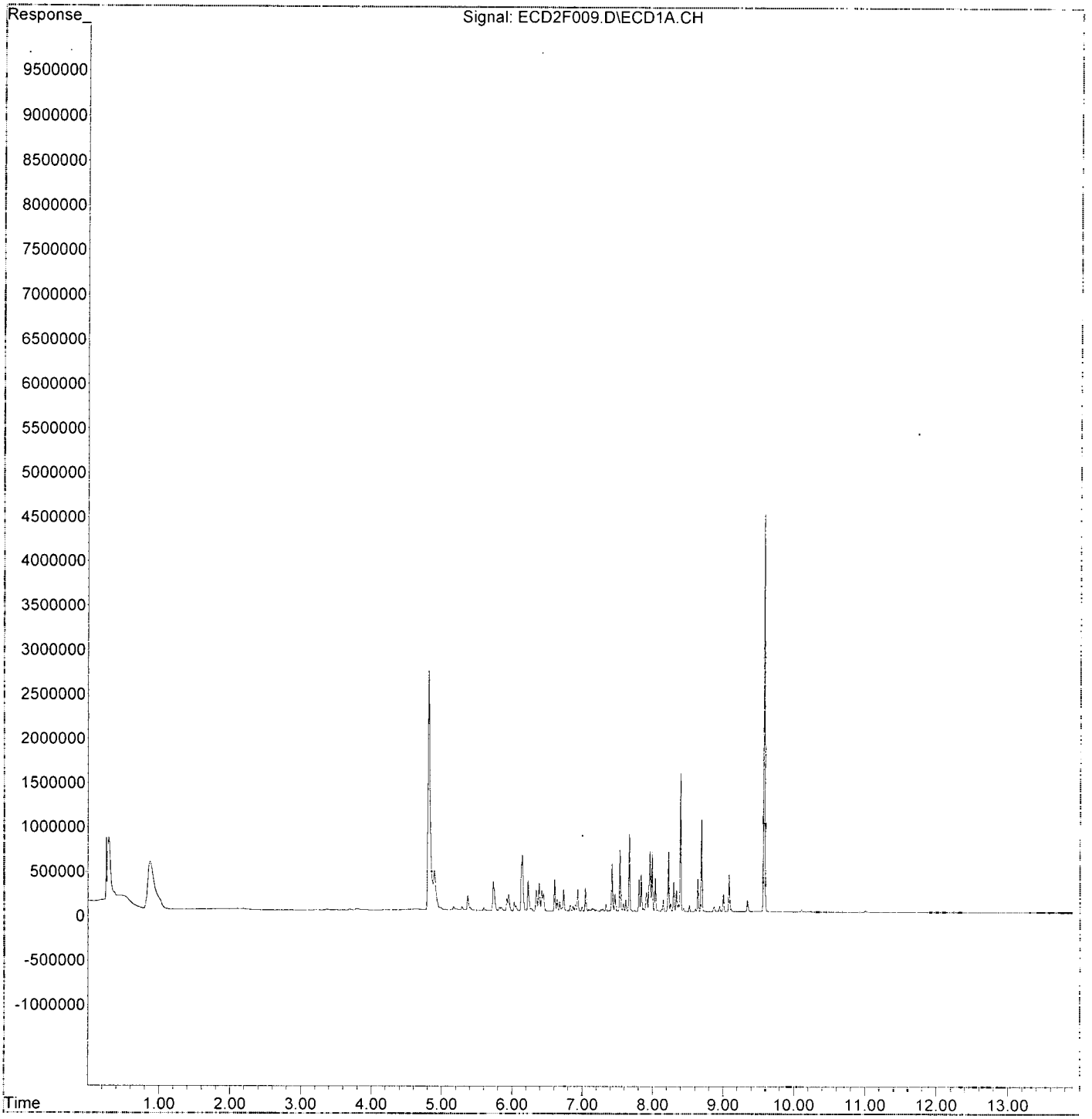
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.808	5577806	94.944	ng/ml
62) S	DCBP (S)	9.578	8735809	96.788	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.728	608465	184.646	ng/ml
3)	Aroclor 1016 (2)	6.142	1229631	190.550	ng/ml
4)	Aroclor 1016 (3)	6.224	654810	185.923	ng/ml
5)	Aroclor 1016 (4)	6.381	567708	185.138	ng/ml
6)	Aroclor 1016 (5)	6.604	666112	183.761	ng/ml
7)	Aroclor 1016 (6)	6.730	475570	187.970	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.532	1317960	188.255	ng/ml
42)	Aroclor 1260 (2)	7.665	1693317	190.248	ng/ml
43)	Aroclor 1260 (3)	8.221	1248868	187.484	ng/ml
44)	Aroclor 1260 (4)	8.391	3024167	191.375	ng/ml
45)	Aroclor 1260 (5)	8.690	2007748	194.660	ng/ml
46)	Aroclor 1260 (6)	9.082	805160	186.905	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

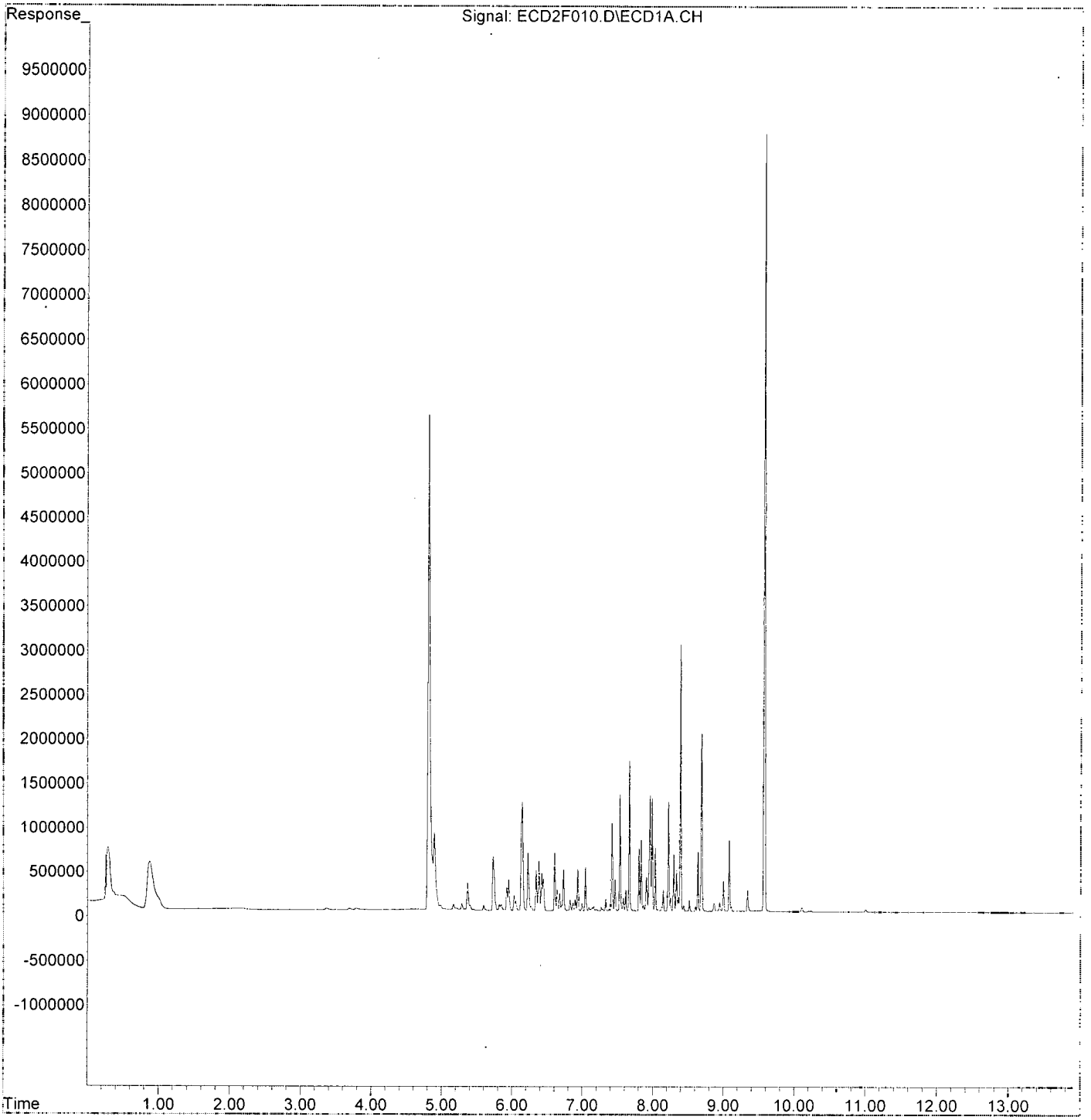
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:44:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.807	15628714	266.029	ng/ml	✓
62) S	DCBP (S)	9.578	23566412	261.102	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	5.727	1570795	476.676	ng/ml	
3)	Aroclor 1016 (2)	6.142	3244481	502.783	ng/ml	
4)	Aroclor 1016 (3)	6.224	1629506	462.673	ng/ml	✓
5)	Aroclor 1016 (4)	6.381	1400274	456.651	ng/ml	
6)	Aroclor 1016 (5)	6.604	1733524	478.230	ng/ml	
7)	Aroclor 1016 (6)	6.729	1223284	483.505	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	7.532	3372903	481.779	ng/ml	
42)	Aroclor 1260 (2)	7.665	4524027	508.284	ng/ml	
43)	Aroclor 1260 (3)	8.222	3251302	488.096	ng/ml	
44)	Aroclor 1260 (4)	8.392	8281983	524.099	ng/ml	✓
45)	Aroclor 1260 (5)	8.691	5051780	489.793	ng/ml	
46)	Aroclor 1260 (6)	9.082	2088239	484.750	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

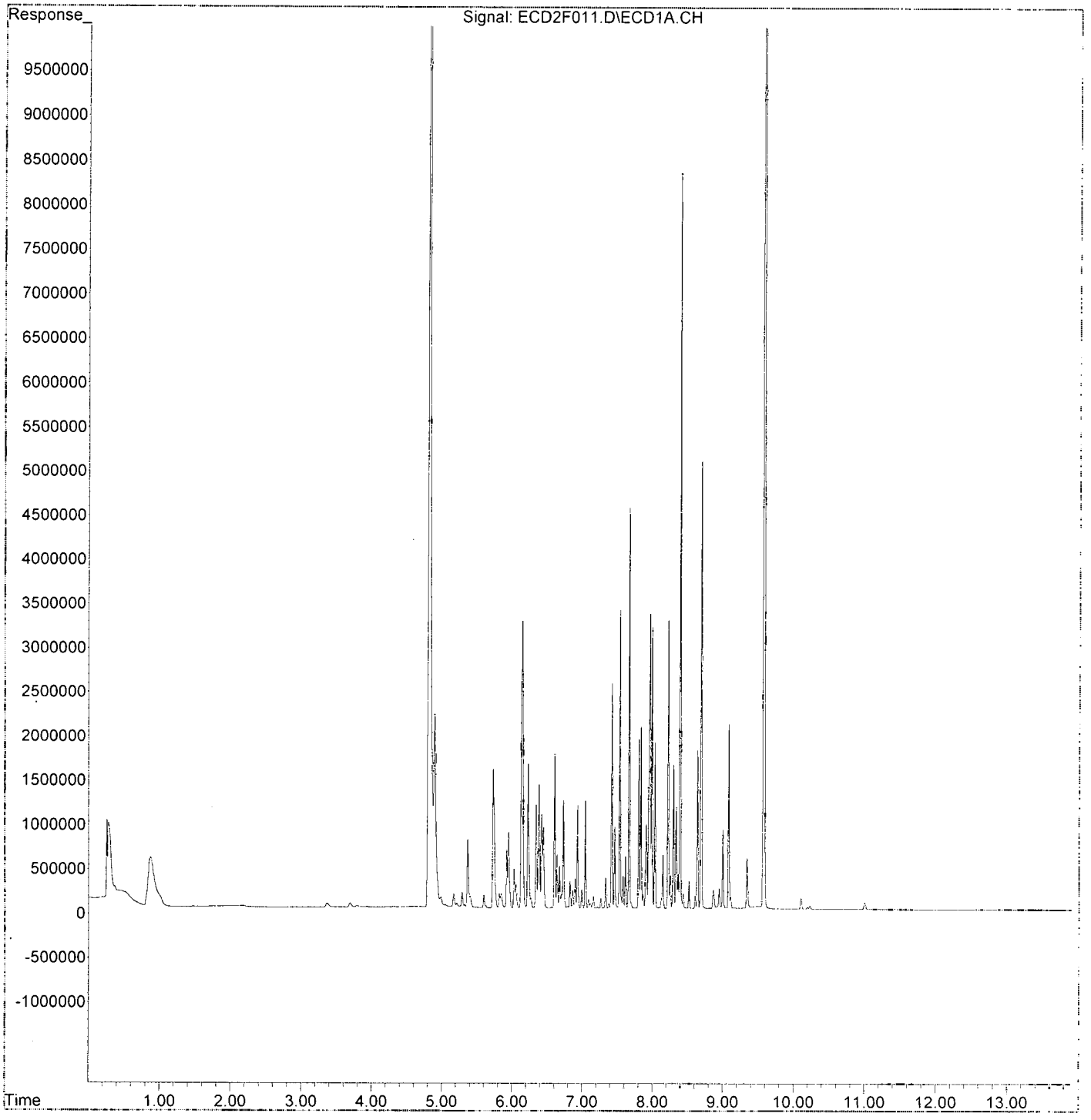
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:00 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.808	30808482	524.417	ng/ml	✓
62) S	DCBP (S)	9.580	43589586	482.947	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	5.728	2940535	892.339	ng/ml	
3)	Aroclor 1016 (2)	6.142	6279795	973.152	ng/ml	✓
4)	Aroclor 1016 (3)	6.223	3312159	940.436	ng/ml	
5)	Aroclor 1016 (4)	6.381	2732170	891.004	ng/ml	
6)	Aroclor 1016 (5)	6.603	3284938	906.220	ng/ml	
7)	Aroclor 1016 (6)	6.729	2196746	868.268	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	11/7/19
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	7.531	6475085	924.889	ng/ml	
42)	Aroclor 1260 (2)	7.665	8366550	939.999	ng/ml	
43)	Aroclor 1260 (3)	8.222	6159348	924.661	ng/ml	✓
44)	Aroclor 1260 (4)	8.392	15136835	957.886	ng/ml	
45)	Aroclor 1260 (5)	8.691	9811564	951.275	ng/ml	
46)	Aroclor 1260 (6)	9.082	3911056	907.887	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

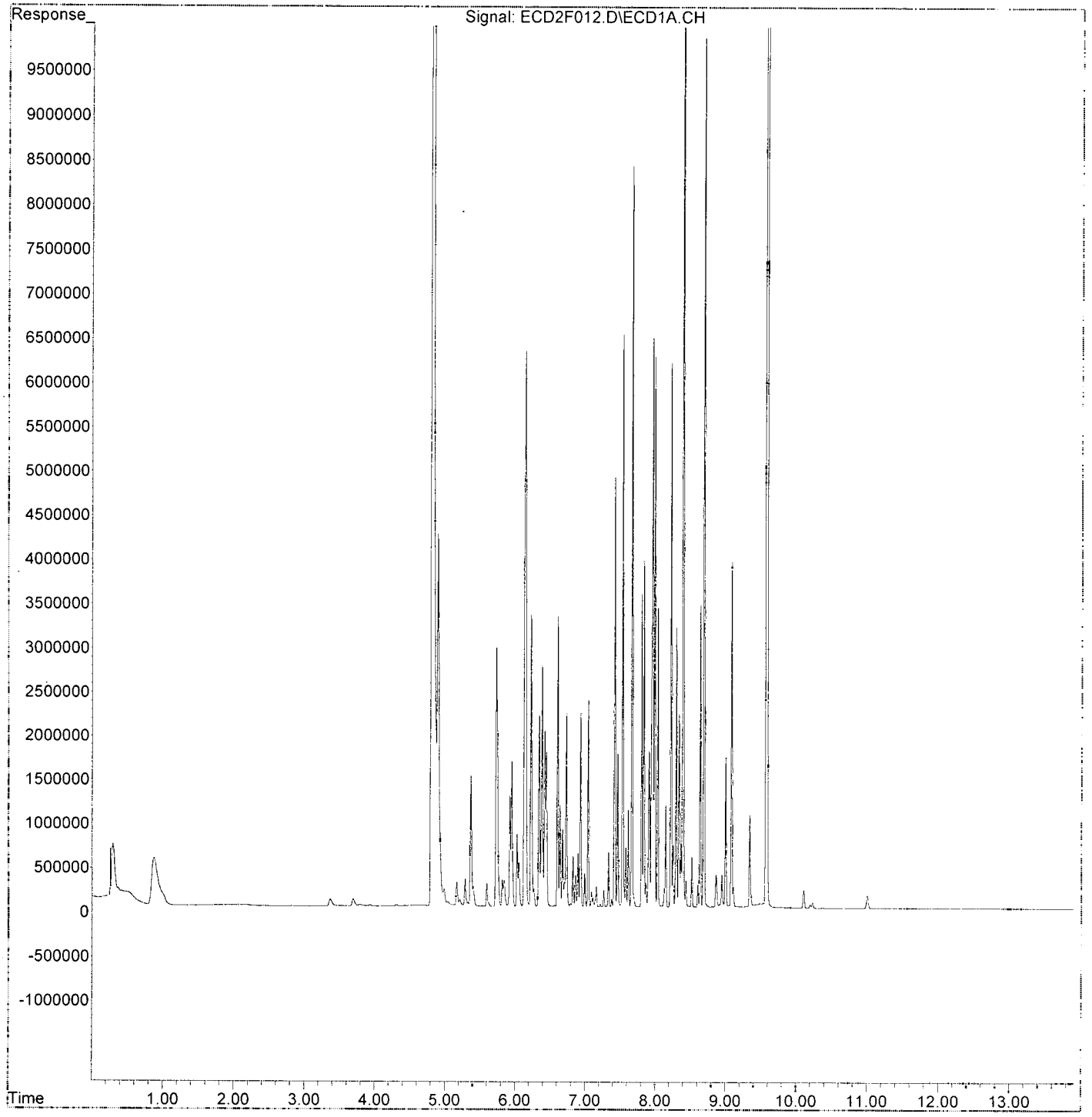
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.810	54526422	928.139	ng/ml	✓
62) S	DCBP (S)	9.579	73691893	816.464	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	5.727	4486587	1361.506	ng/ml	
3)	Aroclor 1016 (2)	6.141	9691786	1501.893	ng/ml	
4)	Aroclor 1016 (3)	6.223	4953928	1406.591	ng/ml	✓
5)	Aroclor 1016 (4)	6.380	4186279	1365.212	ng/ml	
6)	Aroclor 1016 (5)	6.603	4986600	1375.660	ng/ml	
7)	Aroclor 1016 (6)	6.729	3532274	1396.137	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	7.531	9814234	1401.846	ng/ml	
42)	Aroclor 1260 (2)	7.664	12508346	1405.338	ng/ml	
43)	Aroclor 1260 (3)	8.221	9779054	1468.063	ng/ml	✓
44)	Aroclor 1260 (4)	8.392	23529318	1488.978	ng/ml	
45)	Aroclor 1260 (5)	8.691	14945054	1448.989	ng/ml	
46)	Aroclor 1260 (6)	9.082	6194753	1438.010	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

11/7/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

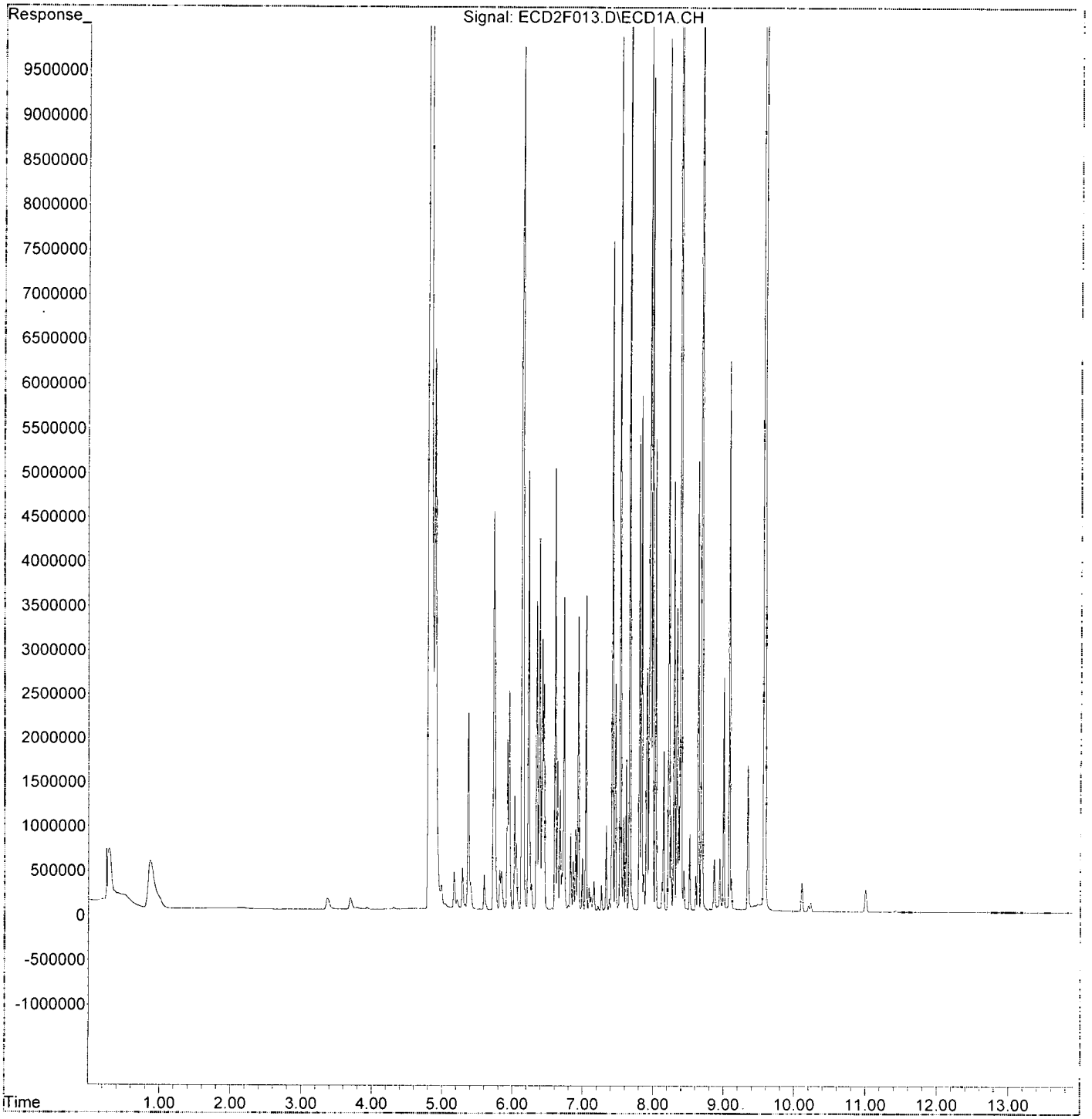
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\requant\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:45:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:27:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\2\SEQUENCE\9K05021.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	Hexane	E2A21015	1	Sample		
2	Vial 2	9K05021-CCV1	E2A21015	1	Sample		
3	Vial 3	9K05021-CCB1	E2A21015	1	Sample		
4	Vial 1	Hexane	E2A21015	1	Sample		
5	Vial 1	Hexane	E2A21015	1	Sample		
6	Vial 3	9K05021-ICB1	E2A21015	1	Sample		
7	Vial 4	9K05021-CAL1	E2A21015	1	Sample		
8	Vial 5	9K05021-CAL2	E2A21015	1	Sample		
9	Vial 6	9K05021-CAL3	E2A21015	1	Sample		
10	Vial 7	9K05021-CAL4	E2A21015	1	Sample		
11	Vial 8	9K05021-CAL5	E2A21015	1	Sample		
12	Vial 9	9K05021-CAL6	E2A21015	1	Sample		
13	Vial 10	9K05021-CAL7	E2A21015	1	Sample		
14	Vial 1	9K05021-IBL1	E2A21015	1	Sample		
15	Vial 11	9K05021-ICV1	E2A21015	1	Sample		
16	Vial 12	9K05021-CAL8	E2A21015	1	Sample		
17	Vial 13	9K05021-CAL9	E2A21015	1	Sample		
18	Vial 14	9K05021-CALA	E2A21015	1	Sample		
19	Vial 15	9K05021-CALB	E2A21015	1	Sample		
20	Vial 16	9K05021-CALC	E2A21015	1	Sample		
21	Vial 17	9K05021-CALD	E2A21015	1	Sample		
22	Vial 18	9K05021-CALE	E2A21015	1	Sample		
23	Vial 19	9K05021-ICV2	E2A21015	1	Sample		
24	Vial 20	9K05021-ICV3	E2A21015	1	Sample		
25	Vial 21	9K05021-ICV4	E2A21015	1	Sample		
26	Vial 22	9K05021-ICV5	E2A21015	1	Sample		
27	Vial 1	Hexane	E2A21015	1	Sample		

11/15/19

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	Hexane	E2A21015	1	Sample		
2	Vial 52	9K05022-CCV1	E2A21015	1	Sample		
3	Vial 53	9K05022-CCB1	E2A21015	1	Sample		
4	Vial 51	Hexane	E2A21015	1	Sample		
5	Vial 52	9K05022-CCV2	E2A21015	1	Sample		
6	Vial 53	9K05022-CCB2	E2A21015	1	Sample		
7	Vial 54	9110364-BLK1	E2A21015	1	Sample		
8	Vial 55	9110364-BS1	E2A21015	1	Sample		
9	Vial 56	9110364-BSD1	E2A21015	1	Sample		
10	Vial 57	A9J0841-02	E2A21015	1	Sample		
11	Vial 51	9K05022-IBL1	E2A21015	1	Sample		
12	Vial 58	A9J0841-03	E2A21015	1	Sample		
13	Vial 51	9K05022-IBL2	E2A21015	1	Sample		
14	Vial 59	A9J0841-10	E2A21015	1	Sample		
15	Vial 51	9K05022-IBL3	E2A21015	1	Sample		
16	Vial 60	A9J0841-11	E2A21015	1	Sample		
17	Vial 51	9K05022-IBL4	E2A21015	1	Sample		
18	Vial 61	A9J0893-02	E2A21015	1	Sample		
19	Vial 51	9K05022-IBL5	E2A21015	1	Sample		
20	Vial 62	A9J0893-03	E2A21015	1	Sample		
21	Vial 51	9K05022-IBL6	E2A21015	1	Sample		
22	Vial 63	A9J0893-13	E2A21015	1	Sample		
23	Vial 51	9K05022-IBL7	E2A21015	1	Sample		

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:01:08 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.807	539955	7.506	ng/ml
62) S	DCBP (S)	9.578	919094	12.773	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.727	80130	25.904	ng/ml
3)	Aroclor 1016 (2)	6.142	139827	22.645	ng/ml
4)	Aroclor 1016 (3)	6.224	84035	25.225	ng/ml
5)	Aroclor 1016 (4)	6.381	76507	28.397	ng/ml
6)	Aroclor 1016 (5)	6.603	87463	26.872	ng/ml
7)	Aroclor 1016 (6)	6.730	62528	26.611	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.531	163647	26.580	ng/ml
42)	Aroclor 1260 (2)	7.665	199418	25.689	ng/ml
43)	Aroclor 1260 (3)	8.221	152902	26.949	ng/ml
44)	Aroclor 1260 (4)	8.392	324380	24.270	ng/ml
45)	Aroclor 1260 (5)	8.691	225342	25.732	ng/ml
46)	Aroclor 1260 (6)	9.082	102393	28.500	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:01:08 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

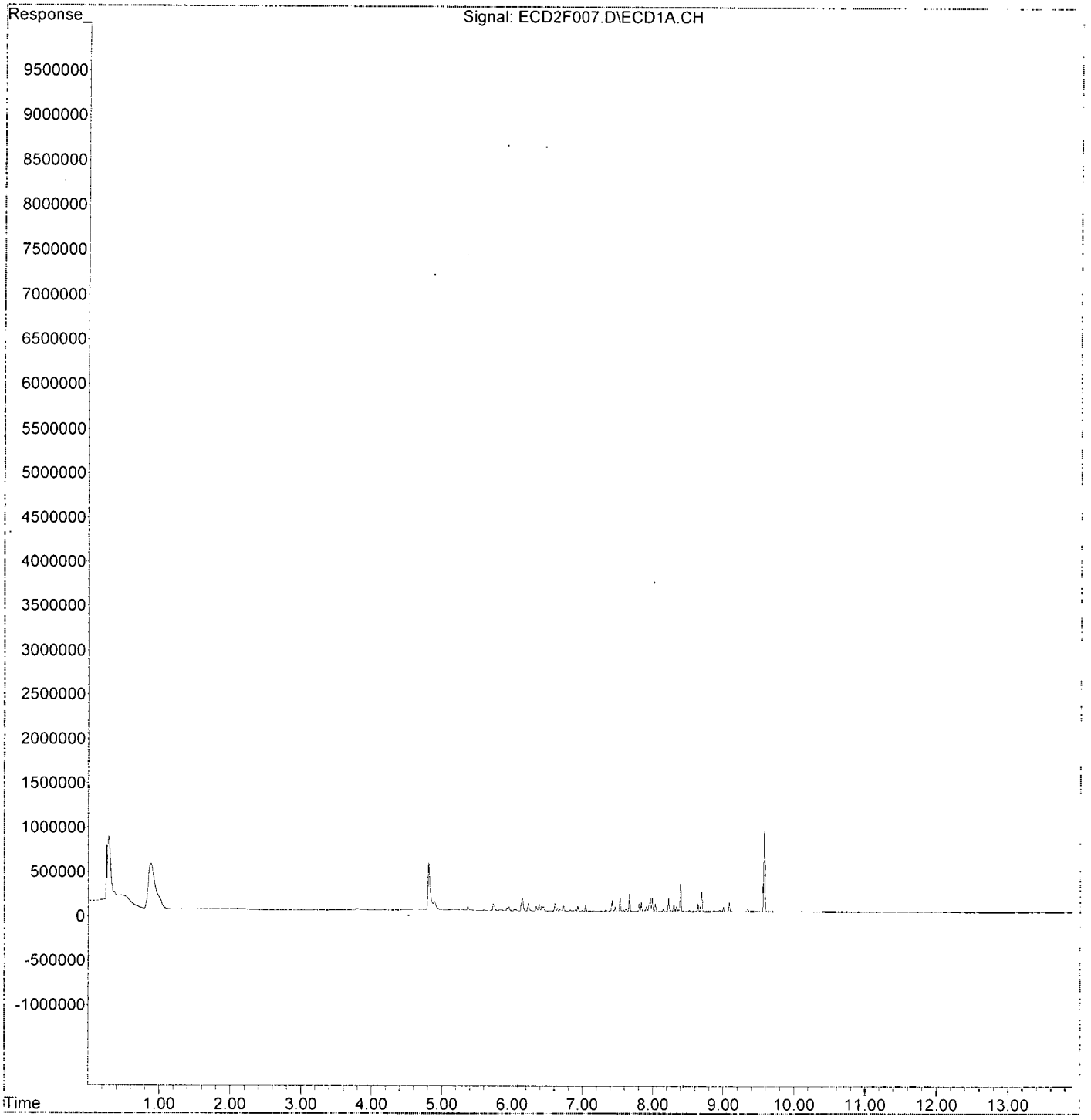
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:27
Operator : MJB / KAK
Sample : 9K05021-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:01:08 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:02:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.809	1379199	19.174	ng/ml
62) S	DCBP (S)	9.579	2231799	31.016	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.729	182577	59.023	ng/ml
3)	Aroclor 1016 (2)	6.142	325502	52.716	ng/ml
4)	Aroclor 1016 (3)	6.224	193384	58.048	ng/ml
5)	Aroclor 1016 (4)	6.382	166030	61.626	ng/ml
6)	Aroclor 1016 (5)	6.603	199889	61.413	ng/ml
7)	Aroclor 1016 (6)	6.730	136869	58.251	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.532	372185	60.452	ng/ml
42)	Aroclor 1260 (2)	7.665	467846	60.268	ng/ml
43)	Aroclor 1260 (3)	8.222	339148	59.775	ng/ml
44)	Aroclor 1260 (4)	8.392	815447	61.012	ng/ml
45)	Aroclor 1260 (5)	8.691	533434	60.913	ng/ml
46)	Aroclor 1260 (6)	9.083	227739	63.389	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:02:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

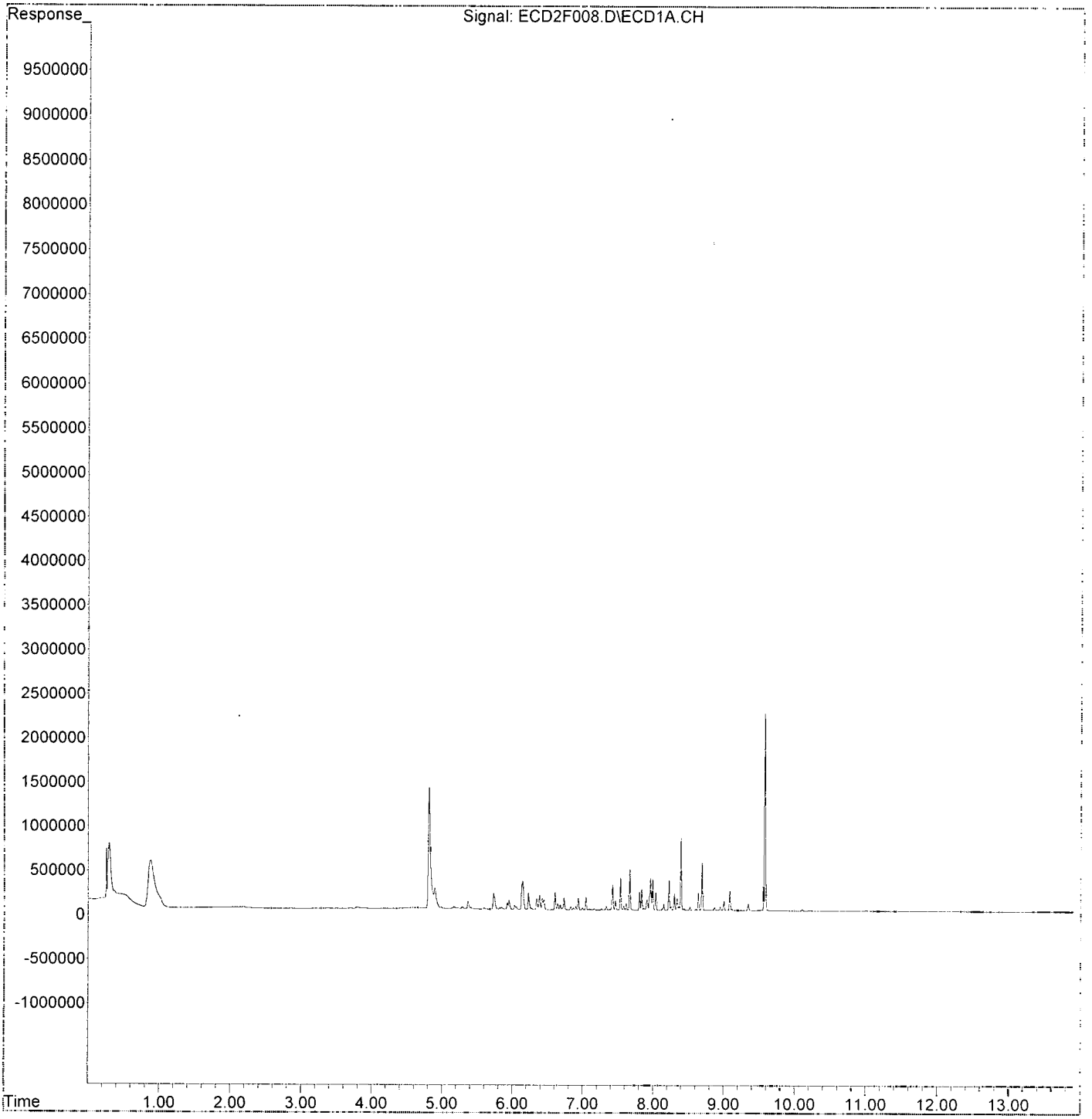
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 16:45
Operator : MJB / KAK
Sample : 9K05021-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:02:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:03:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.807	2700271	37.539	ng/ml
62) S	DCBP (S)	9.578	4485138	62.332	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.728	329363	106.475	ng/ml
3)	Aroclor 1016 (2)	6.141	629184	101.898	ng/ml
4)	Aroclor 1016 (3)	6.224	343631	103.147	ng/ml
5)	Aroclor 1016 (4)	6.381	315672	117.169	ng/ml
6)	Aroclor 1016 (5)	6.603	359625	110.489	ng/ml
7)	Aroclor 1016 (6)	6.730	247045	105.141	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.531	702701	114.136	ng/ml
42)	Aroclor 1260 (2)	7.665	875625	112.799	ng/ml
43)	Aroclor 1260 (3)	8.222	677462	119.404	ng/ml
44)	Aroclor 1260 (4)	8.392	1558054	116.574	ng/ml
45)	Aroclor 1260 (5)	8.691	1034585	118.139	ng/ml
46)	Aroclor 1260 (6)	9.082	423747	117.945	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:03:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

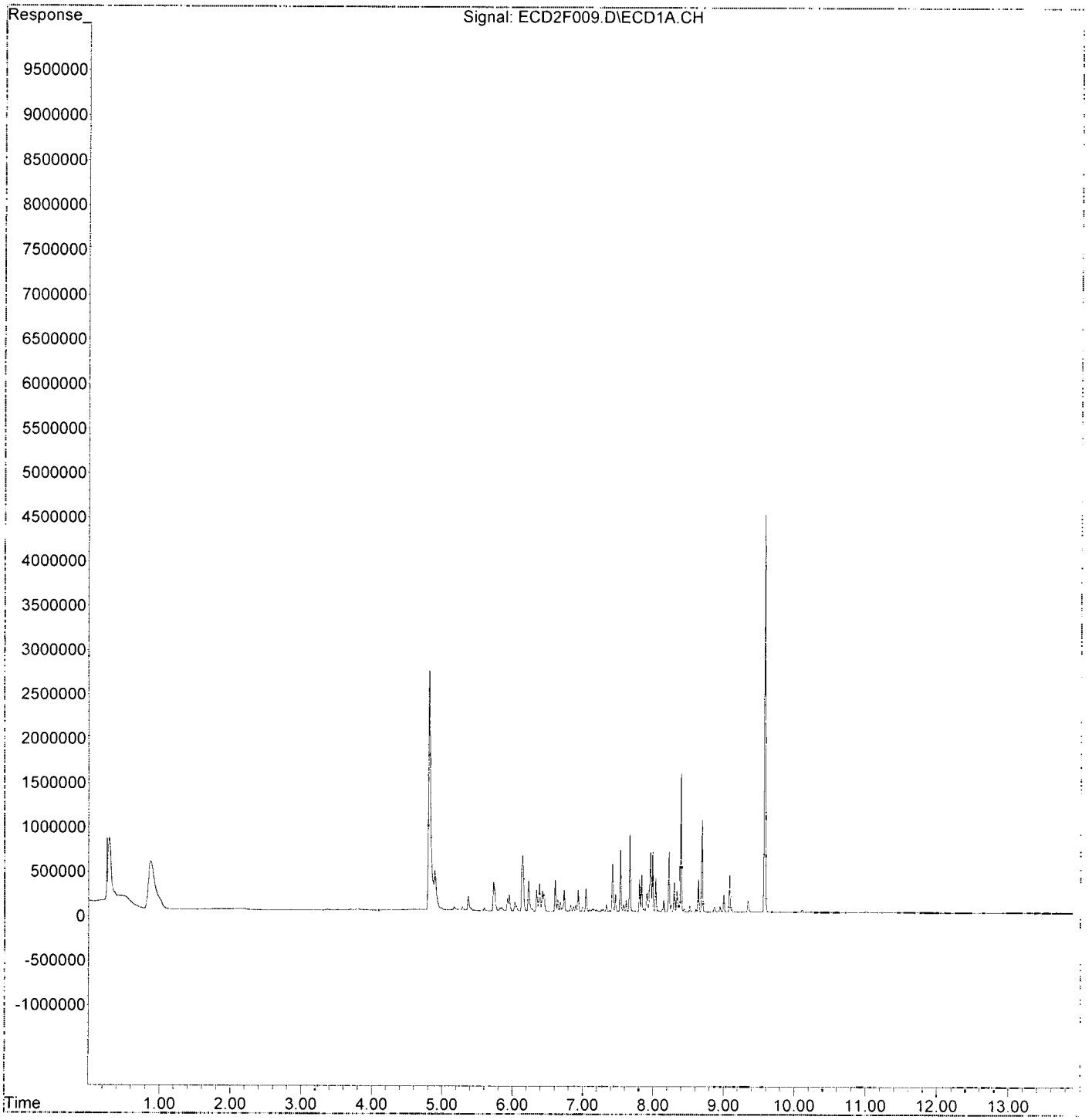
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:02
Operator : MJB / KAK
Sample : 9K05021-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:03:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:05:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.808	5577806	77.543	ng/ml
62) S	DCBP (S)	9.578	8735809	121.406	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.728	608465	196.703	ng/ml
3)	Aroclor 1016 (2)	6.142	1229631	199.141	ng/ml
4)	Aroclor 1016 (3)	6.224	654810	196.554	ng/ml
5)	Aroclor 1016 (4)	6.381	567708	210.717	ng/ml
6)	Aroclor 1016 (5)	6.604	666112	204.652	ng/ml
7)	Aroclor 1016 (6)	6.730	475570	202.400	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.532	1317960	214.070	ng/ml
42)	Aroclor 1260 (2)	7.665	1693317	218.135	ng/ml
43)	Aroclor 1260 (3)	8.221	1248868	220.115	ng/ml
44)	Aroclor 1260 (4)	8.391	3024167	226.269	ng/ml
45)	Aroclor 1260 (5)	8.690	2007748	229.264	ng/ml
46)	Aroclor 1260 (6)	9.082	805160	224.108	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:05:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

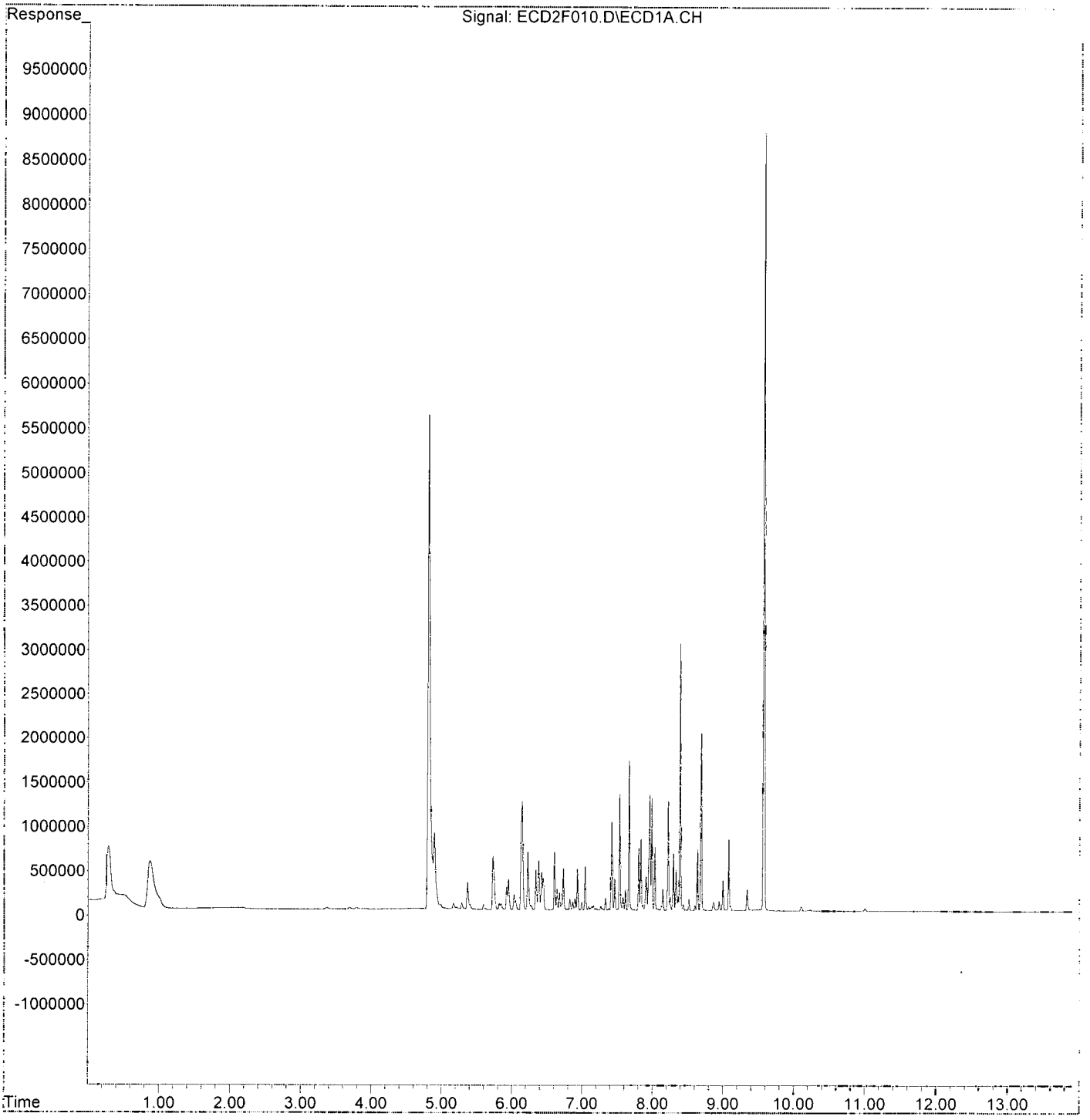
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:20
Operator : MJB / KAK
Sample : 9K05021-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:05:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 09:59:49 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.807	15628714	217.271	ng/ml
62) S	DCBP (S)	9.578	23566412	327.514	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.727	1570795	507.802	ng/ml
3)	Aroclor 1016 (2)	6.142	3244481	525.480	ng/ml
4)	Aroclor 1016 (3)	6.224	1629506	489.127	ng/ml
5)	Aroclor 1016 (4)	6.381	1400274	519.743	ng/ml
6)	Aroclor 1016 (5)	6.604	1733524	532.596	ng/ml
7)	Aroclor 1016 (6)	6.729	1223284	520.622	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.532	3372903	547.844	ng/ml
42)	Aroclor 1260 (2)	7.665	4524027	582.791	ng/ml
43)	Aroclor 1260 (3)	8.222	3251302	573.048	ng/ml
44)	Aroclor 1260 (4)	8.392	8281983	619.662	ng/ml
45)	Aroclor 1260 (5)	8.691	5051780	576.860	ng/ml
46)	Aroclor 1260 (6)	9.082	2088239	581.239	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 09:59:49 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

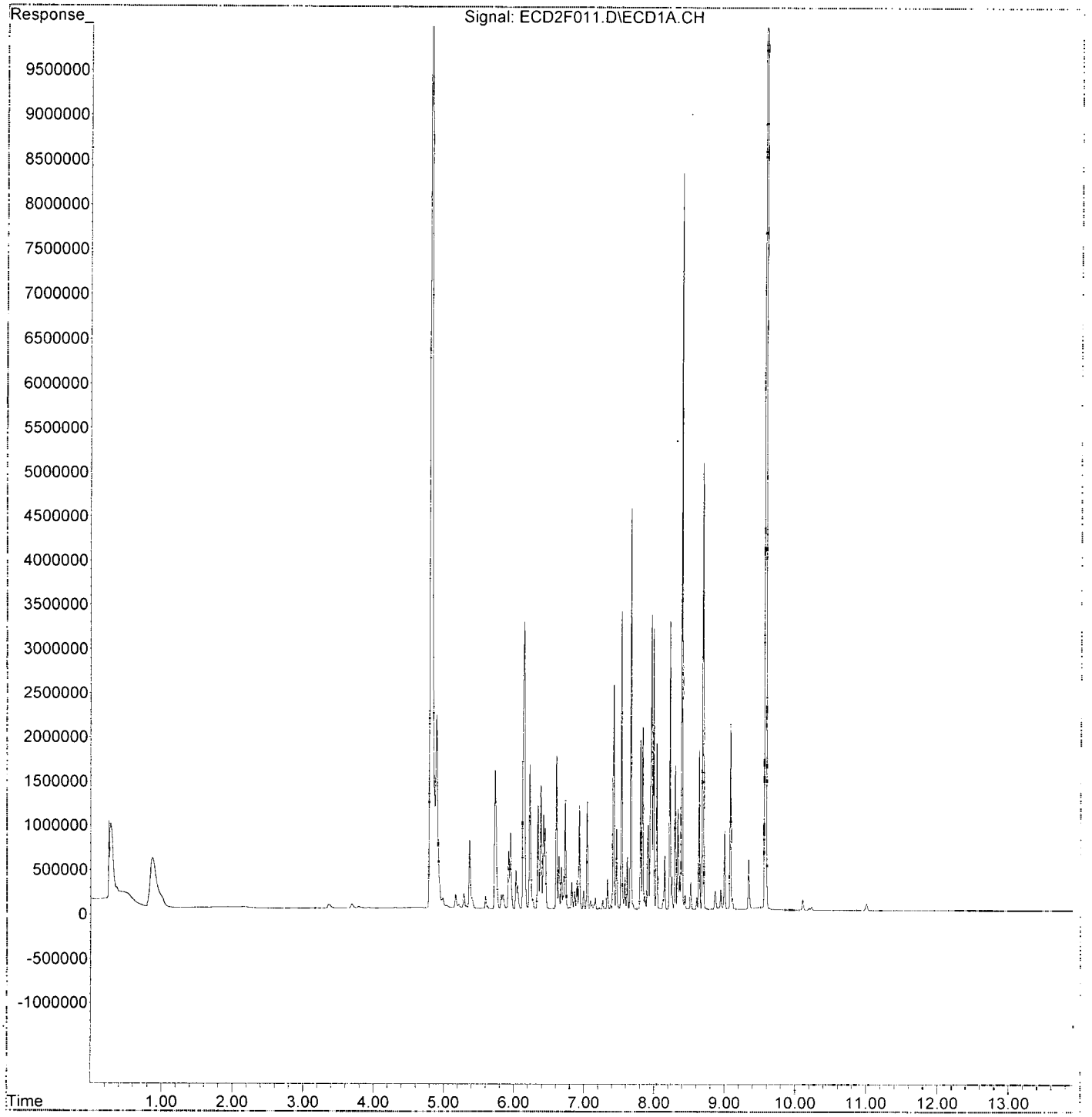
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:37
Operator : MJB / KAK
Sample : 9K05021-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 09:59:49 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:06:55 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.808	30808482	428.301	ng/ml
62) S	DCBP (S)	9.580	43589586	605.787	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.728	2940535	950.608	ng/ml
3)	Aroclor 1016 (2)	6.142	6279795	1017.025	ng/ml
4)	Aroclor 1016 (3)	6.223	3312159	994.207	ng/ml
5)	Aroclor 1016 (4)	6.381	2732170	1014.106	ng/ml
6)	Aroclor 1016 (5)	6.603	3284938	1009.242	ng/ml
7)	Aroclor 1016 (6)	6.729	2196746	934.922	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.531	6475085	1051.715	ng/ml
42)	Aroclor 1260 (2)	7.665	8366550	1077.790	ng/ml
43)	Aroclor 1260 (3)	8.222	6159348	1085.596	ng/ml
44)	Aroclor 1260 (4)	8.392	15136835	1132.545	ng/ml
45)	Aroclor 1260 (5)	8.691	9811564	1120.377	ng/ml
46)	Aroclor 1260 (6)	9.082	3911056	1088.601	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:06:55 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

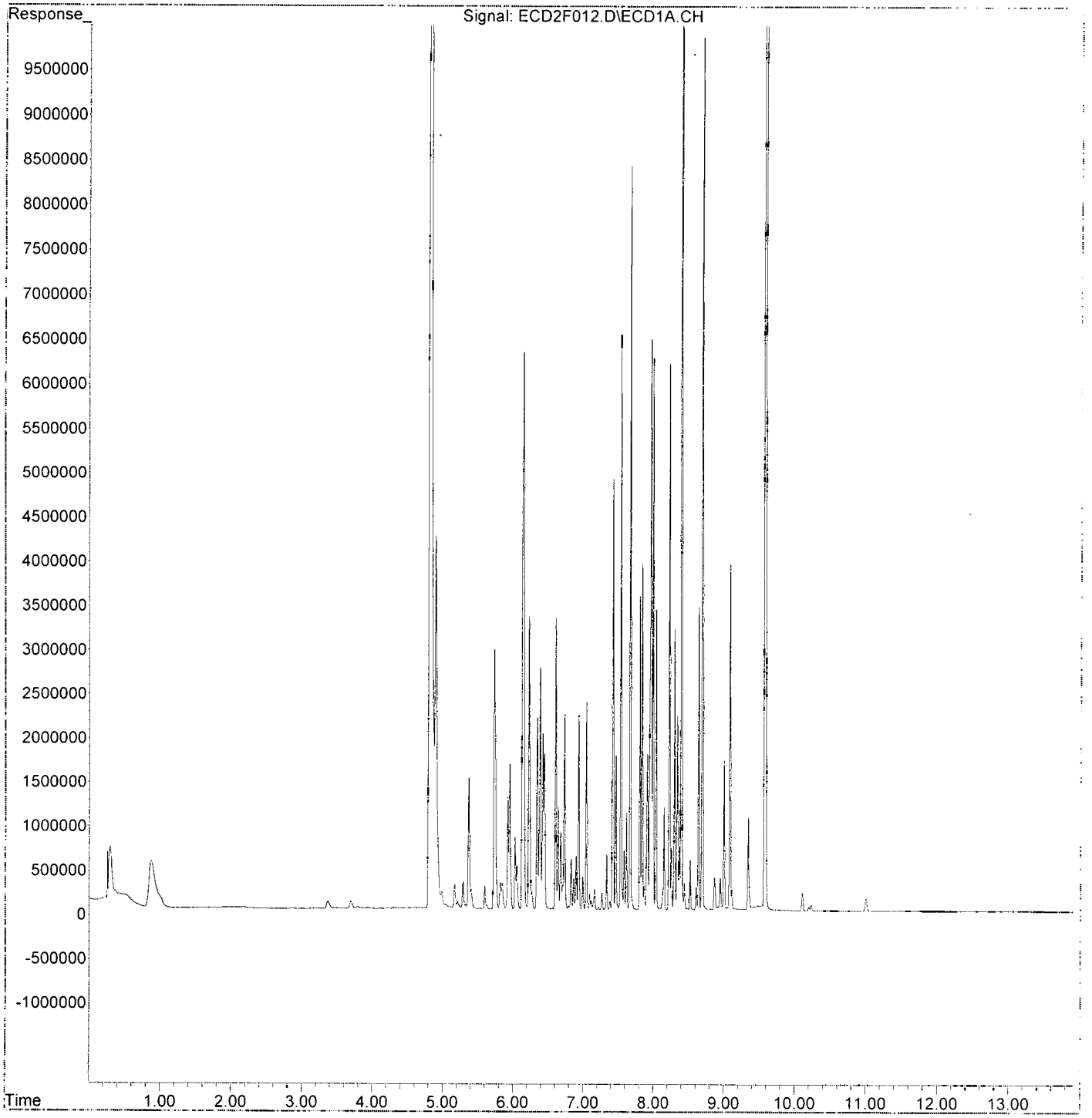
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 17:55
Operator : MJB / KAK
Sample : 9K05021-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:06:55 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:08:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.810	54526422	758.028	ng/ml
62) S	DCBP (S)	9.579	73691893	1024.134	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.727	4486587	1450.411	ng/ml
3)	Aroclor 1016 (2)	6.141	9691786	1569.604	ng/ml
4)	Aroclor 1016 (3)	6.223	4953928	1487.015	ng/ml
5)	Aroclor 1016 (4)	6.380	4186279	1553.830	ng/ml
6)	Aroclor 1016 (5)	6.603	4986600	1532.049	ng/ml
7)	Aroclor 1016 (6)	6.729	3532274	1503.314	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.167	424455	408.934	ng/ml
10)	Aroclor 1221 (2)	5.286	467640	721.057	ng/ml
11)	Aroclor 1221 (3)	5.367	2229931	1021.561	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.367	2229931	1266.820	ng/ml
14)	Aroclor 1232 (2)	6.141	9691786	3948.912	ng/ml
15)	Aroclor 1232 (3)	6.223	4953928	3908.986	ng/ml
16)	Aroclor 1232 (4)	6.380	4186279	4881.762	ng/ml
17)	Aroclor 1232 (5)	6.603	4986600	4399.835	ng/ml
18)	Aroclor 1232 (6)	6.729	3532274	3778.617	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.727	4486587	2033.004	ng/ml
21)	Aroclor 1242 (2)	6.141	9691786	2128.842	ng/ml
22)	Aroclor 1242 (3)	6.223	4953928	2122.170	ng/ml
23)	Aroclor 1242 (4)	6.380	4186279	2385.537	ng/ml
24)	Aroclor 1242 (5)	6.603	4986600	2087.061	ng/ml
25)	Aroclor 1242 (6)	6.729	3532274	1784.965	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.141	9691786	3277.693	ng/ml
28)	Aroclor 1248 (2)	6.380	4186279	1207.805	ng/ml
29)	Aroclor 1248 (3)	6.603	4986600	1272.171	ng/ml
30)	Aroclor 1248 (4)	6.896	915621	191.101	ng/ml
31)	Aroclor 1248 (5)	6.930	3309601	661.441	ng/ml
32)	Aroclor 1248 (6)	7.419	7527150	2889.122	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.930	3309601	700.059	ng/ml
35)	Aroclor 1254 (2)	7.041	3560495	632.567	ng/ml
36)	Aroclor 1254 (3)	7.419	7527150	879.835	ng/ml
37)	Aroclor 1254 (4)	7.578	1051956	180.655	ng/ml
38)	Aroclor 1254 (5)	7.959	9929381	1700.160	ng/ml
39)	Aroclor 1254 (6)	8.251	1066498	564.366	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.531	9814234	1594.076	ng/ml
42)	Aroclor 1260 (2)	7.664	12508346	1611.342	ng/ml
43)	Aroclor 1260 (3)	8.221	9779054	1723.575	ng/ml
44)	Aroclor 1260 (4)	8.392	23529318	1760.474	ng/ml
45)	Aroclor 1260 (5)	8.691	14945054	1706.568	ng/ml
46)	Aroclor 1260 (6)	9.082	6194753	1724.244	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:08:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

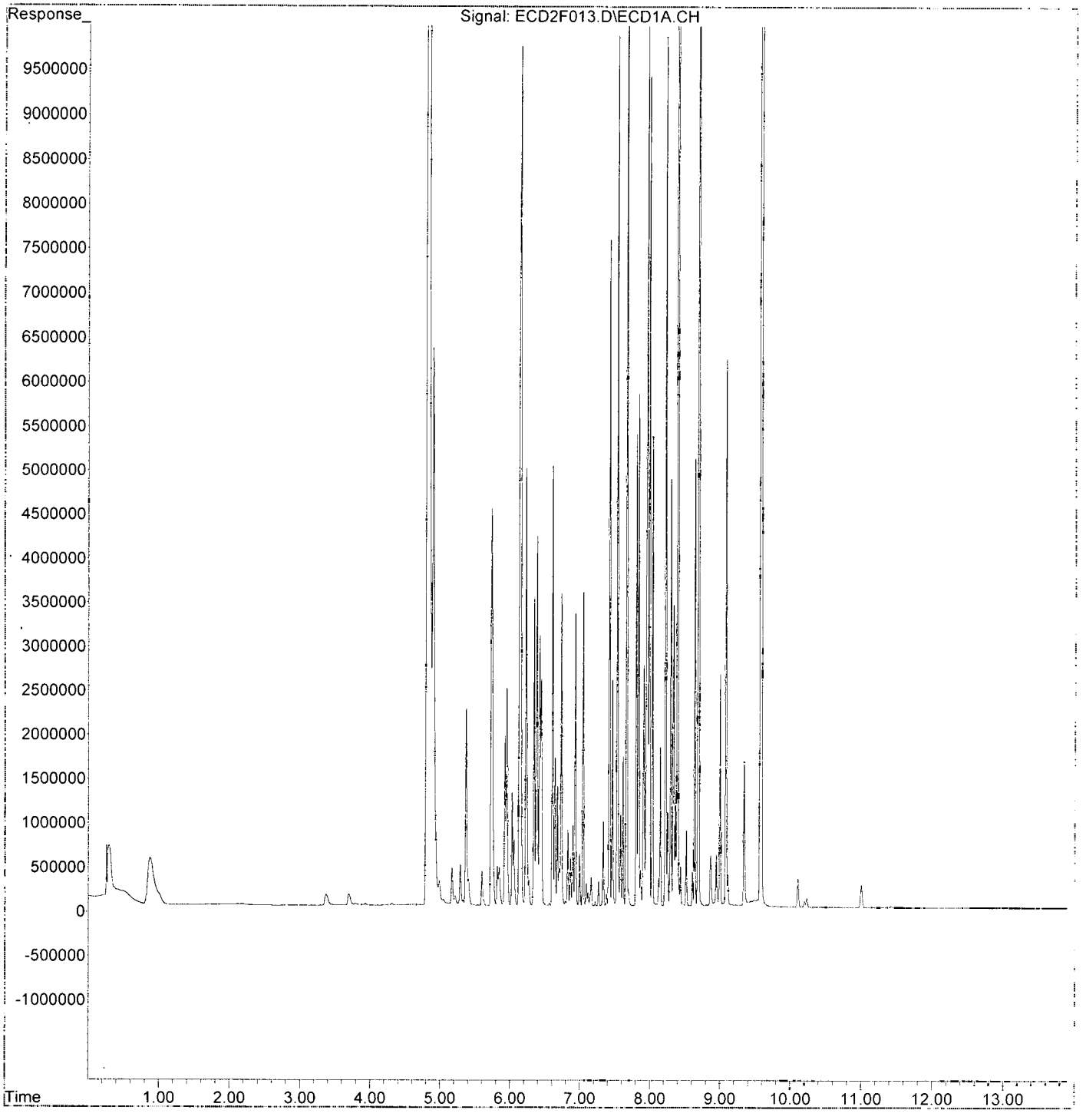
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.664	12508346	2117.214	ng/ml
49)	Aroclor 1262 (2)	7.988	9367265	1137.122	ng/ml
50)	Aroclor 1262 (3)	8.221	9779054	1420.522	ng/ml
51)	Aroclor 1262 (4)	8.392	23529318	1587.634	ng/ml
52)	Aroclor 1262 (5)	8.691	14945054	1676.807	ng/ml
53)	Aroclor 1262 (6)	9.082	6194753	1292.961	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.221	9779054	2715.049	ng/ml
56)	Aroclor 1268 (2)	8.638	5072402	307.019	ng/ml
57)	Aroclor 1268 (3)	8.691	14945054	1075.825	ng/ml
58)	Aroclor 1268 (4)	8.866	585836	46.636	ng/ml
59)	Aroclor 1268 (5)	9.082	6194753	1130.455	ng/ml
60)	Aroclor 1268 (6)	9.341	1641861	47.896	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 18:13
Operator : MJB / KAK
Sample : 9K05021-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:08:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Oct 02 17:06:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F016.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:06
Operator : MJB / KAK
Sample : 9K05021-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:09:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:09:50 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	5.167	493272	475.235	ng/ml
10)	Aroclor 1221 (2)	5.285	326257	503.058	ng/ml
11)	Aroclor 1221 (3)	5.366	1068414	489.455	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F016.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:06
Operator : MJB / KAK
Sample : 9K05021-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:09:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:09:50 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

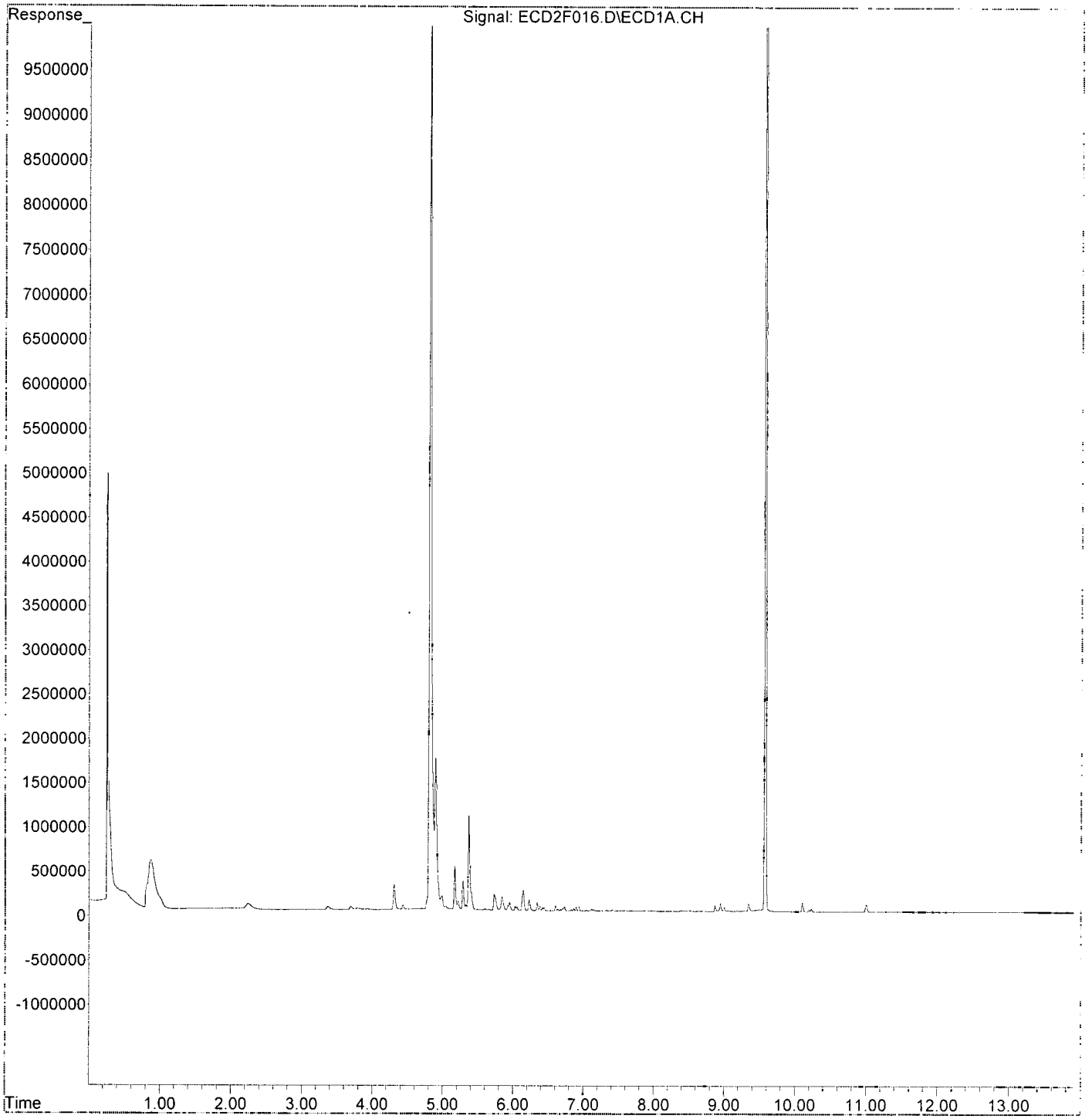
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F016.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:06
Operator : MJB / KAK
Sample : 9K05021-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:09:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:09:50 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:23
Operator : MJB / KAK
Sample : 9K05021-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:12:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:12:26 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	5.366	863130	490.343	ng/ml
14)	Aroclor 1232 (2)	6.141	1270816	517.793	ng/ml
15)	Aroclor 1232 (3)	6.223	695618	548.890	ng/ml
16)	Aroclor 1232 (4)	6.380	497241	579.849	ng/ml
17)	Aroclor 1232 (5)	6.602	633662	559.100	ng/ml
18)	Aroclor 1232 (6)	6.729	516903	552.952	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:23
Operator : MJB / KAK
Sample : 9K05021-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:12:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:12:26 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

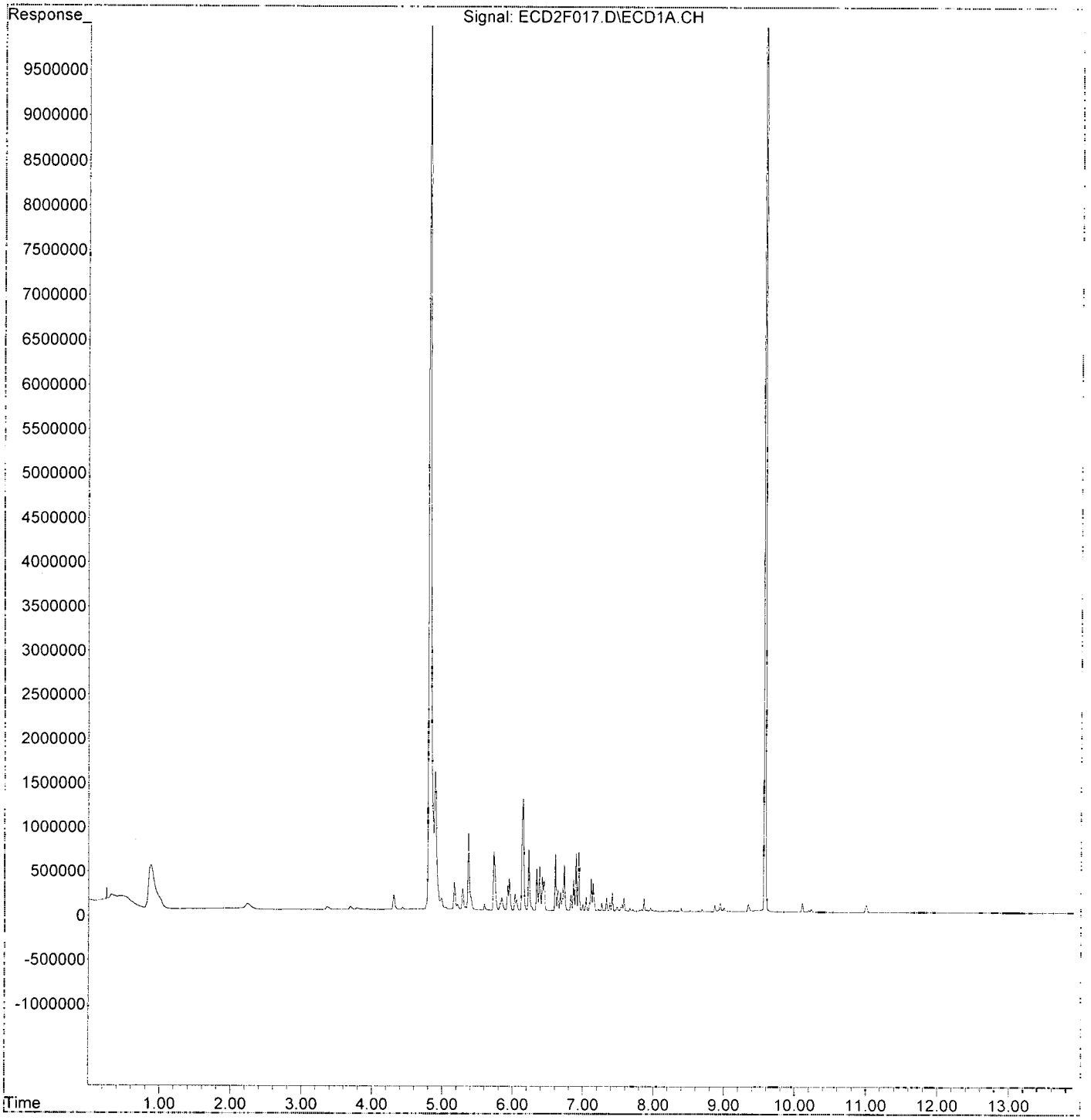
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:23
Operator : MJB / KAK
Sample : 9K05021-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:12:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:12:26 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:41
Operator : MJB / KAK
Sample : 9K05021-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:14:32 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:14:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	5.727	1146052	519.310	ng/ml
21)	Aroclor 1242 (2)	6.141	2307163	506.778	ng/ml
22)	Aroclor 1242 (3)	6.223	1213031	519.640	ng/ml
23)	Aroclor 1242 (4)	6.380	1021907	582.330	ng/ml
24)	Aroclor 1242 (5)	6.603	1306458	546.797	ng/ml
25)	Aroclor 1242 (6)	6.729	1064399	537.873	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/6/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:41
Operator : MJB / KAK
Sample : 9K05021-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:14:32 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:14:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

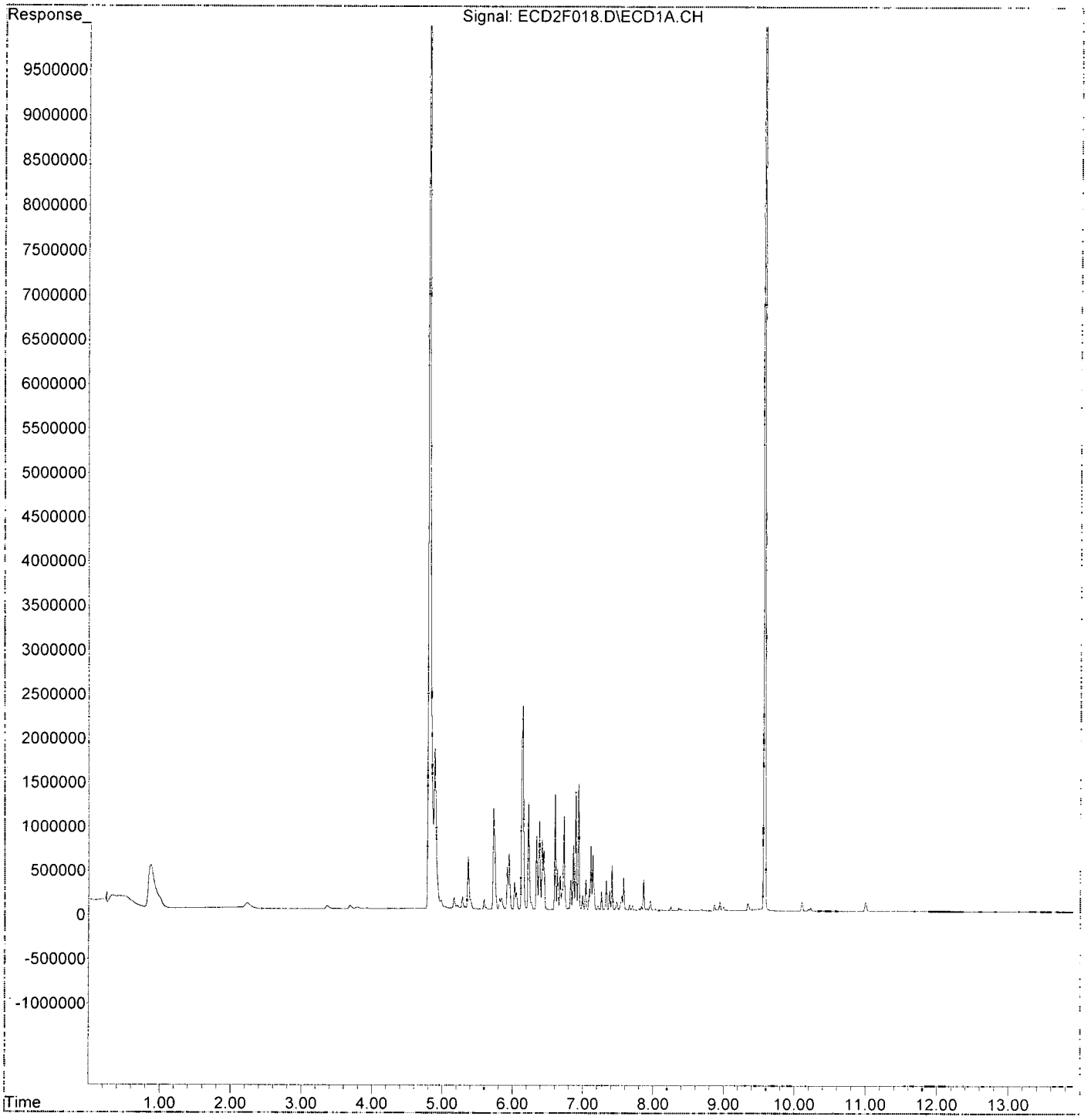
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:41
Operator : MJB / KAK
Sample : 9K05021-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:14:32 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:14:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:58
Operator : MJB / KAK
Sample : 9K05021-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:16:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:16:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	6.140	1483863	501.832	ng/ml
28)	Aroclor 1248 (2)	6.380	1825982	526.824	ng/ml
29)	Aroclor 1248 (3)	6.602	2181173	556.456	ng/ml
30)	Aroclor 1248 (4)	6.897	2502252	522.249	ng/ml
31)	Aroclor 1248 (5)	6.934	2566205	512.870	ng/ml
32)	Aroclor 1248 (6)	7.411	1395147	535.495	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/16/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:58
Operator : MJB / KAK
Sample : 9K05021-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:16:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:16:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

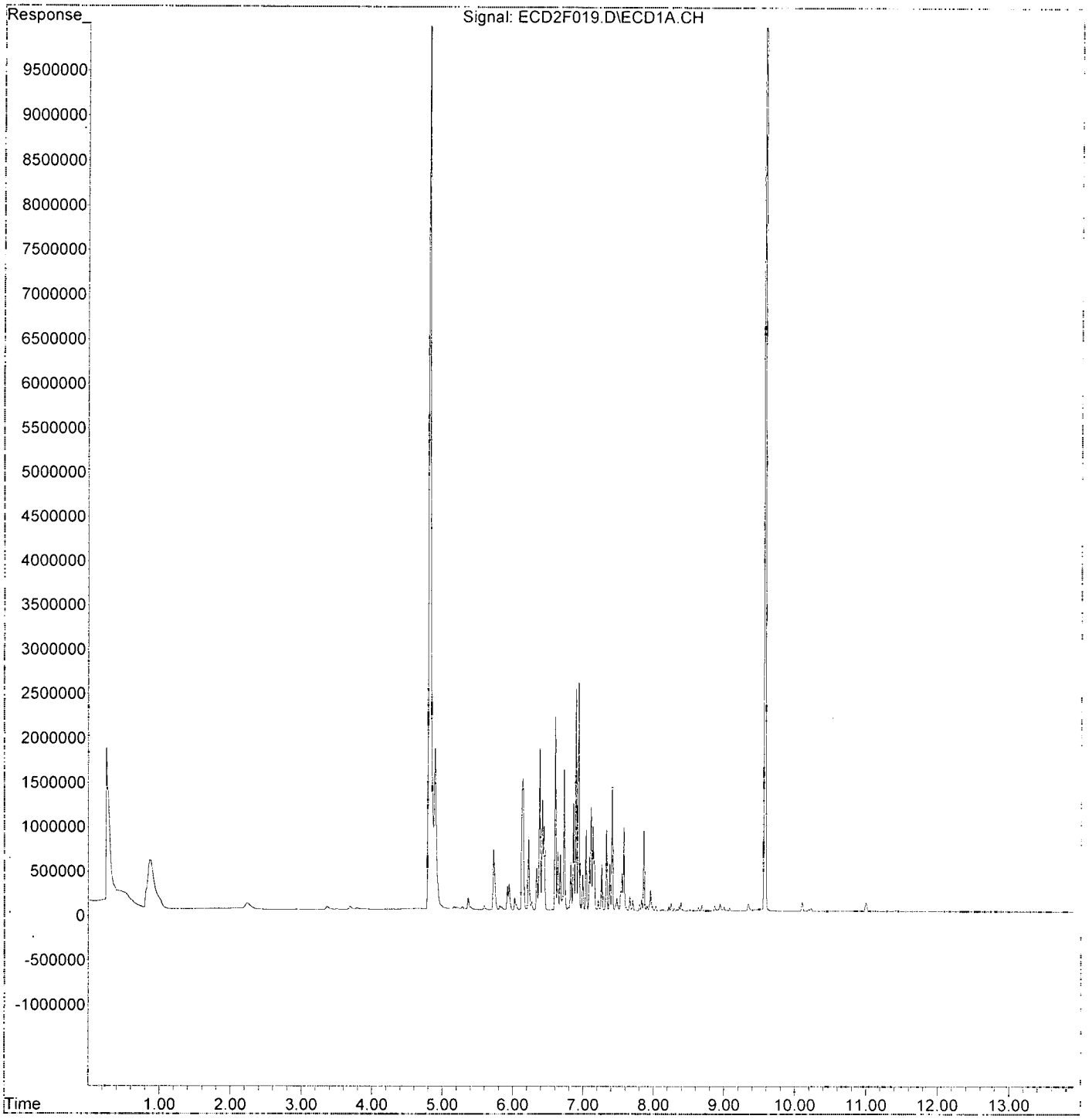
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 19:58
Operator : MJB / KAK
Sample : 9K05021-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:16:51 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:16:29 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:16
Operator : MJB / KAK
Sample : 9K05021-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:19:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:18:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	0.000	0	N.D.	ng/mld
62)	S	DCBP (S)	0.000	0	N.D.	ng/mld
		Target Compounds				
2)		Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)		Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)		Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)		Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)		Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)		Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)		Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)		Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)		Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)		Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)		Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)		Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)		Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)		Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)		Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)		Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)		Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)		Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)		Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)		Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)		Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)		Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)		Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)		Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)		Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)		Aroclor 1254 (1)	6.930	2647302	559.967	ng/ml
35)		Aroclor 1254 (2)	7.041	3152682	560.114	ng/ml
36)		Aroclor 1254 (3)	7.412	4753936	555.679	ng/ml
37)		Aroclor 1254 (4)	7.578	3186799	547.276	ng/ml
38)		Aroclor 1254 (5)	7.959	3283779	562.266	ng/ml
39)		Aroclor 1254 (6)	8.251	1041564	551.172	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)		Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)		Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)		Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)		Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)		Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/16/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:16
Operator : MJB / KAK
Sample : 9K05021-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:19:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:18:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

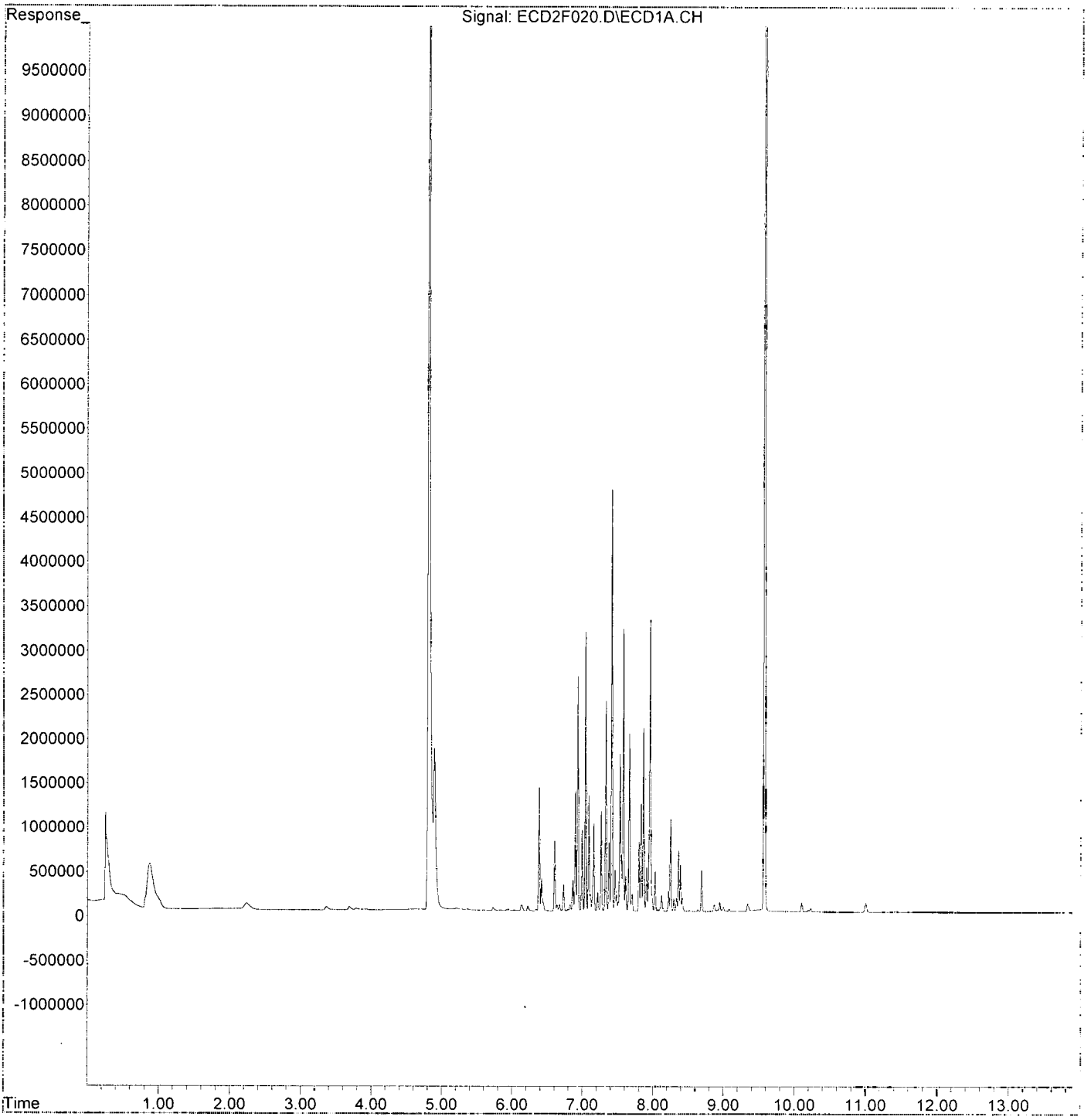
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:16
Operator : MJB / KAK
Sample : 9K05021-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:19:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:18:54 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:34
Operator : MJB / KAK
Sample : 9K05021-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:21:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:20:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/6/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	0.000	0	N.D.	ng/mld
62)	S	DCBP (S)	0.000	0	N.D.	ng/mld
		Target Compounds				
2)		Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)		Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)		Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)		Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)		Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)		Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)		Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)		Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)		Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)		Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)		Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)		Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)		Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)		Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)		Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)		Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)		Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)		Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)		Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)		Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)		Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)		Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)		Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)		Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)		Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)		Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)		Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)		Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)		Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)		Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)		Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)		Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)		Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)		Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)		Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)		Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)		Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)		Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:34
Operator : MJB / KAK
Sample : 9K05021-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:21:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:20:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.663	3332517	564.076	ng/ml
49)	Aroclor 1262 (2)	7.987	4666720	566.508	ng/ml
50)	Aroclor 1262 (3)	8.219	3968015	576.401	ng/ml
51)	Aroclor 1262 (4)	8.390	8789788	593.089	ng/ml
52)	Aroclor 1262 (5)	8.688	5377889	603.389	ng/ml
53)	Aroclor 1262 (6)	9.080	2847671	594.362	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

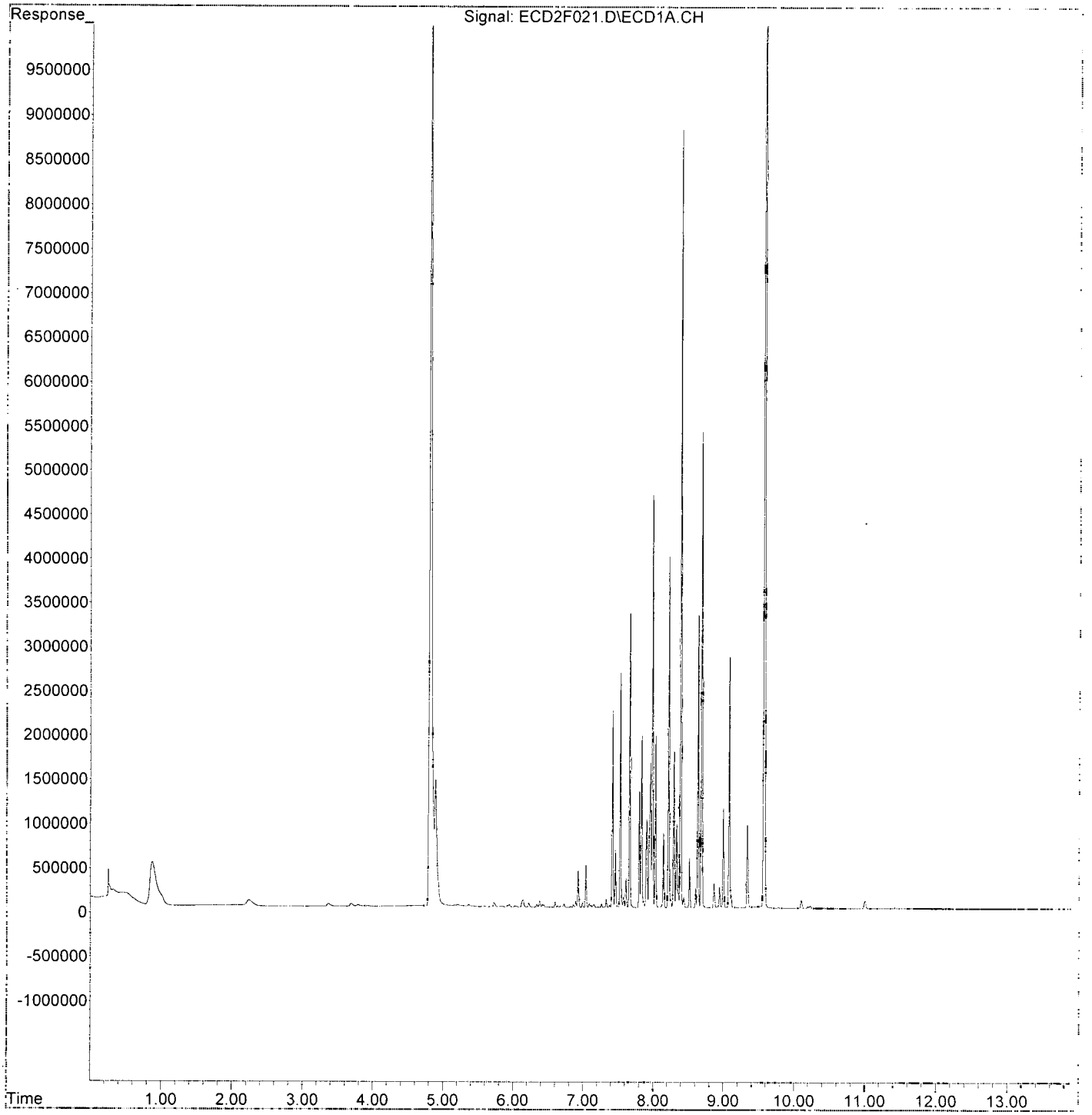
11/16/19

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:34
Operator : MJB / KAK
Sample : 9K05021-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:21:04 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:20:58 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:51
Operator : MJB / KAK
Sample : 9K05021-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:22:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/16/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:51
Operator : MJB / KAK
Sample : 9K05021-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:22:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	8.212	2055692	570.741	ng/ml
56)	Aroclor 1268 (2)	8.638	10159535	614.930	ng/ml
57)	Aroclor 1268 (3)	8.685	8384259	603.544	ng/ml
58)	Aroclor 1268 (4)	8.867	7611285	605.903	ng/ml
59)	Aroclor 1268 (5)	9.081	3147569	574.387	ng/ml
60)	Aroclor 1268 (6)	9.340	21655928	631.745	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

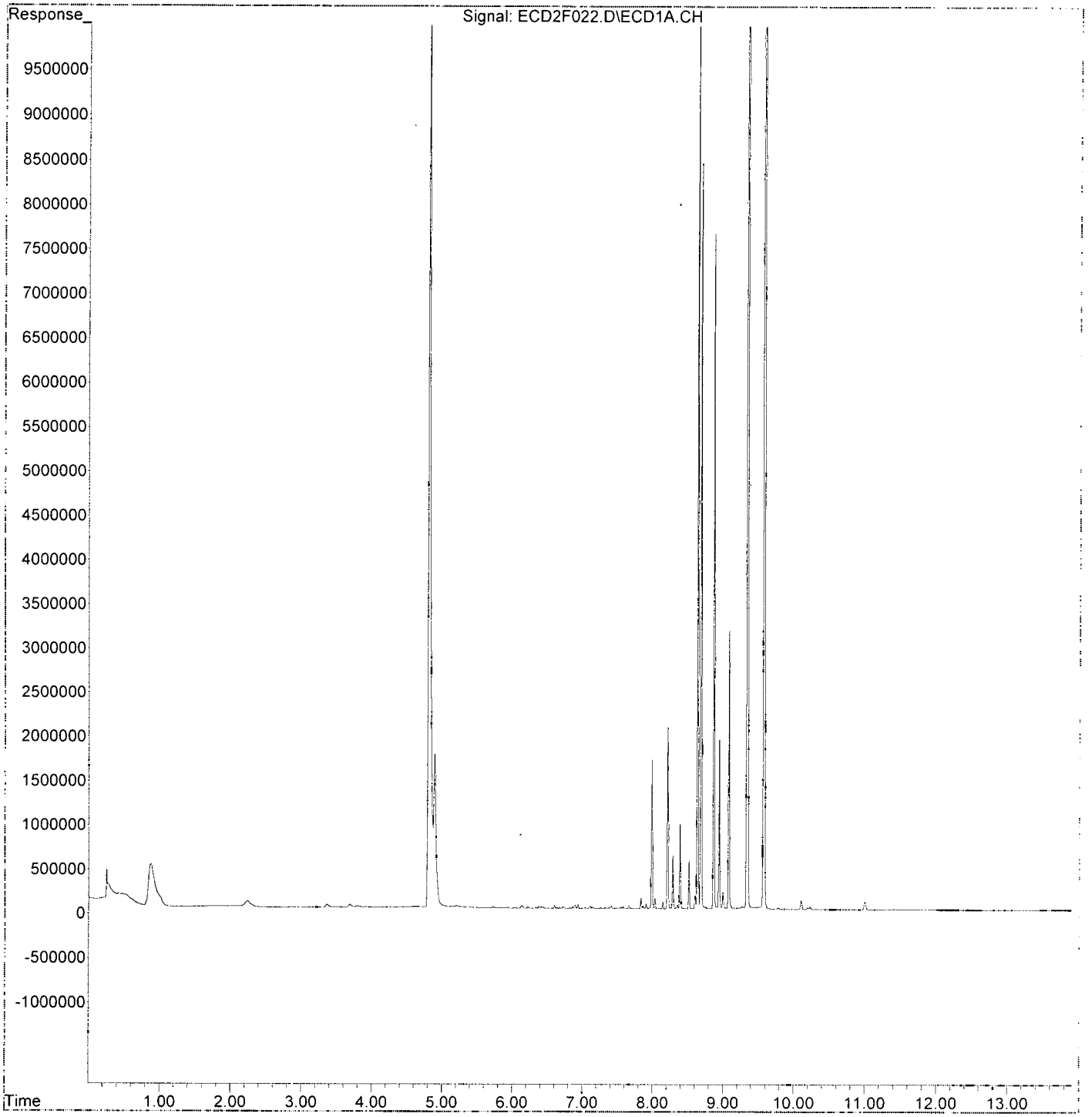
11/6/19

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9K05021\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 05 Nov 2019 20:51
Operator : MJB / KAK
Sample : 9K05021-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 06 10:22:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_191105.M
Quant Title : PCB Data Analysis
QLast Update : Wed Nov 06 10:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9K14008 (Cal ID A9K1502) DUALECD1R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K14008**	Instrument:	**DUALECD1R**
Date:	**11/14/19 07:22**	Calibration:	**A9K1502**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14008-ICB1	Water	QC	QC				A19K026
2	9K14008-CAL1	Water	QC	QC				A19F250
3	9K14008-CAL2	Water	QC	QC				A19F251
4	9K14008-CAL3	Water	QC	QC				A19F252
5	9K14008-CAL4	Water	QC	QC				A19F253
6	9K14008-CAL5	Water	QC	QC				A19F247
7	9K14008-CAL6	Water	QC	QC				A19F248
8	9K14008-CAL7	Water	QC	QC				A19F249
9	9K14008-IBL1	Water	QC	QC				
10	9K14008-ICV1	Water	QC	QC				A19H459
11	9K14008-CAL8	Water	QC	QC				A19H447
12	9K14008-CAL9	Water	QC	QC				A19H448
13	9K14008-CALA	Water	QC	QC				A19H449
14	9K14008-CALB	Water	QC	QC				A19H450
15	9K14008-CALC	Water	QC	QC				A19H451
16	9K14008-CALD	Water	QC	QC				A19H452
17	9K14008-CALE	Water	QC	QC				A19H453
18	9K14008-ICV2	Water	QC	QC				A19H405
19	9K14008-ICV3	Water	QC	QC				A19J367
20	9K14008-ICV4	Water	QC	QC				A19H406
21	9K14008-ICV5	Water	QC	QC				A19E303

Comments:

Data Entered By: 11/15/19

Data Reviewed By: 11/15/19

Calibration Status Report HP G1530A

Method Path : J:\METHODS\
Method File : RECD1_QUANTPCB_191114.M
Title : PCB Data Analysis
Last Update : Fri Nov 15 08:50:30 2019
Response Via : Initial Calibration

A9K1502
11/15/19

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	I:\DATA\9K14008\ECD1R004.D
2	2	25	0	I:\DATA\9K14008\ECD1R005.D
3	3	50	0	I:\DATA\9K14008\ECD1R006.D
4	4	100	0	I:\DATA\9K14008\ECD1R007.D
5	5	250	0	I:\DATA\9K14008\ECD1R019.D
6	6	500	0	I:\DATA\9K14008\ECD1R009.D
7	7	800	0	I:\DATA\9K14008\ECD1R010.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Nov 15 08:47 2019	Nov 15 08:16 2019	14 Nov 2019 8:40
2	2	Nov 15 08:48 2019	Nov 15 08:17 2019	14 Nov 2019 8:58
3	3	Nov 15 08:48 2019	Nov 15 08:18 2019	14 Nov 2019 9:16
4	4	Nov 15 08:48 2019	Nov 15 08:19 2019	14 Nov 2019 9:35
5	5	Nov 15 08:50 2019	Nov 15 08:35 2019	14 Nov 2019 13:13
6	6	Nov 15 08:48 2019	Nov 15 08:21 2019	14 Nov 2019 10:11
7	7	Nov 15 08:49 2019	Nov 15 08:22 2019	14 Nov 2019 10:29

RECD1_QUANTPCB_191114.M Fri Nov 15 10:06:42 2019

Response Factor Report HP G1530A

Method Path : J:\METHODS\
Method File : RECD1_QUANTPCB_191114.M
Title : PCB Data Analysis
Last Update : Fri Nov 15 08:50:30 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD1R004.D 2 =ECD1R005.D 3 =ECD1R006.D
4 =ECD1R007.D 5 =ECD1R019.D 6 =ECD1R009.D

11/15/19

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	S	TCMX (S)	2.905	2.947	2.978	2.946	3.145	2.913	2.977	E4	2.75
2)		Aroclor 1016 ...	1.237	1.139	1.050	0.964	0.932	0.910	1.018	E3	12.76 ✓
3)		Aroclor 1016 ...	2.117	1.976	1.873	1.823	1.794	1.760	1.878	E3	6.72 ✓
4)		Aroclor 1016 ...	9.971	9.477	9.116	8.352	8.157	8.224	8.805	E2	8.15 ✓
5)		Aroclor 1016 ...	1.094	1.031	0.901	0.855	0.818	0.798	0.901	E3	13.00 ✓
6)		Aroclor 1016 ...	1.196	1.115	1.009	0.930	0.918	0.869	0.990	E3	12.41 ✓
7)		Aroclor 1016 (6)	1.208	1.111	1.004	0.944	0.918	0.866	0.995	E3	12.39 ✓
8)		Aroclor 1016 ...							0.000		-1.00
9)		Aroclor 1221 (1)					2.547		2.547	E2	0.00
10)		Aroclor 1221 (2)					2.538		2.538	E2	0.00
11)		Aroclor 1221 (3)					8.383		8.383	E2	0.00
12)		Aroclor 1221 ...							0.000		-1.00
13)		Aroclor 1232 (1)					6.399		6.399	E2	0.00
14)		Aroclor 1232 (2)					4.042		4.042	E2	0.00
15)		Aroclor 1232 (3)					7.627		7.627	E2	0.00
16)		Aroclor 1232 (4)					3.486		3.486	E2	0.00
17)		Aroclor 1232 (5)					2.994		2.994	E2	0.00
18)		Aroclor 1232 (6)					3.463		3.463	E2	0.00
19)		Aroclor 1232 ...							0.000		-1.00
20)		Aroclor 1242 ...					7.313		7.313	E2	0.00
21)		Aroclor 1242 ...					1.402		1.402	E3	0.00
22)		Aroclor 1242 ...					6.645		6.645	E2	0.00
23)		Aroclor 1242 ...					5.994		5.994	E2	0.00
24)		Aroclor 1242 ...					7.054		7.054	E2	0.00
25)		Aroclor 1242 (6)					7.143		7.143	E2	0.00
26)		Aroclor 1242 ...							0.000		-1.00
27)		Aroclor 1248 ...					9.217		9.217	E2	0.00
28)		Aroclor 1248 ...					1.173		1.173	E3	0.00
29)		Aroclor 1248 ...					1.080		1.080	E3	0.00
30)		Aroclor 1248 ...					1.305		1.305	E3	0.00
31)		Aroclor 1248 ...					1.718		1.718	E3	0.00
32)		Aroclor 1248 (6)					1.479		1.479	E3	0.00
33)		Aroclor 1248 ...							0.000		-1.00
34)		Aroclor 1254 ...					1.534		1.534	E3	0.00
35)		Aroclor 1254 ...					2.516		2.516	E3	0.00
36)		Aroclor 1254 ...					2.670		2.670	E3	0.00
37)		Aroclor 1254 ...					1.921		1.921	E3	0.00
38)		Aroclor 1254 ...					1.945		1.945	E3	0.00
39)		Aroclor 1254 (6)					5.846		5.846	E2	0.00
40)		Aroclor 1254 ...							0.000		-1.00
41)		Aroclor 1260 ...	2.296	2.114	1.914	1.809	1.800	1.785	1.941	E3	9.94 ✓
42)		Aroclor 1260 ...	2.777	2.482	2.380	2.257	2.273	2.167	2.371	E3	8.67 ✓
43)		Aroclor 1260 (3)	2.660	2.511	2.394	2.334	2.272	2.305	2.414	E3	5.58 ✓
44)		Aroclor 1260 (4)	3.896	3.626	3.372	3.458	3.477	3.419	3.552	E3	5.04 ✓
45)		Aroclor 1260 (5)	2.370	2.179	2.040	2.048	2.006	1.998	2.102	E3	6.29 ✓
46)		Aroclor 1260 (6)	9.802	9.185	8.225	7.960	7.723	7.454	8.325	E2	10.22 ✓
47)		Aroclor 1260 ...							0.000		-1.00
48)		Aroclor 1262 (1)					1.871		1.871	E3	0.00
49)		Aroclor 1262 (2)					2.584		2.584	E3	0.00
50)		Aroclor 1262 (3)					2.033		2.033	E3	0.00
51)		Aroclor 1262 (4)					4.115		4.115	E3	0.00
52)		Aroclor 1262 (5)					2.509		2.509	E3	0.00
53)		Aroclor 1262 (6)					1.130		1.130	E3	0.00
54)		Aroclor 1262 ...							0.000		-1.00
55)		Aroclor 1268 (1)					1.088		1.088	E3	0.00
56)		Aroclor 1268 (2)					4.383		4.383	E3	0.00
57)		Aroclor 1268 (3)					3.589		3.589	E3	0.00
58)		Aroclor 1268 (4)					3.074		3.074	E3	0.00
59)		Aroclor 1268 (5)					1.231		1.231	E3	0.00
60)		Aroclor 1268 (6)					7.684		7.684	E3	0.00

Response Factor Report HP G1530A

Method Path : J:\METHODS\
Method File : RECD1_QUANTPCB_191114.M
Title : PCB Data Analysis
Last Update : Fri Nov 15 08:50:30 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD1R004.D 2 =ECD1R005.D 3 =ECD1R006.D
4 =ECD1R007.D 5 =ECD1R019.D 6 =ECD1R009.D

	Compound	1	2	3	4	5	6	Avg	%RSD
61)	Aroclor 1268 ...							0.000	-1.00
62) S	DCBP (S)	1.565	1.535	1.502	1.503	1.591	1.471	1.546 E4	4.04 ✓

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : J:\METHODS\
Method File : RECD1_QUANTPCB_191114.M
Title : PCB Data Analysis
Last Update : Fri Nov 15 08:50:30 2019
Response Via : Initial Calibration

11/15/19

Total Cpnds : 62

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	5.771	1.000	A	H	L
2		Aroclor 1016 (1)	6.448	1.000	A	H	R
3		Aroclor 1016 (2)	6.941	1.000	A	H	R
4		Aroclor 1016 (3)	7.070	1.000	A	H	R
5		Aroclor 1016 (4)	7.157	1.000	A	H	R
6		Aroclor 1016 (5)	7.202	1.000	A	H	R
7		Aroclor 1016 (6)	7.329	1.000	A	H	R
8		Aroclor 1016 - AVE	2.820	1.000	A	H	R
9		Aroclor 1221 (1)	5.948	1.000	A	H	R
10		Aroclor 1221 (2)	6.021	1.000	A	H	R
11		Aroclor 1221 (3)	6.109	1.000	A	H	R
12		Aroclor 1221 - AVE	2.820	1.000	A	H	R
13		Aroclor 1232 (1)	6.109	1.000	A	H	R
14		Aroclor 1232 (2)	6.448	1.000	A	H	R
15		Aroclor 1232 (3)	6.942	1.000	A	H	R
16		Aroclor 1232 (4)	7.070	1.000	A	H	R
17		Aroclor 1232 (5)	7.157	1.000	A	H	R
18		Aroclor 1232 (6)	7.329	1.000	A	H	R
19		Aroclor 1232 - AVE	2.820	1.000	A	H	R
20		Aroclor 1242 (1)	6.449	1.000	A	H	R
21		Aroclor 1242 (2)	6.942	1.000	A	H	R
22		Aroclor 1242 (3)	7.070	1.000	A	H	R
23		Aroclor 1242 (4)	7.157	1.000	A	H	R
24		Aroclor 1242 (5)	7.203	1.000	A	H	R
25		Aroclor 1242 (6)	7.329	1.000	A	H	R
26		Aroclor 1242 - AVE	2.820	1.000	A	H	R
27		Aroclor 1248 (1)	6.914	1.000	A	H	R
28		Aroclor 1248 (2)	7.157	1.000	A	H	R
29		Aroclor 1248 (3)	7.202	1.000	A	H	R
30		Aroclor 1248 (4)	7.328	1.000	A	H	R
31		Aroclor 1248 (5)	7.697	1.000	A	H	R
32		Aroclor 1248 (6)	7.856	1.000	A	H	R
33		Aroclor 1248 - AVE	2.820	1.000	A	H	R
34		Aroclor 1254 (1)	7.675	1.000	A	H	R
35		Aroclor 1254 (2)	7.857	1.000	A	H	R
36		Aroclor 1254 (3)	8.170	1.000	A	H	R
37		Aroclor 1254 (4)	8.411	1.000	A	H	R
38		Aroclor 1254 (5)	8.747	1.000	A	H	R
39		Aroclor 1254 (6)	8.982	1.000	A	H	R
40		Aroclor 1254 - AVE	2.820	1.000	A	H	R
41		Aroclor 1260 (1)	8.306	1.000	A	H	R
42		Aroclor 1260 (2)	8.514	1.000	A	H	R
43		Aroclor 1260 (3)	8.749	1.000	A	H	R
44		Aroclor 1260 (4)	9.252	1.000	A	H	R
45		Aroclor 1260 (5)	9.528	1.000	A	H	R
46		Aroclor 1260 (6)	10.135	1.000	A	H	R
47		Aroclor 1260 - AVE	2.820	1.000	A	H	R
48		Aroclor 1262 (1)	8.514	1.000	A	H	R
49		Aroclor 1262 (2)	8.818	1.000	A	H	R
50		Aroclor 1262 (3)	8.999	1.000	A	H	R
51		Aroclor 1262 (4)	9.252	1.000	A	H	R
52		Aroclor 1262 (5)	9.529	1.000	A	H	R
53		Aroclor 1262 (6)	10.134	1.000	A	H	R
54		Aroclor 1262 - AVE	2.831	1.000	A	H	R
55		Aroclor 1268 (1)	9.042	1.000	A	H	R
56		Aroclor 1268 (2)	9.530	1.000	A	H	R

57		Aroclor 1268 (3)	9.600	1.000	A	H	R
58		Aroclor 1268 (4)	9.828	1.000	A	H	R
59		Aroclor 1268 (5)	10.134	1.000	A	H	R
60		Aroclor 1268 (6)	10.510	1.000	A	H	R
61		Aroclor 1268 - AVE	2.820	1.000	A	H	R
62	S	DCBP (S)	10.845	1.000	A	H	R

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

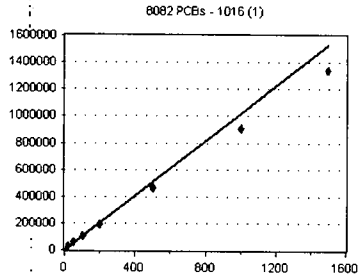
RECD1_QUANTPCB_191114.M Fri Nov 15 10:06:27 2019

Element Calibration Review Sheet

Calibration ID: **A9K1502** Instrument: **DUALECD1R** Calibration Date: **11/15/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD1_QUANTPCB_19111**

1016 (1)

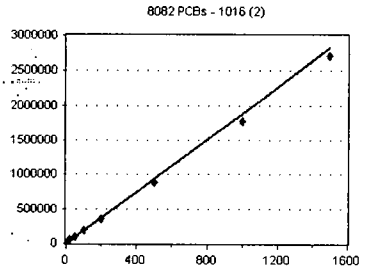


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	24739	1236.950	6.45
9K14008-CAL2	50	56969	1139.380	6.45
9K14008-CAL3	100	105047	1050.470	6.45
9K14008-CAL4	200	192862	964.310	6.45
9K14008-CAL5	500	465811	931.622	6.45
9K14008-CAL6	1000	910088	910.088	6.45
9K14008-CAL7	1500	1340249	893.499	6.45

AVE RF **1018.046** RF RSD **12.76** AVE RT **6.45**

1016 (2)

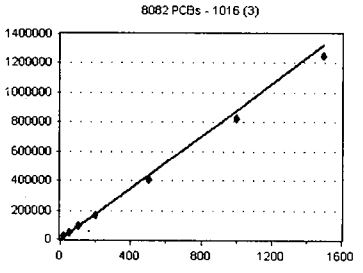


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	42331	2116.550	6.94
9K14008-CAL2	50	98791	1975.820	6.94
9K14008-CAL3	100	187283	1872.830	6.94
9K14008-CAL4	200	364568	1822.840	6.94
9K14008-CAL5	500	897218	1794.436	6.94
9K14008-CAL6	1000	1760361	1760.361	6.94
9K14008-CAL7	1500	2709146	1806.097	6.94

AVE RF **1878.419** RF RSD **6.72** AVE RT **6.94**

1016 (3)

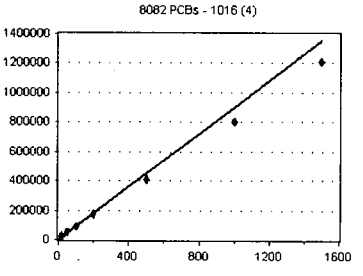


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	19941	997.050	7.07
9K14008-CAL2	50	47384	947.680	7.07
9K14008-CAL3	100	91164	911.640	7.07
9K14008-CAL4	200	167039	835.195	7.07
9K14008-CAL5	500	407855	815.710	7.07
9K14008-CAL6	1000	822421	822.421	7.07
9K14008-CAL7	1500	1250324	833.549	7.07

AVE RF **880.464** RF RSD **8.15** AVE RT **7.07**

1016 (4)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	21875	1093.750	7.16
9K14008-CAL2	50	51568	1031.360	7.16
9K14008-CAL3	100	90145	901.450	7.16
9K14008-CAL4	200	170996	854.980	7.16
9K14008-CAL5	500	409046	818.092	7.16
9K14008-CAL6	1000	798442	798.442	7.16
9K14008-CAL7	1500	1212068	808.045	7.16

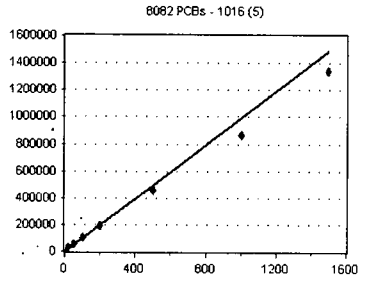
AVE RF **900.874** RF RSD **13.00** AVE RT **7.16**

Element Calibration Review Sheet

Calibration ID: **A9K1502** Instrument: **DUALECD1R** Calibration Date: **11/15/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD1_QUANTPCB_19111**

1016 (5)

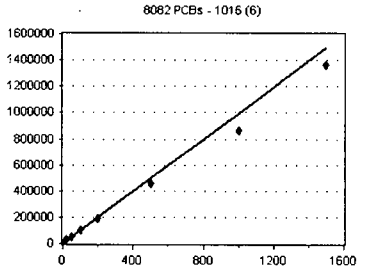


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	23916	1195.800	7.20
9K14008-CAL2	50	55745	1114.900	7.20
9K14008-CAL3	100	100899	1008.990	7.20
9K14008-CAL4	200	185952	929.760	7.20
9K14008-CAL5	500	458751	917.502	7.20
9K14008-CAL6	1000	869103	869.103	7.20
9K14008-CAL7	1500	1344409	896.273	7.20

AVE RF **990.333** RF RSD **12.41** AVE RT **7.20**

1016 (6)

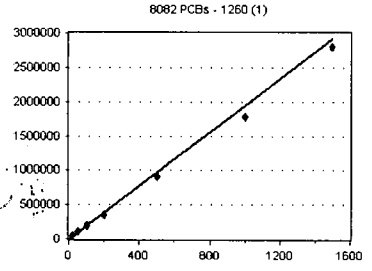


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	24158	1207.900	7.33
9K14008-CAL2	50	55560	1111.200	7.33
9K14008-CAL3	100	100441	1004.410	7.33
9K14008-CAL4	200	188795	943.975	7.33
9K14008-CAL5	500	459123	918.246	7.33
9K14008-CAL6	1000	865672	865.672	7.33
9K14008-CAL7	1500	1366607	911.071	7.33

AVE RF **994.639** RF RSD **12.39** AVE RT **7.33**

1260 (1)

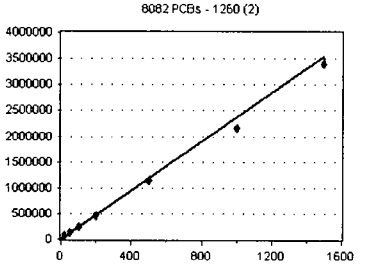


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	45927	2296.350	8.31
9K14008-CAL2	50	105677	2113.540	8.31
9K14008-CAL3	100	191433	1914.330	8.31
9K14008-CAL4	200	361791	1808.955	8.31
9K14008-CAL5	500	900101	1800.202	8.31
9K14008-CAL6	1000	1784866	1784.866	8.31
9K14008-CAL7	1500	2806486	1870.991	8.31

AVE RF **1941.319** RF RSD **9.94** AVE RT **8.31**

1260 (2)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	55539	2776.950	8.51
9K14008-CAL2	50	124075	2481.500	8.52
9K14008-CAL3	100	237983	2379.830	8.51
9K14008-CAL4	200	451338	2256.690	8.51
9K14008-CAL5	500	1136472	2272.944	8.51
9K14008-CAL6	1000	2167457	2167.457	8.52
9K14008-CAL7	1500	3389021	2259.347	8.52

AVE RF **2370.674** RF RSD **8.67** AVE RT **8.51**

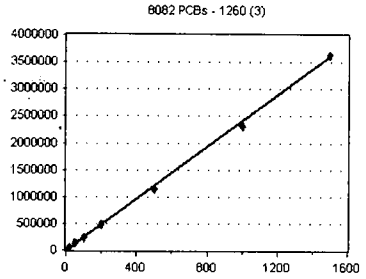
Element Calibration Review Sheet

Calibration ID: **A9K1502** Instrument: **DUALECD1R** Calibration Date: **11/15/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD1_QUANTPCB_19111**

1260 (3)

Curve Fit: **AVERAGE RF**

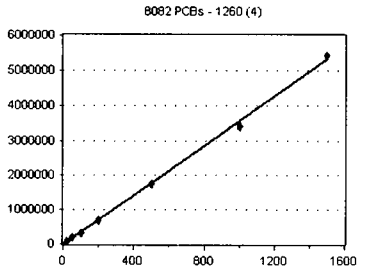


Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	53201	2660.050	8.75
9K14008-CAL2	50	125541	2510.820	8.75
9K14008-CAL3	100	239449	2394.490	8.75
9K14008-CAL4	200	466742	2333.710	8.75
9K14008-CAL5	500	1135933	2271.866	8.75
9K14008-CAL6	1000	2304609	2304.609	8.75
9K14008-CAL7	1500	3635158	2423.439	8.75

AVE RF **2414.141** RF RSD **5.58** AVE RT **8.75**

1260 (4)

Curve Fit: **AVERAGE RF**

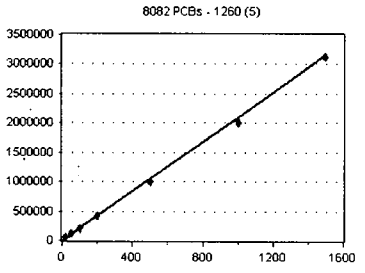


Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	77910	3895.500	9.25
9K14008-CAL2	50	181287	3625.740	9.25
9K14008-CAL3	100	337225	3372.250	9.25
9K14008-CAL4	200	691570	3457.850	9.25
9K14008-CAL5	500	1738359	3476.718	9.25
9K14008-CAL6	1000	3418561	3418.561	9.25
9K14008-CAL7	1500	5421723	3614.482	9.25

AVE RF **3551.586** RF RSD **5.04** AVE RT **9.25**

1260 (5)

Curve Fit: **AVERAGE RF**

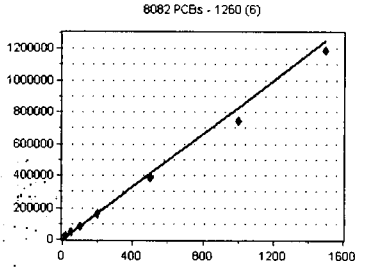


Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	47395	2369.750	9.53
9K14008-CAL2	50	108929	2178.580	9.53
9K14008-CAL3	100	204040	2040.400	9.53
9K14008-CAL4	200	409612	2048.060	9.53
9K14008-CAL5	500	1002994	2005.988	9.53
9K14008-CAL6	1000	1997897	1997.897	9.53
9K14008-CAL7	1500	3113269	2075.513	9.53

AVE RF **2102.313** RF RSD **6.29** AVE RT **9.53**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	20	19605	980.250	10.13
9K14008-CAL2	50	45923	918.460	10.13
9K14008-CAL3	100	82253	822.530	10.13
9K14008-CAL4	200	159199	795.995	10.14
9K14008-CAL5	500	386173	772.346	10.14
9K14008-CAL6	1000	745363	745.363	10.13
9K14008-CAL7	1500	1189118	792.745	10.13

AVE RF **832.527** RF RSD **10.22** AVE RT **10.13**

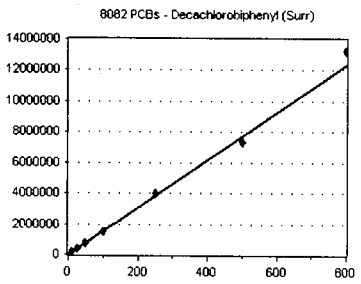
Element Calibration Review Sheet

Calibration ID: **A9K1502** Instrument: **DUALECD1R** Calibration Date: **11/15/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD1_QUANTPCB_19111**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9K14008-CAL1	10	156500	15650.000	10.85
9K14008-CAL2	25	383773	15350.920	10.84
9K14008-CAL3	50	751245	15024.900	10.84
9K14008-CAL4	100	1503461	15034.610	10.84
9K14008-CAL5	250	3978485	15913.940	10.85
9K14008-CAL6	500	7354134	14708.270	10.84
9K14008-CAL7	800	322445E+07	16530.560	10.85

AVE RF **15459.030** RF RSD **4.04** AVE RT **10.84**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K14008

Analysis Included

1311/8082 TCLP PCBs
608 PCBs
608 PCBs - LL (1000/1mL) +1262/68
8082 PCBs
8082 PCBs - Low Level (2mL FV)
8082 PCBs - Low Level (2mL FV) +1262/68
8082 PCBs - Low Level (1000/1mL)
8082 PCBs - Low Level (1000/1mL) +1262/68
8082 PCBs - Low Level (30g/2mL)
8082 PCBs + 1262/1268
8082 PCBs in Trans. Oil - LL

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9K14008-ICB1	Initial Cal Blank	Water	A19K026		11/14/2019 8:22:00AM
9K14008-CAL1	Cal Standard	Water	A19F250	"	11/14/2019 8:40:00AM
9K14008-CAL2	Cal Standard	Water	A19F251	"	11/14/2019 8:58:00AM
9K14008-CAL3	Cal Standard	Water	A19F252	"	11/14/2019 9:16:00AM
9K14008-CAL4	Cal Standard	Water	A19F253	"	11/14/2019 9:35:00AM
9K14008-CAL5	Cal Standard	Water	A19F247	"	11/14/2019 9:53:00AM
9K14008-CAL6	Cal Standard	Water	A19F248	"	11/14/2019 10:11:00AM
9K14008-CAL7	Cal Standard	Water	A19F249	"	11/14/2019 10:29:00AM
9K14008-ICV1	Initial Cal Check	Water	A19H459	"	11/14/2019 11:06:00AM
9K14008-CAL8	Cal Standard	Water	A19H447	"	11/14/2019 11:24:00AM
9K14008-CAL9	Cal Standard	Water	A19H448	"	11/14/2019 11:42:00AM
9K14008-CALA	Cal Standard	Water	A19H449	"	11/14/2019 12:00:00PM
9K14008-CALB	Cal Standard	Water	A19H450	"	11/14/2019 12:18:00PM
9K14008-CALC	Cal Standard	Water	A19H451	"	11/14/2019 12:37:00PM
9K14008-CALD	Cal Standard	Water	A19H452	"	11/14/2019 12:55:00PM
9K14008-CALE	Cal Standard	Water	A19H453	"	11/14/2019 1:13:00PM
9K14008-ICV2	Initial Cal Check	Water	A19H405	"	11/14/2019 1:31:00PM
9K14008-ICV3	Initial Cal Check	Water	A19J367	"	11/14/2019 1:50:00PM
9K14008-ICV4	Initial Cal Check	Water	A19H406	"	11/14/2019 2:08:00PM
9K14008-ICV5	Initial Cal Check	Water	A19E303	"	11/14/2019 2:26:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: A9K1502 Instrument: DUALECD1R

1311/8082 TCLP PCBs Sequence: 9K14008 Matrix: Water

9K14008-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	
Aroclor 1016	0.0000	0.00	20	0	
Aroclor 1260	0.0000	0.00	20	0	

9K14008-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K14008

Aroclor 1016	0.0000	0.00	50	0	
Aroclor 1260	0.0000	0.00	50	0	
9K14008-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
Aroclor 1016	0.0000	0.00	100	0	
Aroclor 1260	0.0000	0.00	100	0	
9K14008-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
Aroclor 1016	0.0000	0.00	200	0	
Aroclor 1260	0.0000	0.00	200	0	
9K14008-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
Aroclor 1016	0.0000	0.00	500	0	
Aroclor 1260	0.0000	0.00	500	0	
9K14008-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1000	0	
Aroclor 1260	800.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
Aroclor 1016	0.0000	0.00	1000	0	
Aroclor 1260	0.0000	0.00	1000	0	
9K14008-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	800.0000	0.00	1500	0	
Aroclor 1260	800.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
Aroclor 1016	0.0000	0.00	1500	0	
Aroclor 1260	0.0000	0.00	1500	0	
9K14008-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1221	0.0000	0.00	500	0	
Aroclor 1221	0.0000	0.00	500	0	
9K14008-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1232	0.0000	0.00	500	0	
Aroclor 1232	0.0000	0.00	500	0	
9K14008-CALA	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1242	0.0000	0.00	500	0	
Aroclor 1242	0.0000	0.00	500	0	
9K14008-CALB	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1248	0.0000	0.00	500	0	
Aroclor 1248	0.0000	0.00	500	0	
9K14008-CALC	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1254	0.0000	0.00	500	0	
Aroclor 1254	0.0000	0.00	500	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9K14008

9K14008-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1262	0.0000	0.00	500	0	
Aroclor 1262	0.0000	0.00	500	0	
9K14008-CALE	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1268	0.0000	0.00	500	0	
Aroclor 1268	0.0000	0.00	500	0	

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: **A9K1502** Instrument: **DUALECD1R**

608 PCBs - LL (1000/1mL) +1 Sequence: **9K14008** Matrix: **Water**

9K14008-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual
1260 (6)	20	500	**350.89**	70	
1260 (6)	20	500	350.89	70	
1260 (6)	20	500	350.89	70	
1260 (6)	20	500	**350.89**	70	
1260 (6)		500	350.89	70	
1260 (6)	20	500	350.89	70	
1260 (6)		500	350.89	70	
1260 (6)	20	500	350.89	70	
1260 (6)	20	500	350.89	70	
1260 (6)	20	500	350.89	70	
1260 (6)	20	500	350.89	70	

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.

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K14008-ICB1
Misc : [redacted]
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

clean

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.771	2981931	100.151	ng/ml
62)	S	DCBP (S)	10.847	1484455	96.025	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.442	1283	1.261	ng/ml
3)		Aroclor 1016 (2)	6.951	1066	0.568	ng/ml
4)		Aroclor 1016 (3)	7.069	769	0.874	ng/ml
5)		Aroclor 1016 (4)	7.179	673	0.747	ng/ml
6)		Aroclor 1016 (5)	7.207	723	0.730	ng/ml
7)		Aroclor 1016 (6)	7.334	807	0.811	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.961	1147	4.501	ng/ml
10)		Aroclor 1221 (2)	6.039	1060	4.176	ng/ml
11)		Aroclor 1221 (3)	6.123	2442	2.912	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.123	2442	3.816	ng/ml
14)		Aroclor 1232 (2)	6.442	1283	3.176	ng/ml
15)		Aroclor 1232 (3)	6.951	1066	1.398	ng/ml
16)		Aroclor 1232 (4)	7.069	769	2.207	ng/ml
17)		Aroclor 1232 (5)	7.179	673	2.249	ng/ml
18)		Aroclor 1232 (6)	7.334	807	2.330	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.442	1283	1.755	ng/ml
21)		Aroclor 1242 (2)	6.951	1066	0.761	ng/ml
22)		Aroclor 1242 (3)	7.069	769	1.158	ng/ml
23)		Aroclor 1242 (4)	7.179	673	1.123	ng/ml
24)		Aroclor 1242 (5)	7.207	723	1.025	ng/ml
25)		Aroclor 1242 (6)	7.334	807	1.129	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.920	1382	1.499	ng/ml
28)		Aroclor 1248 (2)	7.179	673	0.574	ng/ml
29)		Aroclor 1248 (3)	7.207	723	0.669	ng/ml
30)		Aroclor 1248 (4)	7.334	807	0.618	ng/ml
31)		Aroclor 1248 (5)	7.701	933	0.543	ng/ml
32)		Aroclor 1248 (6)	7.826	9249	6.251	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.671	869	0.566	ng/ml
35)		Aroclor 1254 (2)	7.826	9249	3.676	ng/ml
36)		Aroclor 1254 (3)	8.128f	1163	0.436	ng/ml
37)		Aroclor 1254 (4)	8.429	69875	36.373	ng/ml
38)		Aroclor 1254 (5)	8.748	833	0.428	ng/ml
39)		Aroclor 1254 (6)	8.984	914	1.564	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.309	801	0.412	ng/ml
42)		Aroclor 1260 (2)	8.520	1457	0.614	ng/ml
43)		Aroclor 1260 (3)	8.748	833	0.345	ng/ml
44)		Aroclor 1260 (4)	9.256	1387	0.391	ng/ml
45)		Aroclor 1260 (5)	9.529	1573	0.748	ng/ml
46)		Aroclor 1260 (6)	10.138	2576	3.094	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K14008-ICB1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

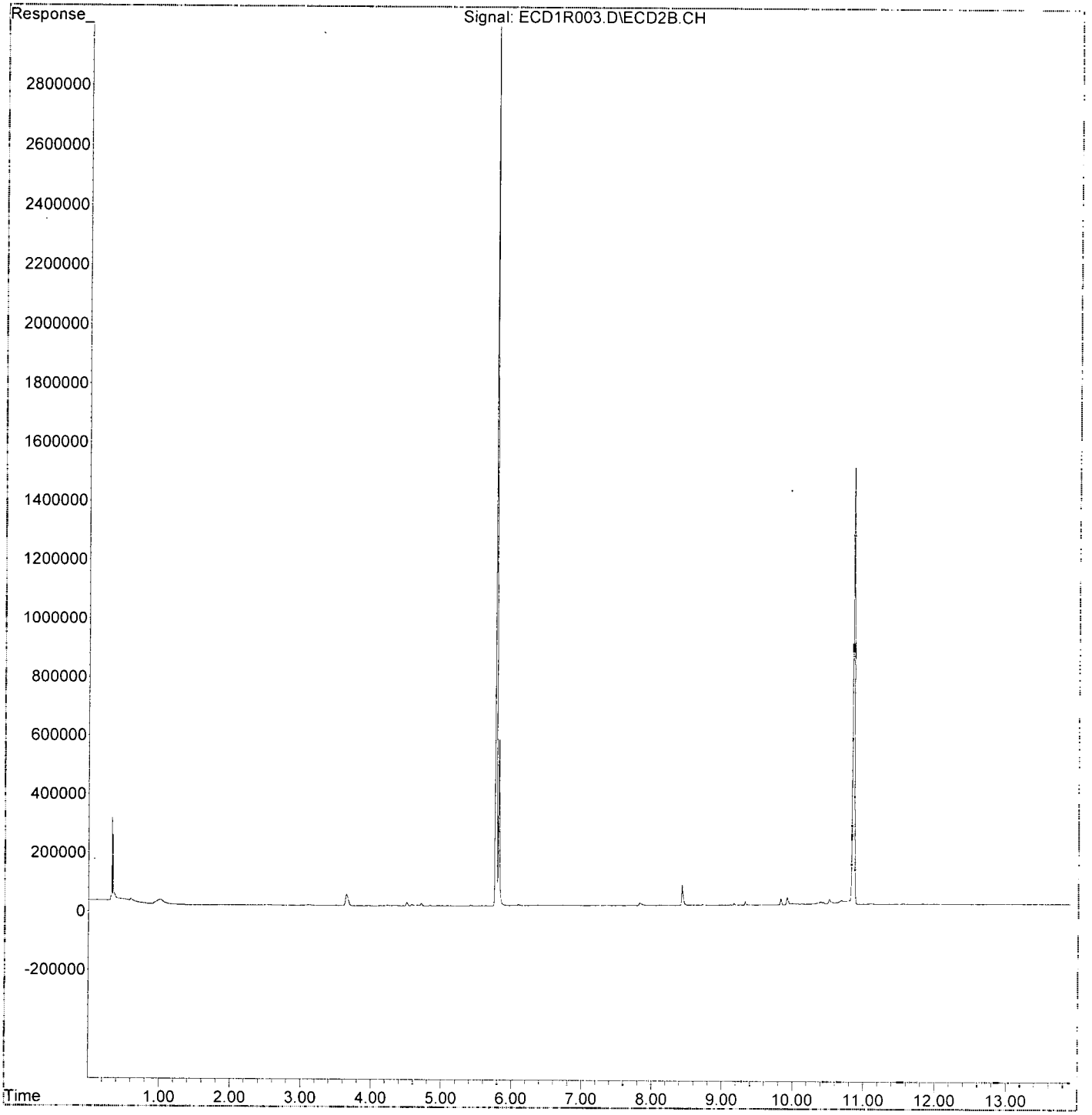
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.520	1457	0.779 ng/ml
49)	Aroclor 1262 (2)	8.819	825	0.319 ng/ml
50)	Aroclor 1262 (3)	9.000	855	0.420 ng/ml
51)	Aroclor 1262 (4)	9.256	1387	0.337 ng/ml
52)	Aroclor 1262 (5)	9.529	1573	0.627 ng/ml
53)	Aroclor 1262 (6)	10.138	2576	2.279 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.041	951	0.874 ng/ml
56)	Aroclor 1268 (2)	9.529	1573	0.359 ng/ml
57)	Aroclor 1268 (3)	9.596	1310	0.365 ng/ml
58)	Aroclor 1268 (4)	9.829	20714	6.739 ng/ml
59)	Aroclor 1268 (5)	10.138	2576	2.092 ng/ml
60)	Aroclor 1268 (6)	10.513	17897	2.329 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R003.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:22
Operator : MJB / KAK
Sample : 9K14008-ICB1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:47
Operator : MJB / KAK
Sample : 9K14008-IBL1
Misc : [redacted]
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:39 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

No Carry-over

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.770	3711	0.125 ng/ml
62) S	DCBP (S)	10.845	3979	0.257 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.435	762	0.749 ng/ml
3)	Aroclor 1016 (2)	6.949	1614	0.859 ng/ml
4)	Aroclor 1016 (3)	7.080	1815	2.062 ng/ml
5)	Aroclor 1016 (4)	7.153	1478	1.641 ng/ml
6)	Aroclor 1016 (5)	7.191	1230	1.242 ng/ml
7)	Aroclor 1016 (6)	7.331	1687	1.696 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.988f	574	2.253 ng/ml
10)	Aroclor 1221 (2)	6.031	1113	4.385 ng/ml
11)	Aroclor 1221 (3)	6.106	1011	1.206 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.106	1011	1.580 ng/ml
14)	Aroclor 1232 (2)	6.435	762	1.886 ng/ml
15)	Aroclor 1232 (3)	6.949	1614	2.116 ng/ml
16)	Aroclor 1232 (4)	7.080	1815	5.208 ng/ml
17)	Aroclor 1232 (5)	7.153	1478	4.936 ng/ml
18)	Aroclor 1232 (6)	7.331	1687	4.870 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.435	762	1.043 ng/ml
21)	Aroclor 1242 (2)	6.949	1614	1.151 ng/ml
22)	Aroclor 1242 (3)	7.080	1815	2.732 ng/ml
23)	Aroclor 1242 (4)	7.153	1478	2.466 ng/ml
24)	Aroclor 1242 (5)	7.191	1230	1.744 ng/ml
25)	Aroclor 1242 (6)	7.331	1687	2.361 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.916	4048	4.392 ng/ml
28)	Aroclor 1248 (2)	7.153	1478	1.260 ng/ml
29)	Aroclor 1248 (3)	7.191	1230	1.139 ng/ml
30)	Aroclor 1248 (4)	7.331	1687	1.292 ng/ml
31)	Aroclor 1248 (5)	7.722	1522	0.886 ng/ml
32)	Aroclor 1248 (6)	7.822	17086	11.549 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.670	2960	1.930 ng/ml
35)	Aroclor 1254 (2)	7.822	17086	6.790 ng/ml
36)	Aroclor 1254 (3)	8.169	1536	0.575 ng/ml
37)	Aroclor 1254 (4)	8.427	89186	46.425 ng/ml
38)	Aroclor 1254 (5)	8.750	2092	1.075 ng/ml
39)	Aroclor 1254 (6)	8.998	1744	2.983 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.308	2164	1.115 ng/ml
42)	Aroclor 1260 (2)	8.517	2767	1.167 ng/ml
43)	Aroclor 1260 (3)	8.750	2092	0.866 ng/ml
44)	Aroclor 1260 (4)	9.252	1962	0.552 ng/ml
45)	Aroclor 1260 (5)	9.530	1748	0.832 ng/ml
46)	Aroclor 1260 (6)	10.121	2204	2.648 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:47
Operator : MJB / KAK
Sample : 9K14008-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:39 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

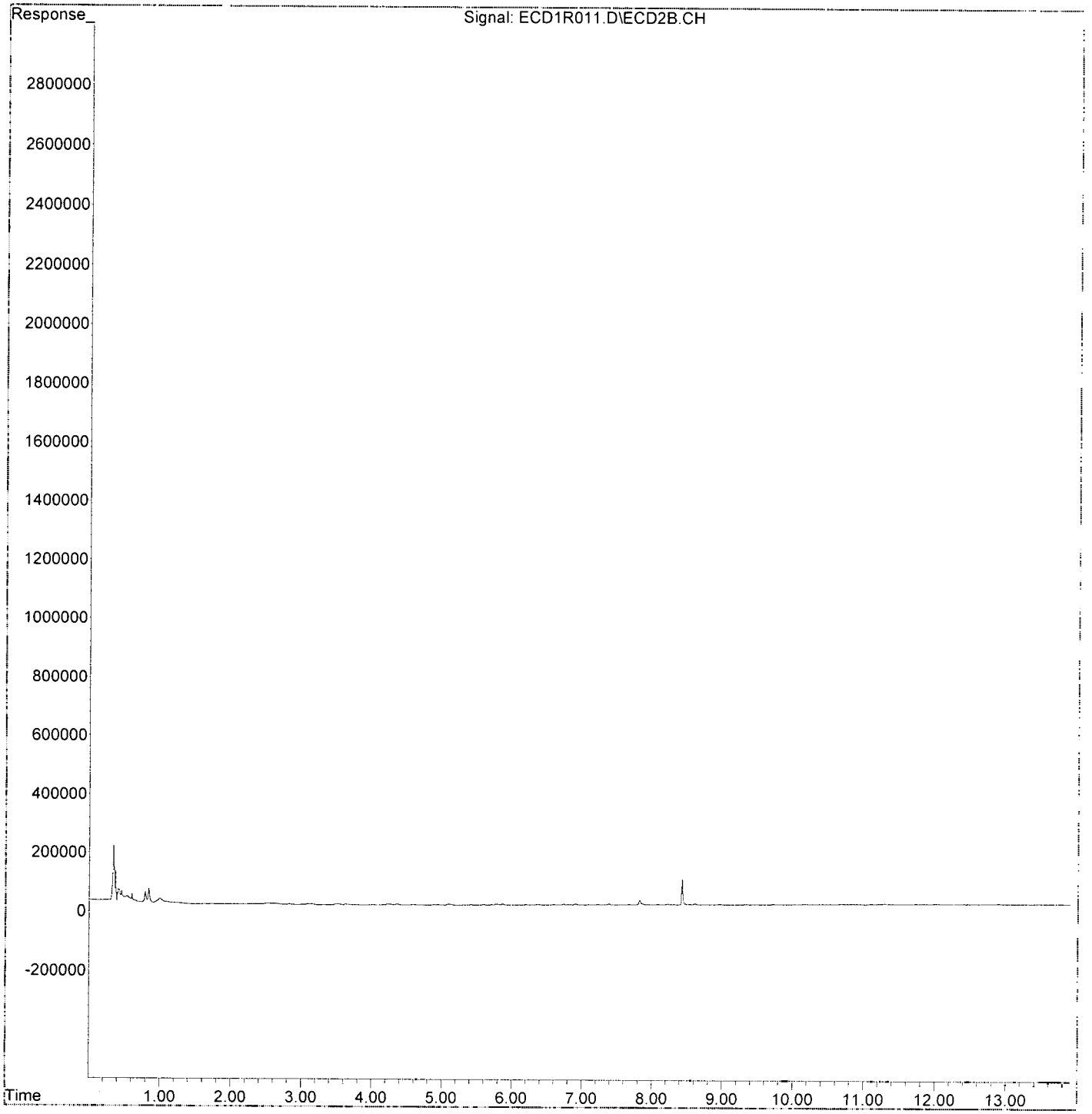
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.517	2767	1.479 ng/ml
49)	Aroclor 1262 (2)	8.815	1728	0.669 ng/ml
50)	Aroclor 1262 (3)	8.998	1744	0.858 ng/ml
51)	Aroclor 1262 (4)	9.252	1962	0.477 ng/ml
52)	Aroclor 1262 (5)	9.530	1748	0.697 ng/ml
53)	Aroclor 1262 (6)	10.121	2204	1.951 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.049	1192	1.095 ng/ml
56)	Aroclor 1268 (2)	9.530	1748	0.399 ng/ml
57)	Aroclor 1268 (3)	9.602	1649	0.460 ng/ml
58)	Aroclor 1268 (4)	9.834	1874	0.610 ng/ml
59)	Aroclor 1268 (5)	10.121	2204	1.790 ng/ml
60)	Aroclor 1268 (6)	10.501	2438	0.317 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R011.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:47
Operator : MJB / KAK
Sample : 9K14008-IBL1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:39 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:06
Operator : MJB / KAK
Sample : 9K14008-ICV1
Misc : [redacted]
ALS Vial : 60 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:56 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

1016, 1260

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.772	5649336	189.739	ng/ml
62)	S	DCBP (S)	10.846	2914866	188.554	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.449	454106	446.056	ng/ml
3)		Aroclor 1016 (2)	6.942	910511	484.723	ng/ml
4)		Aroclor 1016 (3)	7.071	417798	474.520	ng/ml
5)		Aroclor 1016 (4)	7.158	395795	439.343	ng/ml
6)		Aroclor 1016 (5)	7.203	453586	458.013	ng/ml
7)		Aroclor 1016 (6)	7.329	447429	449.842	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.948	32475	127.482	ng/ml
10)		Aroclor 1221 (2)	6.022	63507	250.269	ng/ml
11)		Aroclor 1221 (3)	6.110	281807	336.155	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.110	281807	440.414	ng/ml
14)		Aroclor 1232 (2)	6.449	454106	1123.537	ng/ml
15)		Aroclor 1232 (3)	6.942	910511	1193.769	ng/ml
16)		Aroclor 1232 (4)	7.071	417798	1198.549	ng/ml
17)		Aroclor 1232 (5)	7.158	395795	1321.834	ng/ml
18)		Aroclor 1232 (6)	7.329	447429	1292.024	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.449	454106	620.921	ng/ml
21)		Aroclor 1242 (2)	6.942	910511	649.461	ng/ml
22)		Aroclor 1242 (3)	7.071	417798	628.700	ng/ml
23)		Aroclor 1242 (4)	7.158	395795	660.365	ng/ml
24)		Aroclor 1242 (5)	7.203	453586	643.026	ng/ml
25)		Aroclor 1242 (6)	7.329	447429	626.408	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.915	723533	784.974	ng/ml
28)		Aroclor 1248 (2)	7.158	395795	337.551	ng/ml
29)		Aroclor 1248 (3)	7.203	453586	419.931	ng/ml
30)		Aroclor 1248 (4)	7.329	447429	342.858	ng/ml
31)		Aroclor 1248 (5)	7.675	371891	216.410	ng/ml
32)		Aroclor 1248 (6)	7.857	430126	290.735	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.675	371891	242.423	ng/ml
35)		Aroclor 1254 (2)	7.857	430126	170.941	ng/ml
36)		Aroclor 1254 (3)	8.171	220854	82.719	ng/ml
37)		Aroclor 1254 (4)	8.413	149735	77.943	ng/ml
38)		Aroclor 1254 (5)	8.750	1319116	678.300	ng/ml
39)		Aroclor 1254 (6)	8.970	142883	244.428	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.308	1025291	528.140	ng/ml
42)		Aroclor 1260 (2)	8.515	1216934	513.328	ng/ml
43)		Aroclor 1260 (3)	8.750	1319116	546.412	ng/ml
44)		Aroclor 1260 (4)	9.253	1618636	455.750	ng/ml
45)		Aroclor 1260 (5)	9.529	978428	465.405	ng/ml
46)		Aroclor 1260 (6)	10.135	292122	350.887	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

458.75

476.65

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:06
Operator : MJB / KAK
Sample : 9K14008-ICV1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:56 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

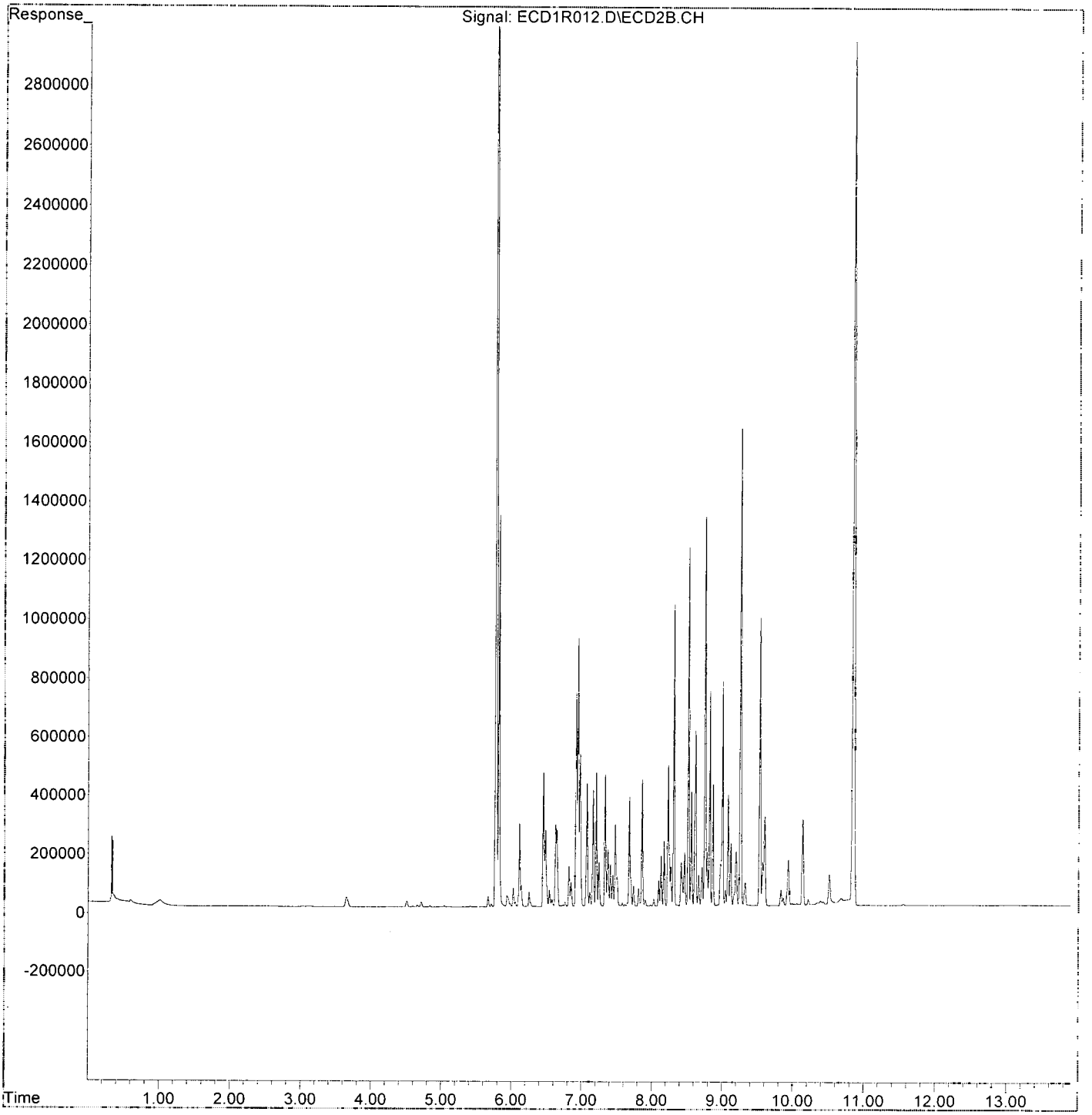
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.515	1216934	650.549 ng/ml
49)	Aroclor 1262 (2)	8.819	729566	282.347 ng/ml
50)	Aroclor 1262 (3)	9.000	762164	374.965 ng/ml
51)	Aroclor 1262 (4)	9.253	1618636	393.311 ng/ml
52)	Aroclor 1262 (5)	9.529	978428	389.975 ng/ml
53)	Aroclor 1262 (6)	10.135	292122	258.519 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.043	54533	50.099 ng/ml
56)	Aroclor 1268 (2)	9.529	978428	223.219 ng/ml
57)	Aroclor 1268 (3)	9.598	301575	84.032 ng/ml
58)	Aroclor 1268 (4)	9.828	54328	17.673 ng/ml
59)	Aroclor 1268 (5)	10.135	292122	237.238 ng/ml
60)	Aroclor 1268 (6)	10.511	105548	13.737 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R012.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:06
Operator : MJB / KAK
Sample : 9K14008-ICV1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:39:56 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R020.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:31
Operator : MJB / KAK
Sample : 9K14008-ICV2
Misc : [redacted]
ALS Vial : 68 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:12 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

1221, 1254

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.770	1199204	40.277	ng/ml	
62) S	DCBP (S)	10.845	1358176	87.856	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.447	83756	82.271	ng/ml	
3)	Aroclor 1016 (2)	6.941	142085	75.641	ng/ml	
4)	Aroclor 1016 (3)	7.070	63803	72.465	ng/ml	
5)	Aroclor 1016 (4)	7.157	471868	523.787	ng/ml	
6)	Aroclor 1016 (5)	7.202	175611	177.325	ng/ml	
7)	Aroclor 1016 (6)	7.329	292881	294.461	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.948	227188	891.842	ng/ml	895.56
10)	Aroclor 1221 (2)	6.021	225377	888.162	ng/ml	
11)	Aroclor 1221 (3)	6.109	760083	906.668	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.109	760083	1187.873	ng/ml	
14)	Aroclor 1232 (2)	6.447	83756	207.226	ng/ml	
15)	Aroclor 1232 (3)	6.941	142085	186.287	ng/ml	
16)	Aroclor 1232 (4)	7.070	63803	183.033	ng/ml	
17)	Aroclor 1232 (5)	7.157	471868	1575.896	ng/ml	
18)	Aroclor 1232 (6)	7.329	292881	845.743	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.447	83756	114.523	ng/ml	
21)	Aroclor 1242 (2)	6.941	142085	101.348	ng/ml	
22)	Aroclor 1242 (3)	7.070	63803	96.010	ng/ml	
23)	Aroclor 1242 (4)	7.157	471868	787.289	ng/ml	
24)	Aroclor 1242 (5)	7.202	175611	248.955	ng/ml	
25)	Aroclor 1242 (6)	7.329	292881	410.039	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.914	114573	124.303	ng/ml	
28)	Aroclor 1248 (2)	7.157	471868	402.430	ng/ml	
29)	Aroclor 1248 (3)	7.202	175611	162.581	ng/ml	
30)	Aroclor 1248 (4)	7.329	292881	224.431	ng/ml	
31)	Aroclor 1248 (5)	7.696	473842	275.737	ng/ml	
32)	Aroclor 1248 (6)	7.856	1251143	845.684	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.674	779120	507.881	ng/ml	489.53
35)	Aroclor 1254 (2)	7.856	1251143	497.229	ng/ml	
36)	Aroclor 1254 (3)	8.170	1263244	473.138	ng/ml	
37)	Aroclor 1254 (4)	8.411	951184	495.131	ng/ml	
38)	Aroclor 1254 (5)	8.748	952199	489.628	ng/ml	
39)	Aroclor 1254 (6)	8.982	277192	474.190	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.306	461206	237.573	ng/ml	
42)	Aroclor 1260 (2)	8.514	554736	233.999	ng/ml	
43)	Aroclor 1260 (3)	8.748	952199	394.425	ng/ml	
44)	Aroclor 1260 (4)	9.251	159847	45.007	ng/ml	
45)	Aroclor 1260 (5)	9.528	119761	56.966	ng/ml	
46)	Aroclor 1260 (6)	10.134	10074	12.100	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R020.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:31
Operator : MJB / KAK
Sample : 9K14008-ICV2
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:12 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

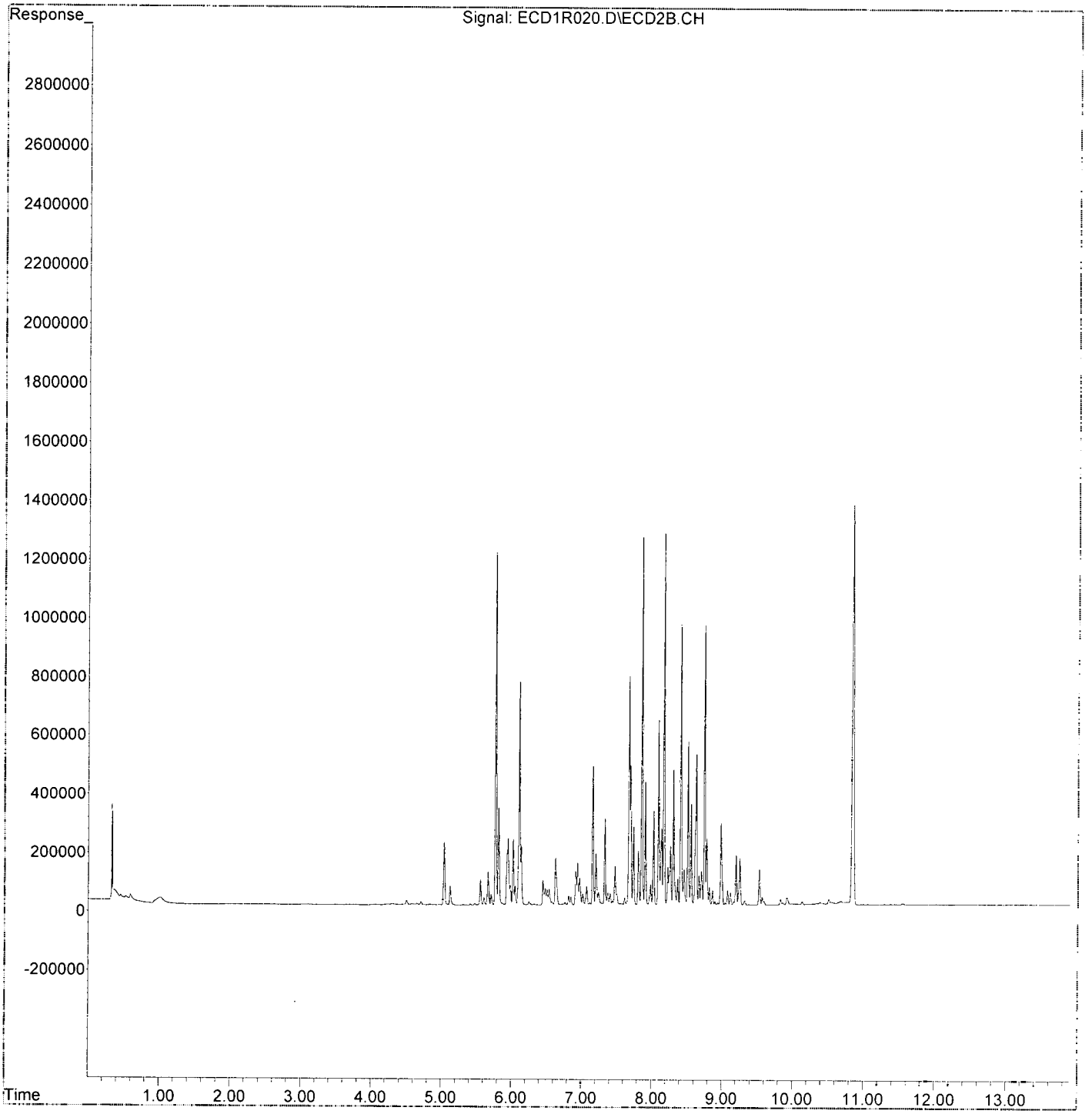
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.514	554736	296.551 ng/ml
49)	Aroclor 1262 (2)	8.818	59261	22.934 ng/ml
50)	Aroclor 1262 (3)	8.982	277192	136.371 ng/ml
51)	Aroclor 1262 (4)	9.251	159847	38.841 ng/ml
52)	Aroclor 1262 (5)	9.528	119761	47.734 ng/ml
53)	Aroclor 1262 (6)	10.134	10074	8.915 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.045	6952	6.387 ng/ml
56)	Aroclor 1268 (2)	9.528	119761	27.322 ng/ml
57)	Aroclor 1268 (3)	9.596	10967	3.056 ng/ml
58)	Aroclor 1268 (4)	9.827	18483	6.013 ng/ml
59)	Aroclor 1268 (5)	10.134	10074	8.181 ng/ml
60)	Aroclor 1268 (6)	10.511	17249	2.245 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R020.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:31
Operator : MJB / KAK
Sample : 9K14008-ICV2
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:12 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R021.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:50
Operator : MJB / KAK
Sample : 9K14008-ICV3
Misc : [redacted]
ALS Vial : 69 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

1232, 1262

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.771	1276421	42.870	ng/ml
62)	S	DCBP (S)	10.844	1483943	95.992	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.448	225927	221.922	ng/ml
3)		Aroclor 1016 (2)	6.941	417995	222.525	ng/ml
4)		Aroclor 1016 (3)	7.070	195934	222.535	ng/ml
5)		Aroclor 1016 (4)	7.156	174795	194.027	ng/ml
6)		Aroclor 1016 (5)	7.202	191557	193.427	ng/ml
7)		Aroclor 1016 (6)	7.328	203860	204.959	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.947	84296	330.910	ng/ml
10)		Aroclor 1221 (2)	6.021	96012	378.363	ng/ml
11)		Aroclor 1221 (3)	6.109	344448	410.876	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.109	344448	538.310	ng/ml
14)		Aroclor 1232 (2)	6.448	225927	558.981	ng/ml
15)		Aroclor 1232 (3)	6.941	417995	548.031	ng/ml
16)		Aroclor 1232 (4)	7.070	195934	562.082	ng/ml
17)		Aroclor 1232 (5)	7.156	174795	583.761	ng/ml
18)		Aroclor 1232 (6)	7.328	203860	588.678	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.448	225927	308.920	ng/ml
21)		Aroclor 1242 (2)	6.941	417995	298.152	ng/ml
22)		Aroclor 1242 (3)	7.070	195934	294.841	ng/ml
23)		Aroclor 1242 (4)	7.156	174795	291.636	ng/ml
24)		Aroclor 1242 (5)	7.202	191557	271.561	ng/ml
25)		Aroclor 1242 (6)	7.328	203860	285.407	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.914	335165	363.627	ng/ml
28)		Aroclor 1248 (2)	7.156	174795	149.073	ng/ml
29)		Aroclor 1248 (3)	7.202	191557	177.344	ng/ml
30)		Aroclor 1248 (4)	7.328	203860	156.215	ng/ml
31)		Aroclor 1248 (5)	7.696	244114	142.054	ng/ml
32)		Aroclor 1248 (6)	7.855	325978	220.338	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.676	243373	158.646	ng/ml
35)		Aroclor 1254 (2)	7.855	325978	129.550	ng/ml
36)		Aroclor 1254 (3)	8.170	124350	46.574	ng/ml
37)		Aroclor 1254 (4)	8.411	101389	52.777	ng/ml
38)		Aroclor 1254 (5)	8.750	758769	390.165	ng/ml
39)		Aroclor 1254 (6)	8.967	227979	390.001	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.306	769125	396.186	ng/ml
42)		Aroclor 1260 (2)	8.514	952688	401.864	ng/ml
43)		Aroclor 1260 (3)	8.750	758769	314.301	ng/ml
44)		Aroclor 1260 (4)	9.251	2092082	589.055	ng/ml
45)		Aroclor 1260 (5)	9.529	1265788	602.093	ng/ml
46)		Aroclor 1260 (6)	10.133	554602	666.170	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

563.31

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R021.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:50
Operator : MJB / KAK
Sample : 9K14008-ICV3
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.514	952688	509.289	ng/ml
49)	Aroclor 1262 (2)	8.818	1291172	499.693	ng/ml
50)	Aroclor 1262 (3)	8.999	971755	478.078	ng/ml
51)	Aroclor 1262 (4)	9.251	2092082	508.353	ng/ml
52)	Aroclor 1262 (5)	9.529	1265788	504.510	ng/ml
53)	Aroclor 1262 (6)	10.133	554602	490.805	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.041	140544	129.118	ng/ml
56)	Aroclor 1268 (2)	9.529	1265788	288.778	ng/ml
57)	Aroclor 1268 (3)	9.596	668395	186.243	ng/ml
58)	Aroclor 1268 (4)	9.827	62258	20.253	ng/ml
59)	Aroclor 1268 (5)	10.133	554602	450.404	ng/ml
60)	Aroclor 1268 (6)	10.508	183113	23.832	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

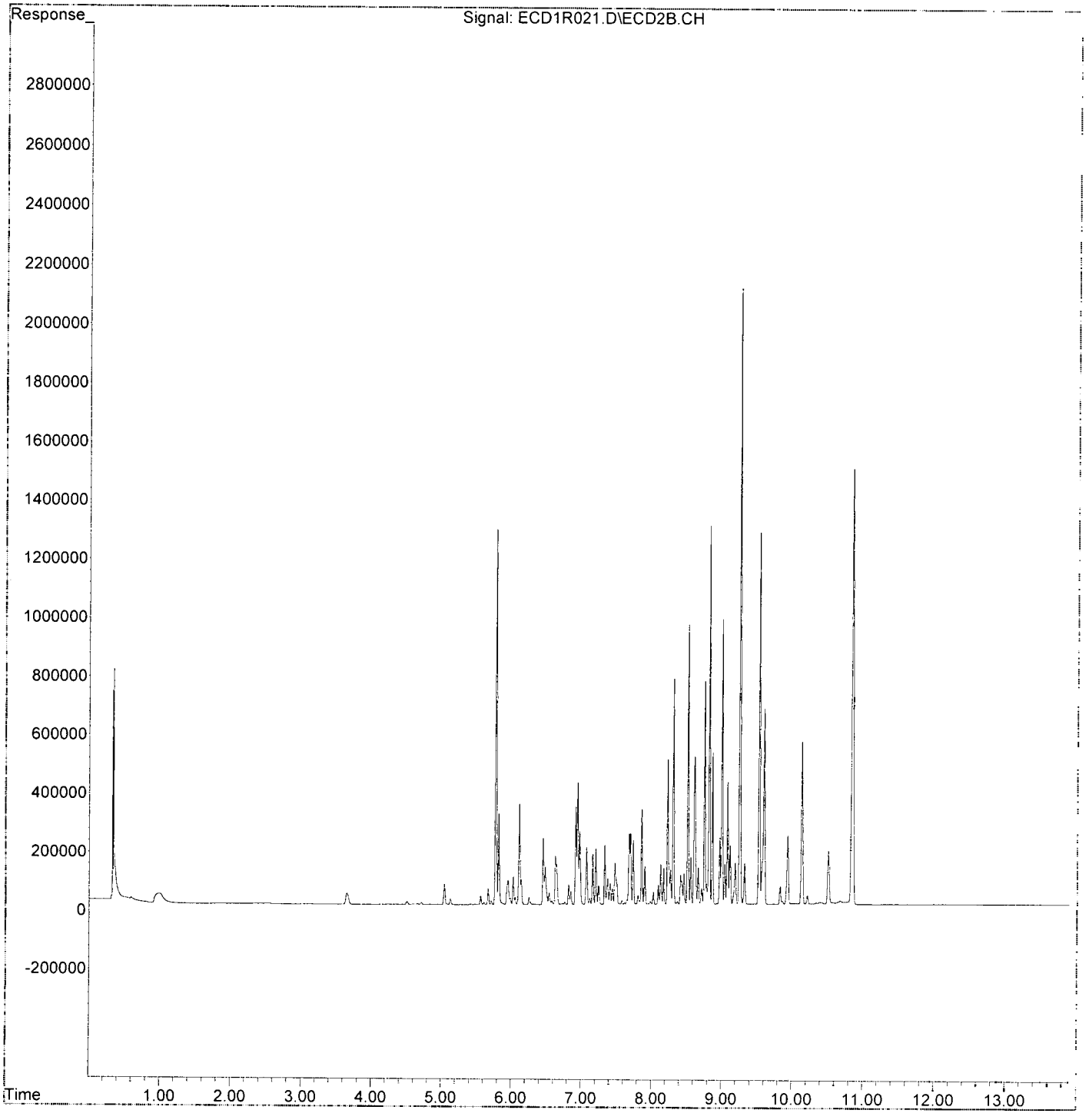
498.48

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R021.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:50
Operator : MJB / KAK
Sample : 9K14008-ICV3
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:28 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R022.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:08
Operator : MJB / KAK
Sample : 9K14008-ICV4
Misc : [redacted]
ALS Vial : 70 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.772	1276269	42.865	ng/ml
62)	S DCBP (S)	10.845	648717	41.964	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	379118	372.397	ng/ml
3)	Aroclor 1016 (2)	6.942	736688	392.185	ng/ml
4)	Aroclor 1016 (3)	7.071	344187	390.915	ng/ml
5)	Aroclor 1016 (4)	7.157	307013	340.793	ng/ml
6)	Aroclor 1016 (5)	7.202	360543	364.062	ng/ml
7)	Aroclor 1016 (6)	7.329	379600	381.647	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.947	28220	110.779	ng/ml
10)	Aroclor 1221 (2)	6.022	56113	221.128	ng/ml
11)	Aroclor 1221 (3)	6.109	248950	296.961	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.109	248950	389.065	ng/ml
14)	Aroclor 1232 (2)	6.448	379118	938.002	ng/ml
15)	Aroclor 1232 (3)	6.942	736688	965.869	ng/ml
16)	Aroclor 1232 (4)	7.071	344187	987.378	ng/ml
17)	Aroclor 1232 (5)	7.157	307013	1025.329	ng/ml
18)	Aroclor 1232 (6)	7.329	379600	1096.156	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.448	379118	518.386	ng/ml
21)	Aroclor 1242 (2)	6.942	736688	525.474	ng/ml
22)	Aroclor 1242 (3)	7.071	344187	517.930	ng/ml
23)	Aroclor 1242 (4)	7.157	307013	512.236	ng/ml
24)	Aroclor 1242 (5)	7.202	360543	511.123	ng/ml
25)	Aroclor 1242 (6)	7.329	379600	531.446	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.914	584132	633.735	ng/ml
28)	Aroclor 1248 (2)	7.157	307013	261.834	ng/ml
29)	Aroclor 1248 (3)	7.202	360543	333.791	ng/ml
30)	Aroclor 1248 (4)	7.329	379600	290.881	ng/ml
31)	Aroclor 1248 (5)	7.697	431171	250.906	ng/ml
32)	Aroclor 1248 (6)	7.856	338002	228.466	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.679	291259	189.862	ng/ml
35)	Aroclor 1254 (2)	7.856	338002	134.329	ng/ml
36)	Aroclor 1254 (3)	8.171	127410	47.720	ng/ml
37)	Aroclor 1254 (4)	8.412	98101	51.066	ng/ml
38)	Aroclor 1254 (5)	8.751	32634	16.781	ng/ml
39)	Aroclor 1254 (6)	8.968	25401	43.453	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.307	15585	8.028	ng/ml
42)	Aroclor 1260 (2)	8.512	24266	10.236	ng/ml
43)	Aroclor 1260 (3)	8.751	32634	13.518	ng/ml
44)	Aroclor 1260 (4)	9.252	239894	67.546	ng/ml
45)	Aroclor 1260 (5)	9.529	2182184	1037.992	ng/ml
46)	Aroclor 1260 (6)	10.134	606738	728.793	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

519.60

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R022.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:08
Operator : MJB / KAK
Sample : 9K14008-ICV4
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.512	24266	12.972	ng/ml
49)	Aroclor 1262 (2)	8.818	461673	178.671	ng/ml
50)	Aroclor 1262 (3)	9.000	50265	24.729	ng/ml
51)	Aroclor 1262 (4)	9.252	239894	58.292	ng/ml
52)	Aroclor 1262 (5)	9.529	2182184	869.761	ng/ml
53)	Aroclor 1262 (6)	10.134	606738	536.943	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	9.042	528888	485.891	ng/ml
56)	Aroclor 1268 (2)	9.529	2182184	497.845	ng/ml
57)	Aroclor 1268 (3)	9.600	1760943	490.673	ng/ml
58)	Aroclor 1268 (4)	9.827	1463757	476.178	ng/ml
59)	Aroclor 1268 (5)	10.134	606738	492.744	ng/ml
60)	Aroclor 1268 (6)	10.510	3658054	476.089	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

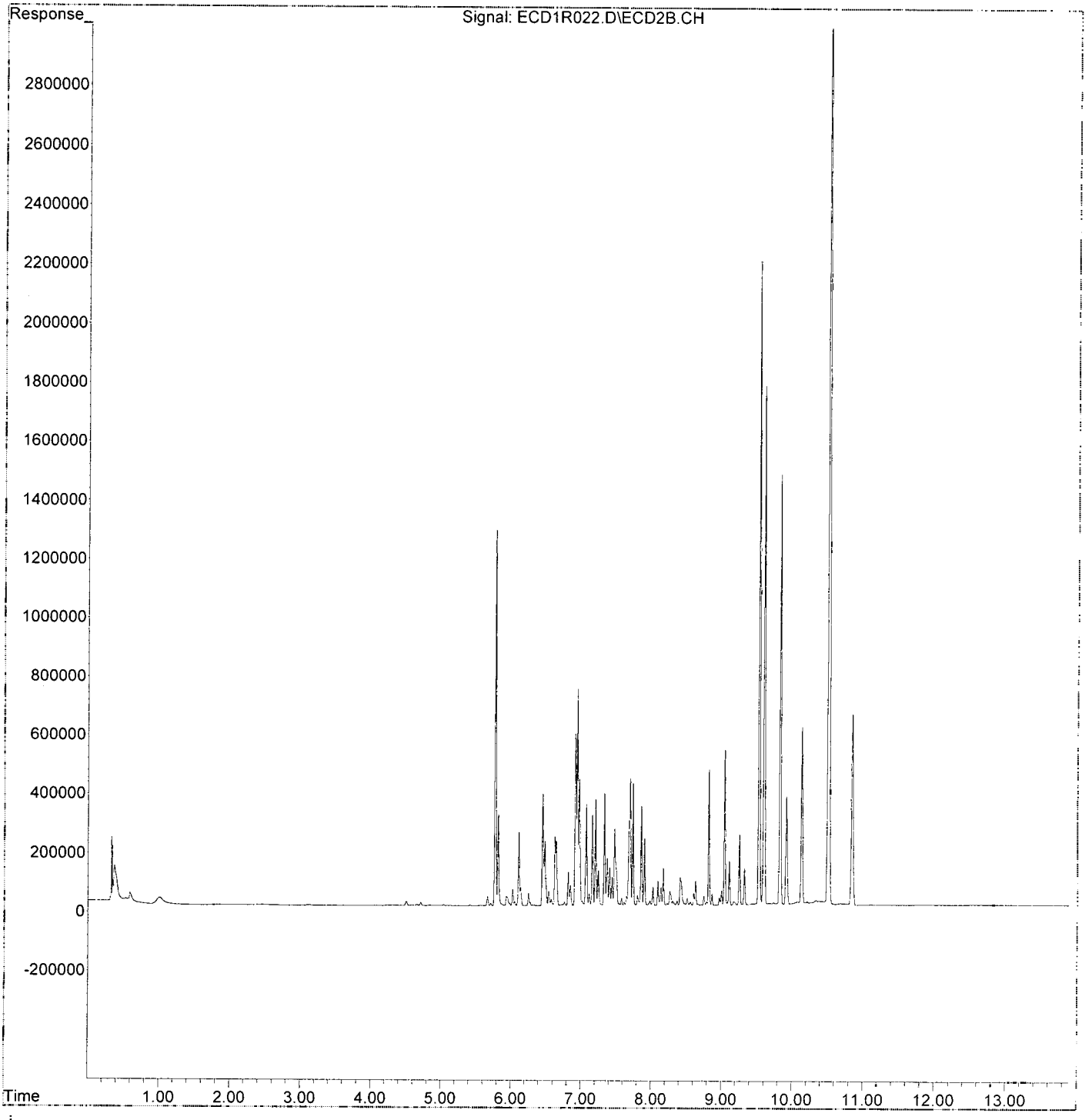
486.57

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R022.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:08
Operator : MJB / KAK
Sample : 9K14008-ICV4
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:43 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R023.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:26
Operator : MJB / KAK
Sample : 9K14008-ICV5
Misc : [redacted]
ALS Vial : 71 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

1248

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.707f	1435	0.048	ng/ml
62)	S	DCBP (S)	10.846	976	0.063	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.449	210432	206.701	ng/ml
3)		Aroclor 1016 (2)	6.941	442605	235.627	ng/ml
4)		Aroclor 1016 (3)	7.069	220503	250.439	ng/ml
5)		Aroclor 1016 (4)	7.158	639661	710.041	ng/ml
6)		Aroclor 1016 (5)	7.203	588721	594.466	ng/ml
7)		Aroclor 1016 (6)	7.329	706695	710.506	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.947	2649	10.399	ng/ml
10)		Aroclor 1221 (2)	6.021	5606	22.093	ng/ml
11)		Aroclor 1221 (3)	6.110	32156	38.358	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.110	32156	50.254	ng/ml
14)		Aroclor 1232 (2)	6.449	210432	520.644	ng/ml
15)		Aroclor 1232 (3)	6.941	442605	580.299	ng/ml
16)		Aroclor 1232 (4)	7.069	220503	632.563	ng/ml
17)		Aroclor 1232 (5)	7.158	639661	2136.271	ng/ml
18)		Aroclor 1232 (6)	7.329	706695	2040.697	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.449	210432	287.733	ng/ml
21)		Aroclor 1242 (2)	6.941	442605	315.707	ng/ml
22)		Aroclor 1242 (3)	7.069	220503	331.811	ng/ml
23)		Aroclor 1242 (4)	7.158	639661	1067.243	ng/ml
24)		Aroclor 1242 (5)	7.203	588721	834.599	ng/ml
25)		Aroclor 1242 (6)	7.329	706695	989.385	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.915	447030	484.992	ng/ml
28)		Aroclor 1248 (2)	7.158	639661	545.531	ng/ml
29)		Aroclor 1248 (3)	7.203	588721	545.039	ng/ml
30)		Aroclor 1248 (4)	7.329	706695	541.529	ng/ml
31)		Aroclor 1248 (5)	7.697	920149	535.450	ng/ml
32)		Aroclor 1248 (6)	7.856	803576	543.161	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.679	623249	406.275	ng/ml
35)		Aroclor 1254 (2)	7.856	803576	319.357	ng/ml
36)		Aroclor 1254 (3)	8.171	444364	166.433	ng/ml
37)		Aroclor 1254 (4)	8.411	316808	164.912	ng/ml
38)		Aroclor 1254 (5)	8.748	74402	38.258	ng/ml
39)		Aroclor 1254 (6)	8.982	29292	50.109	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.307	44036	22.684	ng/ml
42)		Aroclor 1260 (2)	8.511	58984	24.881	ng/ml
43)		Aroclor 1260 (3)	8.748	74402	30.819	ng/ml
44)		Aroclor 1260 (4)	9.252	14774	4.160	ng/ml
45)		Aroclor 1260 (5)	9.529	10416	4.955	ng/ml
46)		Aroclor 1260 (6)	10.134	3066	3.682	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

532.62

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R023.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:26
Operator : MJB / KAK
Sample : 9K14008-ICV5
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

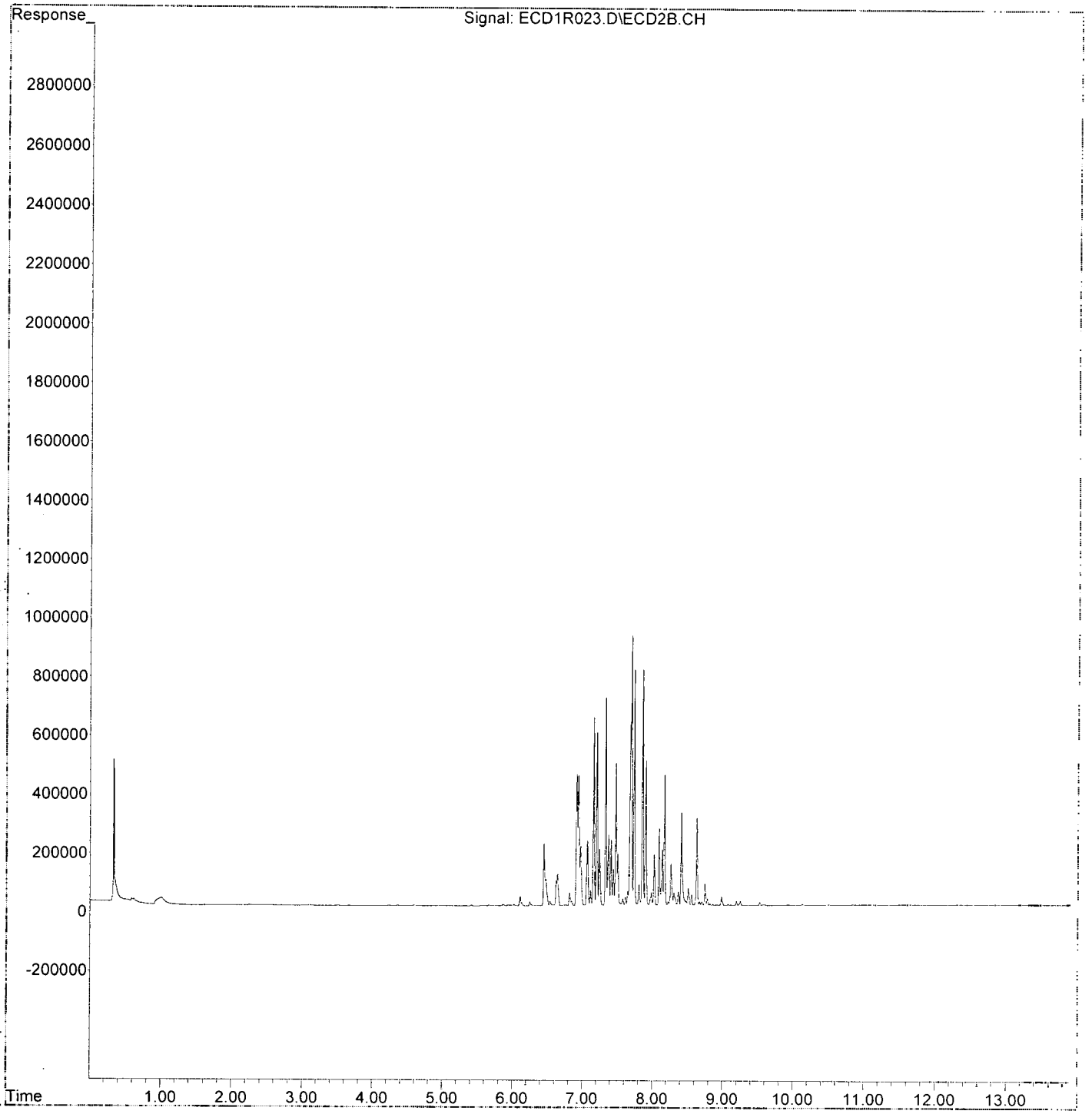
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.511	58984	31.532 ng/ml
49)	Aroclor 1262 (2)	8.818	6820	2.640 ng/ml
50)	Aroclor 1262 (3)	8.982	29292	14.411 ng/ml
51)	Aroclor 1262 (4)	9.252	14774	3.590 ng/ml
52)	Aroclor 1262 (5)	9.529	10416	4.152 ng/ml
53)	Aroclor 1262 (6)	10.134	3066	2.713 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	9.043	1255	1.153 ng/ml
56)	Aroclor 1268 (2)	9.529	10416	2.376 ng/ml
57)	Aroclor 1268 (3)	9.597	3347	0.933 ng/ml
58)	Aroclor 1268 (4)	9.826	780	0.254 ng/ml
59)	Aroclor 1268 (5)	10.134	3066	2.490 ng/ml
60)	Aroclor 1268 (6)	10.509	1641	0.214 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R023.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 14:26
Operator : MJB / KAK
Sample : 9K14008-ICV5
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:40:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:14 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.771	290528	9.758	ng/ml
62)	S DCBP (S)	10.845	156500	10.124	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	24739	24.301	ng/ml
3)	Aroclor 1016 (2)	6.942	42331	22.535	ng/ml
4)	Aroclor 1016 (3)	7.070	19941	22.648	ng/ml
5)	Aroclor 1016 (4)	7.157	21875	24.282	ng/ml
6)	Aroclor 1016 (5)	7.203	23916	24.150	ng/ml
7)	Aroclor 1016 (6)	7.329	24158	24.288	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	45927	23.658	ng/ml
42)	Aroclor 1260 (2)	8.514	55539	23.427	ng/ml
43)	Aroclor 1260 (3)	8.750	53201	22.037	ng/ml
44)	Aroclor 1260 (4)	9.252	77910	21.937	ng/ml
45)	Aroclor 1260 (5)	9.529	47395	22.544	ng/ml
46)	Aroclor 1260 (6)	10.134	19605	23.549	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:14 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

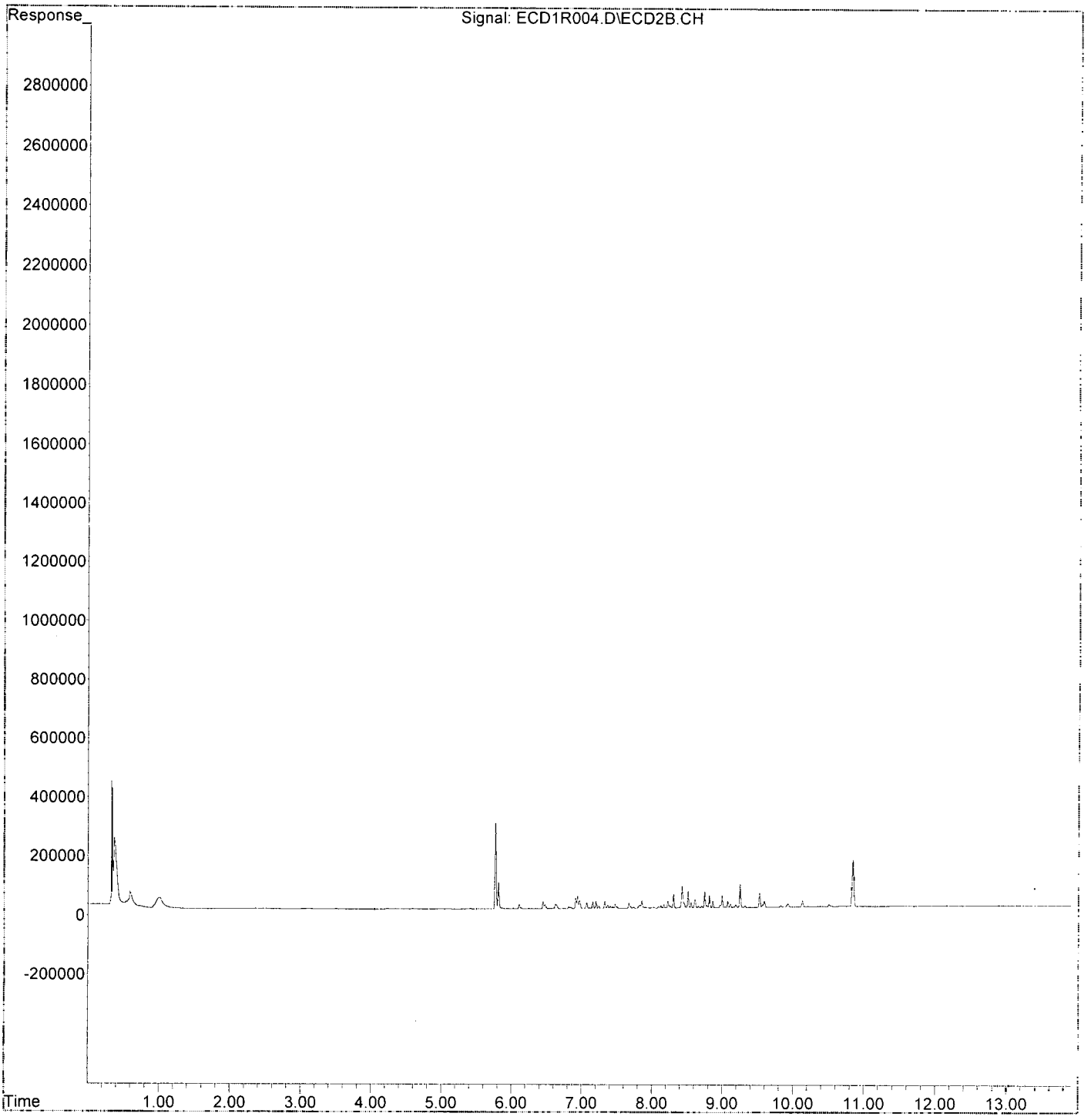
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:14 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:33 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.770	736722	24.744	ng/ml
62) S	DCBP (S)	10.844	383773	24.825	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	56969	55.959	ng/ml
3)	Aroclor 1016 (2)	6.941	98791	52.592	ng/ml
4)	Aroclor 1016 (3)	7.070	47384	53.817	ng/ml
5)	Aroclor 1016 (4)	7.156	51568	57.242	ng/ml
6)	Aroclor 1016 (5)	7.202	55745	56.289	ng/ml
7)	Aroclor 1016 (6)	7.329	55560	55.860	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	105677	54.436	ng/ml
42)	Aroclor 1260 (2)	8.515	124075	52.338	ng/ml
43)	Aroclor 1260 (3)	8.750	125541	52.002	ng/ml
44)	Aroclor 1260 (4)	9.252	181287	51.044	ng/ml
45)	Aroclor 1260 (5)	9.529	108929	51.814	ng/ml
46)	Aroclor 1260 (6)	10.134	45923	55.161	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:33 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

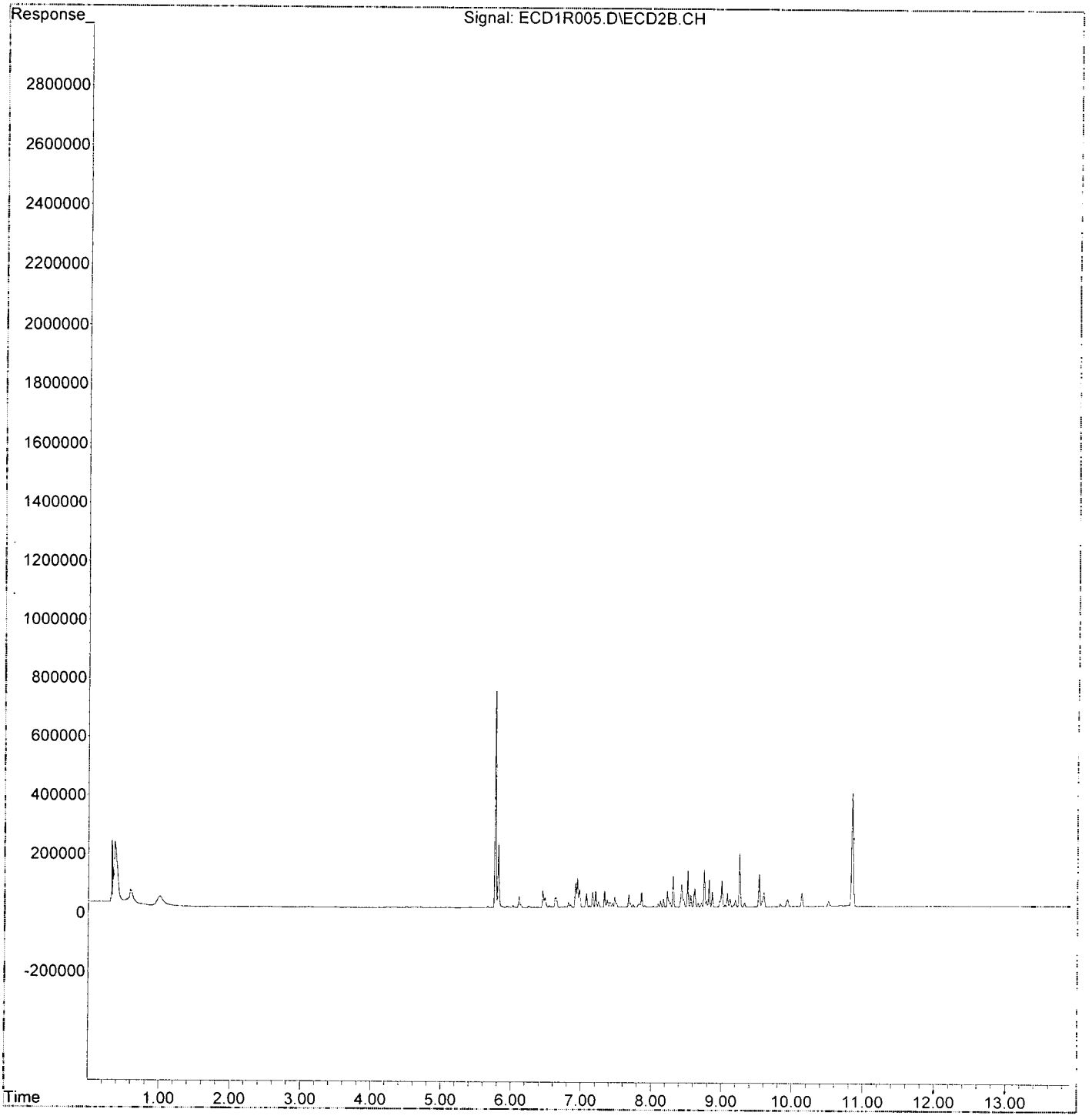
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:33 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:16
Operator : MJB / KAK
Sample : 9K14008-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.771	1489068	50.012	ng/ml
62) S	DCBP (S)	10.843	751245	48.596	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	105047	103.185	ng/ml
3)	Aroclor 1016 (2)	6.941	187283	99.702	ng/ml
4)	Aroclor 1016 (3)	7.070	91164	103.540	ng/ml
5)	Aroclor 1016 (4)	7.156	90145	100.064	ng/ml
6)	Aroclor 1016 (5)	7.202	100899	101.884	ng/ml
7)	Aroclor 1016 (6)	7.329	100441	100.982	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	191433	98.610	ng/ml
42)	Aroclor 1260 (2)	8.514	237983	100.386	ng/ml
43)	Aroclor 1260 (3)	8.748	239449	99.186	ng/ml
44)	Aroclor 1260 (4)	9.251	337225	94.951	ng/ml
45)	Aroclor 1260 (5)	9.527	204040	97.055	ng/ml
46)	Aroclor 1260 (6)	10.134	82253	98.800	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:16
Operator : MJB / KAK
Sample : 9K14008-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

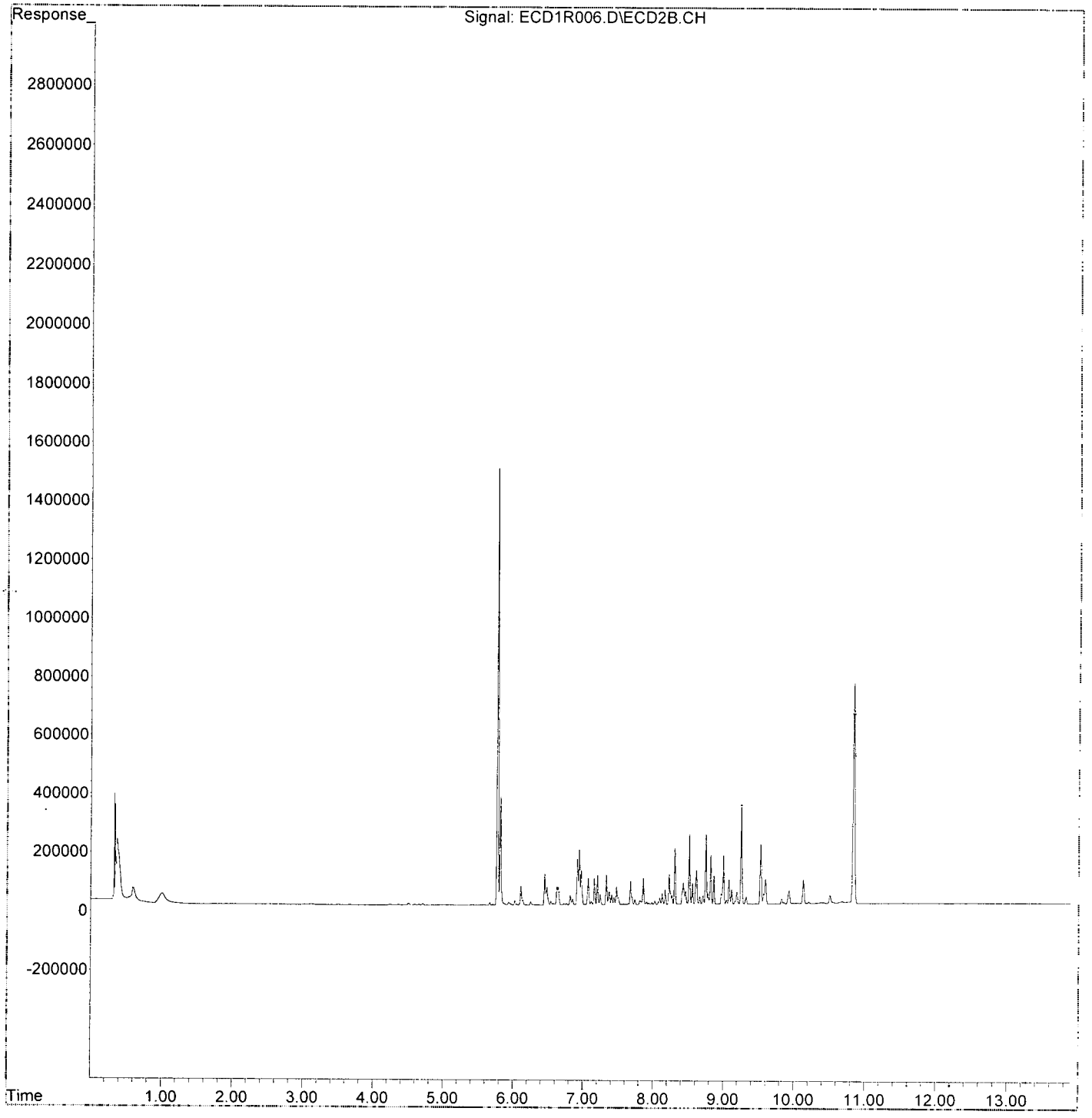
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:16
Operator : MJB / KAK
Sample : 9K14008-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:03:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:07 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.771	2946461	98.960	ng/ml
62) S	DCBP (S)	10.844	1503461	97.254	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	192862	189.443	ng/ml
3)	Aroclor 1016 (2)	6.942	364568	194.083	ng/ml
4)	Aroclor 1016 (3)	7.070	167039	189.717	ng/ml
5)	Aroclor 1016 (4)	7.157	170996	189.811	ng/ml
6)	Aroclor 1016 (5)	7.202	185952	187.766	ng/ml
7)	Aroclor 1016 (6)	7.329	188795	189.813	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	361791	186.363	ng/ml
42)	Aroclor 1260 (2)	8.514	451338	190.384	ng/ml
43)	Aroclor 1260 (3)	8.749	466742	193.337	ng/ml
44)	Aroclor 1260 (4)	9.252	691570	194.721	ng/ml
45)	Aroclor 1260 (5)	9.528	409612	194.839	ng/ml
46)	Aroclor 1260 (6)	10.135	159199	191.224	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:07 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

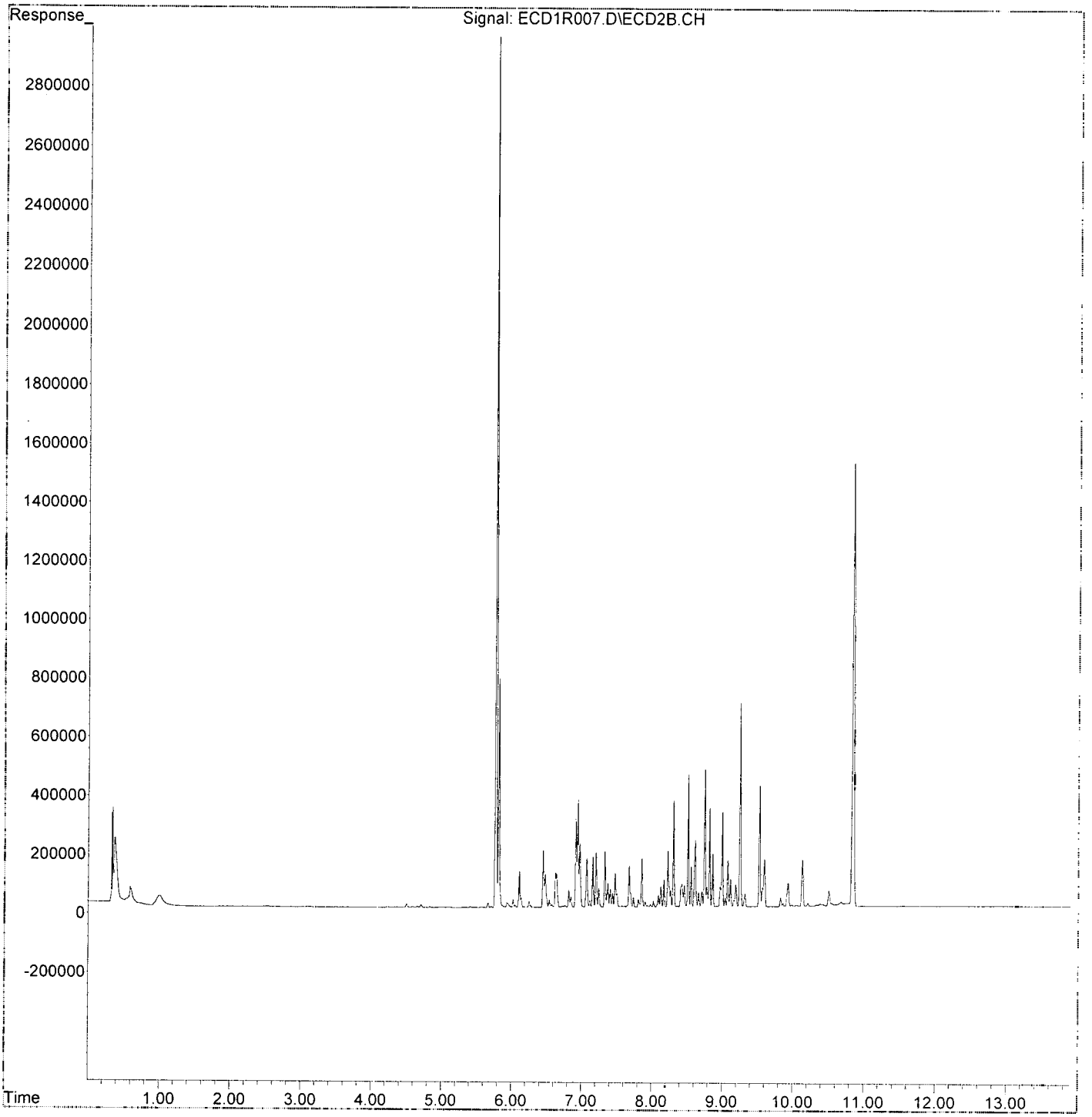
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:07 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:25 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.772	7862730	264.079	ng/ml
62)	S DCBP (S)	10.846	3978485	257.357	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	465811	457.553	ng/ml
3)	Aroclor 1016 (2)	6.942	897218	477.646	ng/ml
4)	Aroclor 1016 (3)	7.070	407855	463.227	ng/ml
5)	Aroclor 1016 (4)	7.157	409046	454.052	ng/ml
6)	Aroclor 1016 (5)	7.203	458751	463.228	ng/ml
7)	Aroclor 1016 (6)	7.329	459123	461.599	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	900101	463.653	ng/ml
42)	Aroclor 1260 (2)	8.514	1136472	479.388	ng/ml
43)	Aroclor 1260 (3)	8.749	1135933	470.533	ng/ml
44)	Aroclor 1260 (4)	9.252	1738359	489.460	ng/ml
45)	Aroclor 1260 (5)	9.528	1002994	477.091	ng/ml
46)	Aroclor 1260 (6)	10.135	386173	463.858	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:25 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

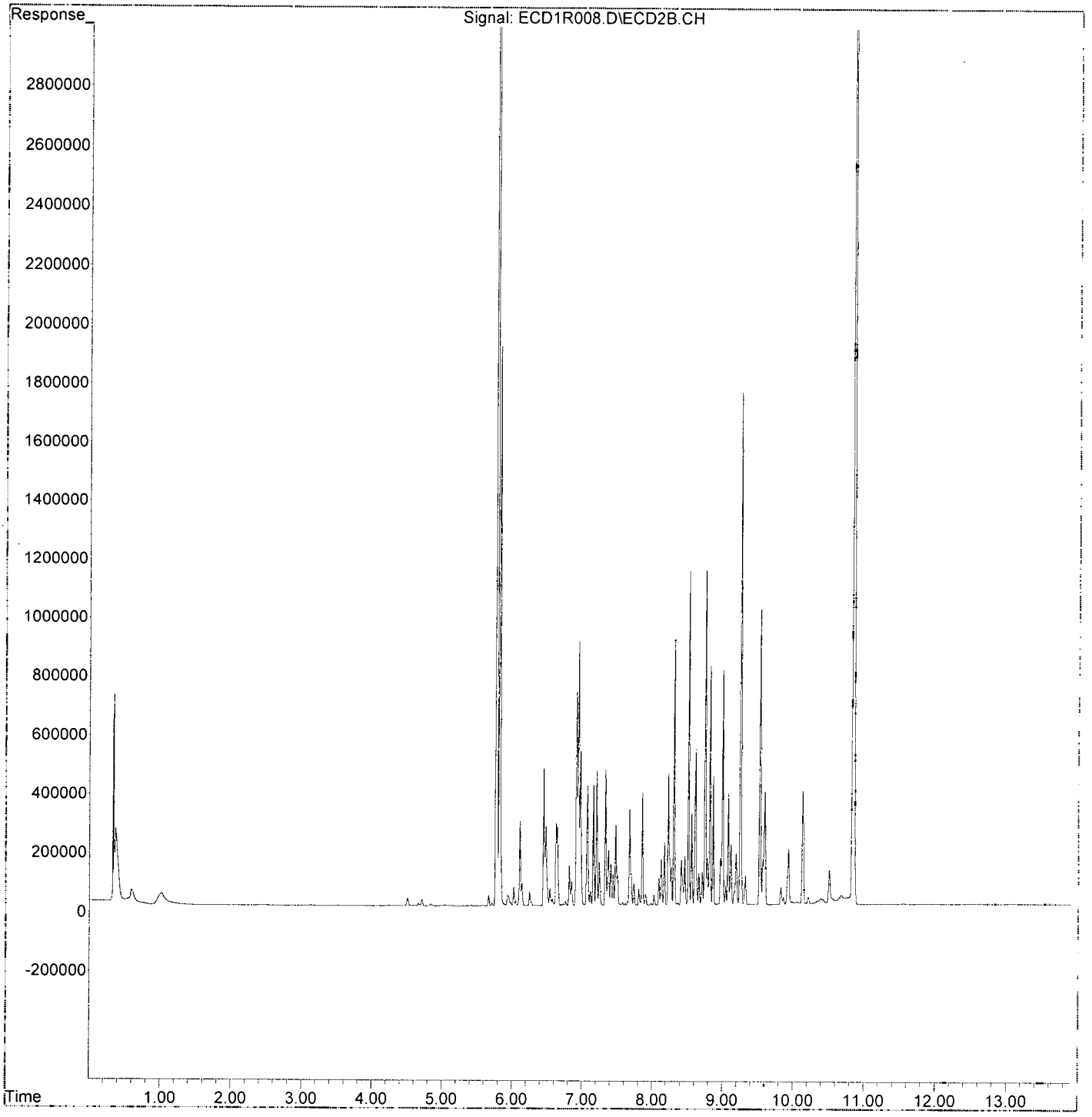
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:25 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:42 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.772	14565057	489.184	ng/ml
62) S	DCBP (S)	10.844	7354134	475.717	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.447	910088	893.955	ng/ml
3)	Aroclor 1016 (2)	6.941	1760361	937.151	ng/ml
4)	Aroclor 1016 (3)	7.069	822421	934.076	ng/ml
5)	Aroclor 1016 (4)	7.157	798442	886.292	ng/ml
6)	Aroclor 1016 (5)	7.202	869103	877.584	ng/ml
7)	Aroclor 1016 (6)	7.329	865672	870.340	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	1784866	919.407	ng/ml
42)	Aroclor 1260 (2)	8.515	2167457	914.279	ng/ml
43)	Aroclor 1260 (3)	8.749	2304609	954.628	ng/ml
44)	Aroclor 1260 (4)	9.252	3418561	962.544	ng/ml
45)	Aroclor 1260 (5)	9.529	1997897	950.332	ng/ml
46)	Aroclor 1260 (6)	10.134	745363	895.305	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:42 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

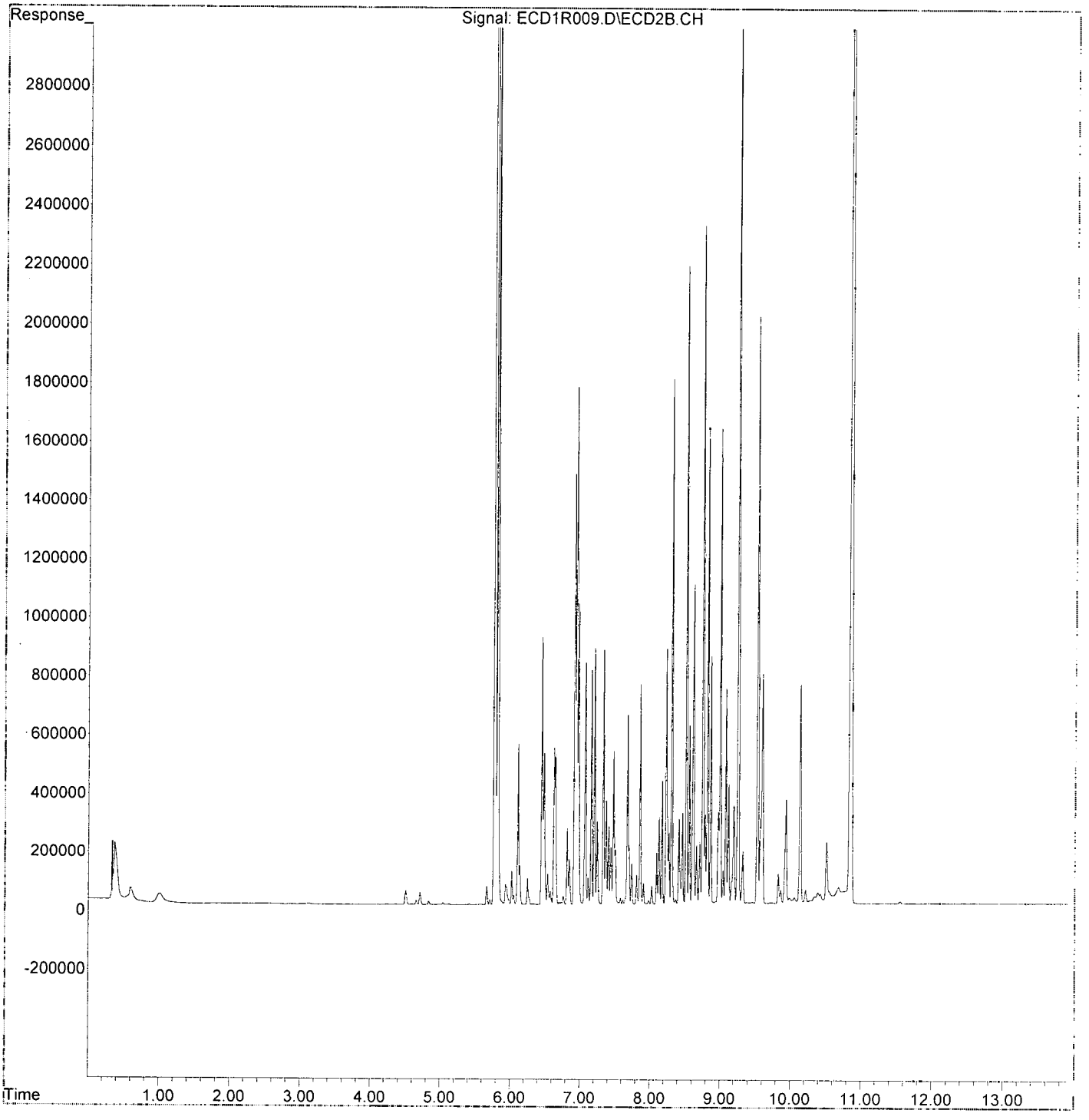
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:42 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.772	24056561	807.967	ng/ml	✓
62) S	DCBP (S)	10.846	13224446	855.451	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	6.448	1340249	1316.490	ng/ml	
3)	Aroclor 1016 (2)	6.941	2709146	1442.249	ng/ml	
4)	Aroclor 1016 (3)	7.070	1250324	1420.072	ng/ml	✓
5)	Aroclor 1016 (4)	7.157	1212068	1345.428	ng/ml	
6)	Aroclor 1016 (5)	7.202	1344409	1357.529	ng/ml	
7)	Aroclor 1016 (6)	7.329	1366607	1373.976	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld	
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld	
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld	
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld	
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld	
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld	
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld	
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld	
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld	
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld	
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld	
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld	
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld	
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld	
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld	
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld	
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld	
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld	
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld	
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld	
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld	
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld	
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld	
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld	
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld	
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld	
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld	
41)	Aroclor 1260 (1)	8.307	2806486	1445.656	ng/ml	
42)	Aroclor 1260 (2)	8.515	3389021	1429.561	ng/ml	
43)	Aroclor 1260 (3)	8.749	3635158	1505.775	ng/ml	
44)	Aroclor 1260 (4)	9.252	5421723	1526.563	ng/ml	✓
45)	Aroclor 1260 (5)	9.529	3113269	1480.878	ng/ml	
46)	Aroclor 1260 (6)	10.133	1189118	1428.329	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

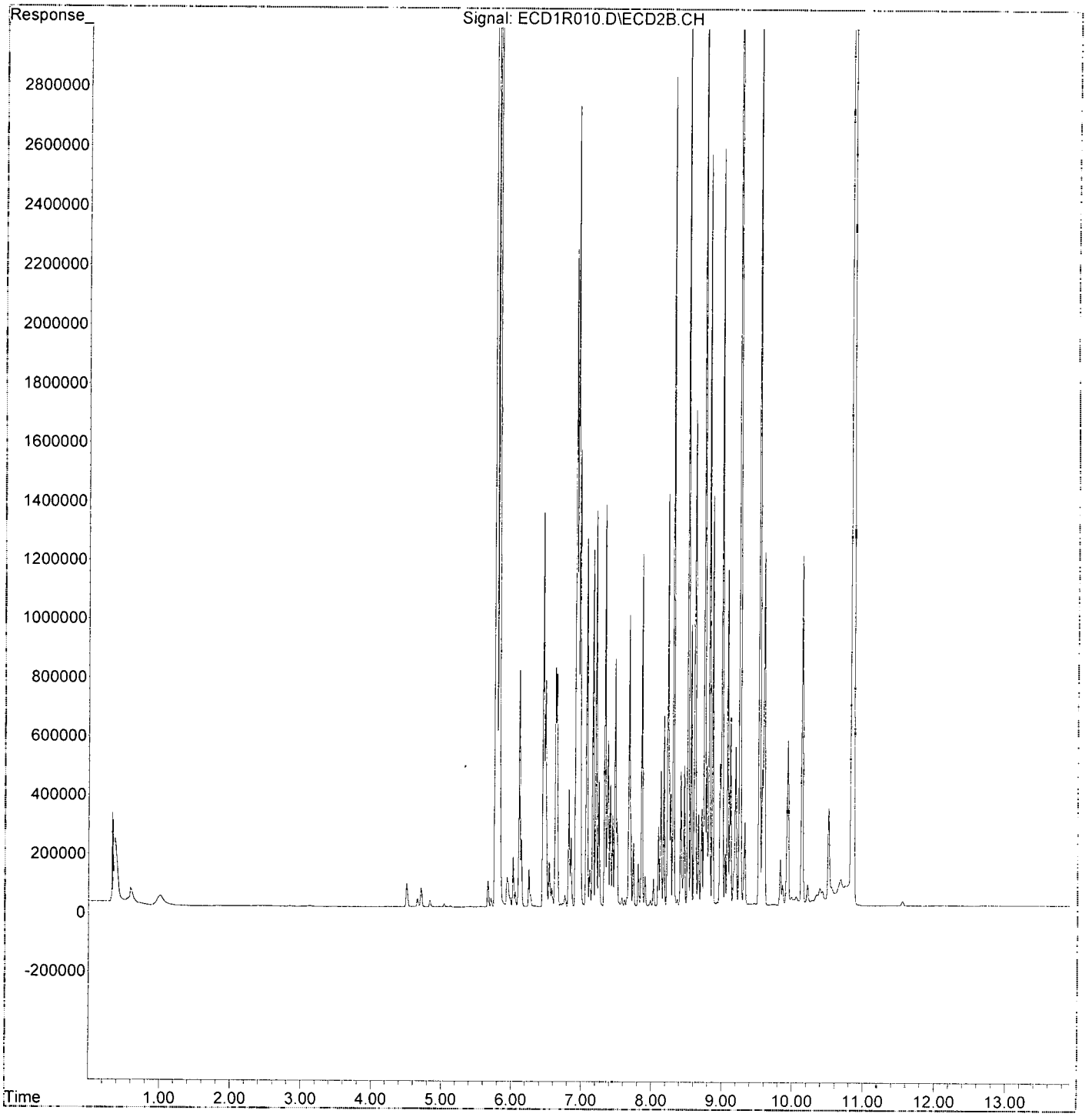
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\requant\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 09:04:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:50:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\1\SEQUENCE\9K14007.S

Sequence Table (Front Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	Isooctane	E1A90127	1	Sample		
2	Vial 1	Isooctane	E1A90127	1	Sample		
3	Vial 4	1221 RT Update	E1A90127	1	Sample		
4	Vial 5	1232 RT Update	E1A90127	1	Sample		
5	Vial 6	1242 RT Update	E1A90127	1	Sample		
6	Vial 7	1248 RT Update	E1A90127	1	Sample		
7	Vial 8	1254 RT Update	E1A90127	1	Sample		
8	Vial 9	1262 RT Update	E1A90127	1	Sample		
9	Vial 10	1268 RT Update	E1A90127	1	Sample		
10	Vial 2	9K14007-CCV1	E1A90127	1	Sample		
11	Vial 3	9K14007-CCB1	E1A90127	1	Sample		
12	Vial 11	9110786-BLK1	E1A90127	1	Sample		
13	Vial 12	9110786-BS1	E1A90127	1	Sample		
14	Vial 13	A9K0351-01	E1A90127	1	Sample		
15	Vial 1	9K14007-IBL1	E1A90127	1	Sample		
16	Vial 14	9110786-DUP1	E1A90127	1	Sample		
17	Vial 1	9K14007-IBL2	E1A90127	1	Sample		
18	Vial 15	A9K0370-01@2	E1A90127	1	Sample		
19	Vial 1	9K14007-IBL3	E1A90127	1	Sample		
20	Vial 2	9K14007-CCV2	E1A90127	1	Sample		
21	Vial 3	9K14007-CCB2	E1A90127	1	Sample		
22	Vial 1	Isooctane	E1A90127	1	Sample		
23	Vial 1	Isooctane	E1A90127	1	Sample		

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 54	conditioning run	E1A90127	1	Sample		
2	Vial 51	Isooctane	E1A90127	1	Sample		
3	Vial 52	9K14008-ICB1	E1A90127	1	Sample		
4	Vial 53	9K14008-CAL1	E1A90127	1	Sample		
5	Vial 54	9K14008-CAL2	E1A90127	1	Sample		
6	Vial 55	9K14008-CAL3	E1A90127	1	Sample		
7	Vial 56	9K14008-CAL4	E1A90127	1	Sample		
8	Vial 57	9K14008-CAL5	E1A90127	1	Sample		
9	Vial 58	9K14008-CAL6	E1A90127	1	Sample		
10	Vial 59	9K14008-CAL7	E1A90127	1	Sample		
11	Vial 51	9K14008-IBL1	E1A90127	1	Sample		
12	Vial 60	9K14008-ICV1	E1A90127	1	Sample		
13	Vial 61	9K14008-CAL8	E1A90127	1	Sample		
14	Vial 62	9K14008-CAL9	E1A90127	1	Sample		
15	Vial 63	9K14008-CALA	E1A90127	1	Sample		
16	Vial 64	9K14008-CALB	E1A90127	1	Sample		
17	Vial 65	9K14008-CALC	E1A90127	1	Sample		
18	Vial 66	9K14008-CALD	E1A90127	1	Sample		
19	Vial 67	9K14008-CALE	E1A90127	1	Sample		
20	Vial 68	9K14008-ICV2	E1A90127	1	Sample		
21	Vial 69	9K14008-ICV3	E1A90127	1	Sample		
22	Vial 70	9K14008-ICV4	E1A90127	1	Sample		
23	Vial 71	9K14008-ICV5	E1A90127	1	Sample		

11/14/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:14:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.771	290528	9.826	ng/ml
62) S	DCBP (S)	10.845	156500	10.861	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	24739	24.032	ng/ml
3)	Aroclor 1016 (2)	6.942	42331	22.296	ng/ml
4)	Aroclor 1016 (3)	7.070	19941	22.448	ng/ml
5)	Aroclor 1016 (4)	7.157	21875	23.957	ng/ml
6)	Aroclor 1016 (5)	7.203	23916	23.803	ng/ml
7)	Aroclor 1016 (6)	7.329	24158	24.131	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	45927	24.077	ng/ml
42)	Aroclor 1260 (2)	8.514	55539	23.851	ng/ml
43)	Aroclor 1260 (3)	8.750	53201	22.309	ng/ml
44)	Aroclor 1260 (4)	9.252	77910	23.121	ng/ml
45)	Aroclor 1260 (5)	9.529	47395	23.531	ng/ml
46)	Aroclor 1260 (6)	10.134	19605	25.189	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:14:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

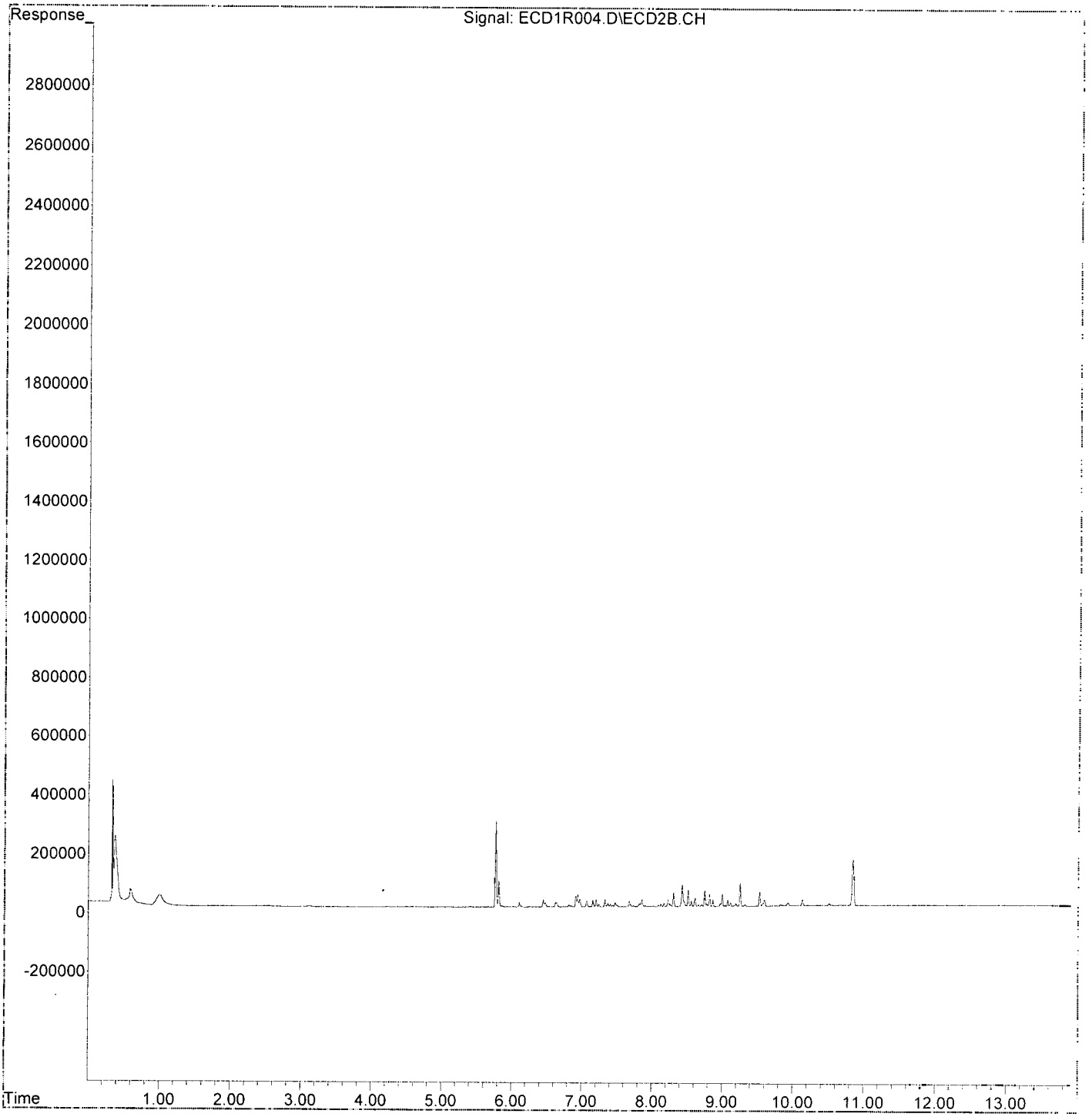
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R004.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:40
Operator : MJB / KAK
Sample : 9K14008-CAL1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:14:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:16:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	TCMX (S)	5.770	736722	24.916 ng/ml
62) S	DCBP (S)	10.844	383773	26.633 ng/ml
Target Compounds				
2)	Aroclor 1016 (1)	6.448	56969	55.341 ng/ml
3)	Aroclor 1016 (2)	6.941	98791	52.033 ng/ml
4)	Aroclor 1016 (3)	7.070	47384	53.341 ng/ml
5)	Aroclor 1016 (4)	7.156	51568	56.474 ng/ml
6)	Aroclor 1016 (5)	7.202	55745	55.481 ng/ml
7)	Aroclor 1016 (6)	7.329	55560	55.498 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D. ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D. ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D. ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D. ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D. ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D. ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D. ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D. ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D. ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D. ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D. ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D. ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D. ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D. ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D. ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D. ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D. ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D. ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D. ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D. ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D. ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D. ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D. ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D. ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D. ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/mld
41)	Aroclor 1260 (1)	8.307	105677	55.400 ng/ml
42)	Aroclor 1260 (2)	8.515	124075	53.285 ng/ml
43)	Aroclor 1260 (3)	8.750	125541	52.644 ng/ml
44)	Aroclor 1260 (4)	9.252	181287	53.800 ng/ml
45)	Aroclor 1260 (5)	9.529	108929	54.082 ng/ml
46)	Aroclor 1260 (6)	10.134	45923	59.003 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:16:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

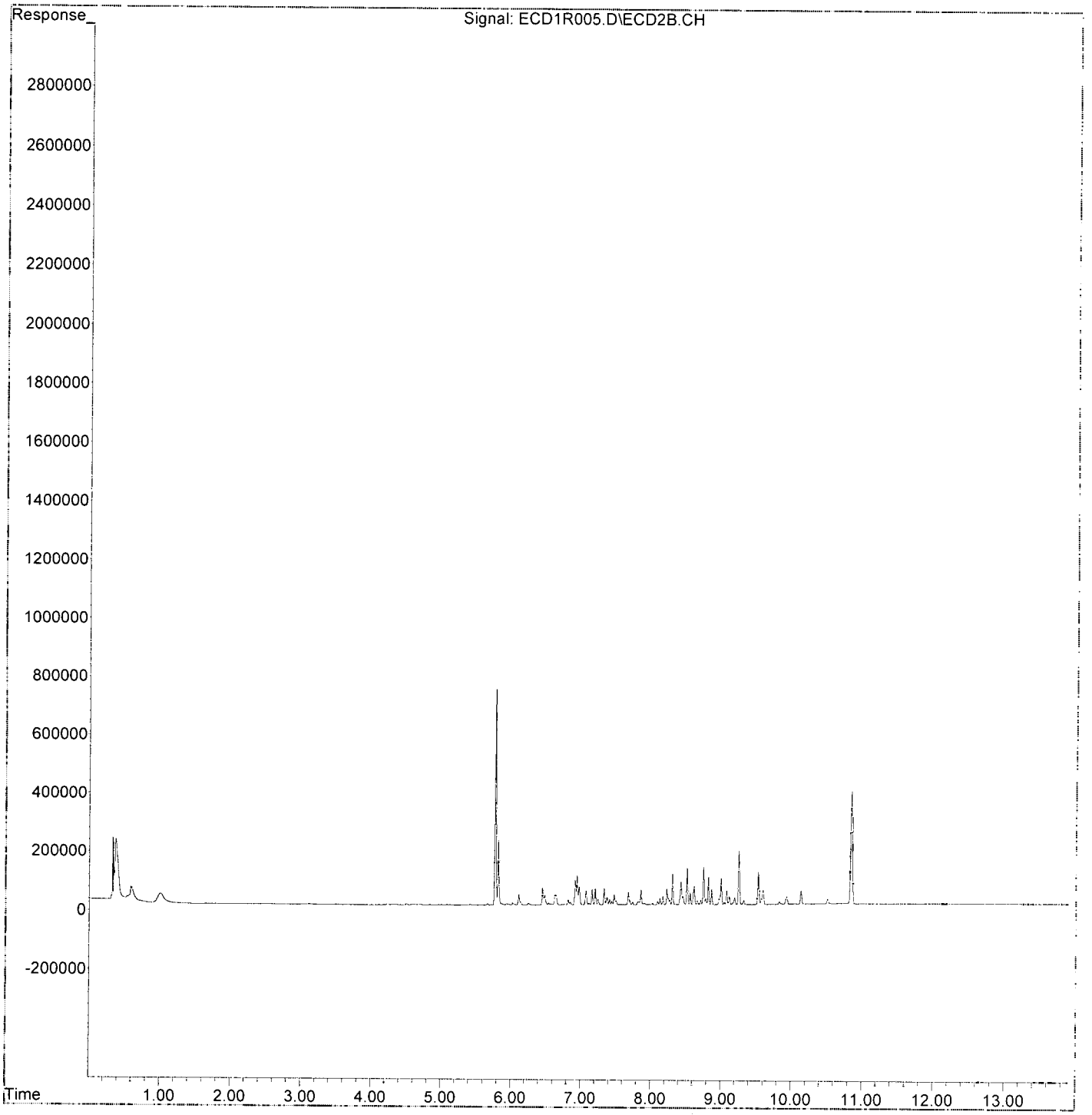
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R005.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 8:58
Operator : MJB / KAK
Sample : 9K14008-CAL2
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:16:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

```
Data Path : I:\DATA\9K14008\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On    : 14 Nov 2019   9:16
Operator  : MJB / KAK
Sample    : 9K14008-CAL3
Misc      :
ALS Vial  : 55   Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:17:36 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title  : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Small noise peaks clipped
```

Compound		R.T.	Response	Conc	Units
System Monitoring Compounds					
1) S	TCMX (S)	5.771	1489068	50.360	ng/ml
62) S	DCBP (S)	10.843	751245	52.134	ng/ml
Target Compounds					
2)	Aroclor 1016 (1)	6.448	105047	102.045	ng/ml
3)	Aroclor 1016 (2)	6.941	187283	98.642	ng/ml
4)	Aroclor 1016 (3)	7.070	91164	102.625	ng/ml
5)	Aroclor 1016 (4)	7.156	90145	98.722	ng/ml
6)	Aroclor 1016 (5)	7.202	100899	100.422	ng/ml
7)	Aroclor 1016 (6)	7.329	100441	100.328	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	191433	100.357	ng/ml
42)	Aroclor 1260 (2)	8.514	237983	102.203	ng/ml
43)	Aroclor 1260 (3)	8.748	239449	100.410	ng/ml
44)	Aroclor 1260 (4)	9.251	337225	100.077	ng/ml
45)	Aroclor 1260 (5)	9.527	204040	101.304	ng/ml
46)	Aroclor 1260 (6)	10.134	82253	105.682	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:16
Operator : MJB / KAK
Sample : 9K14008-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:17:36 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

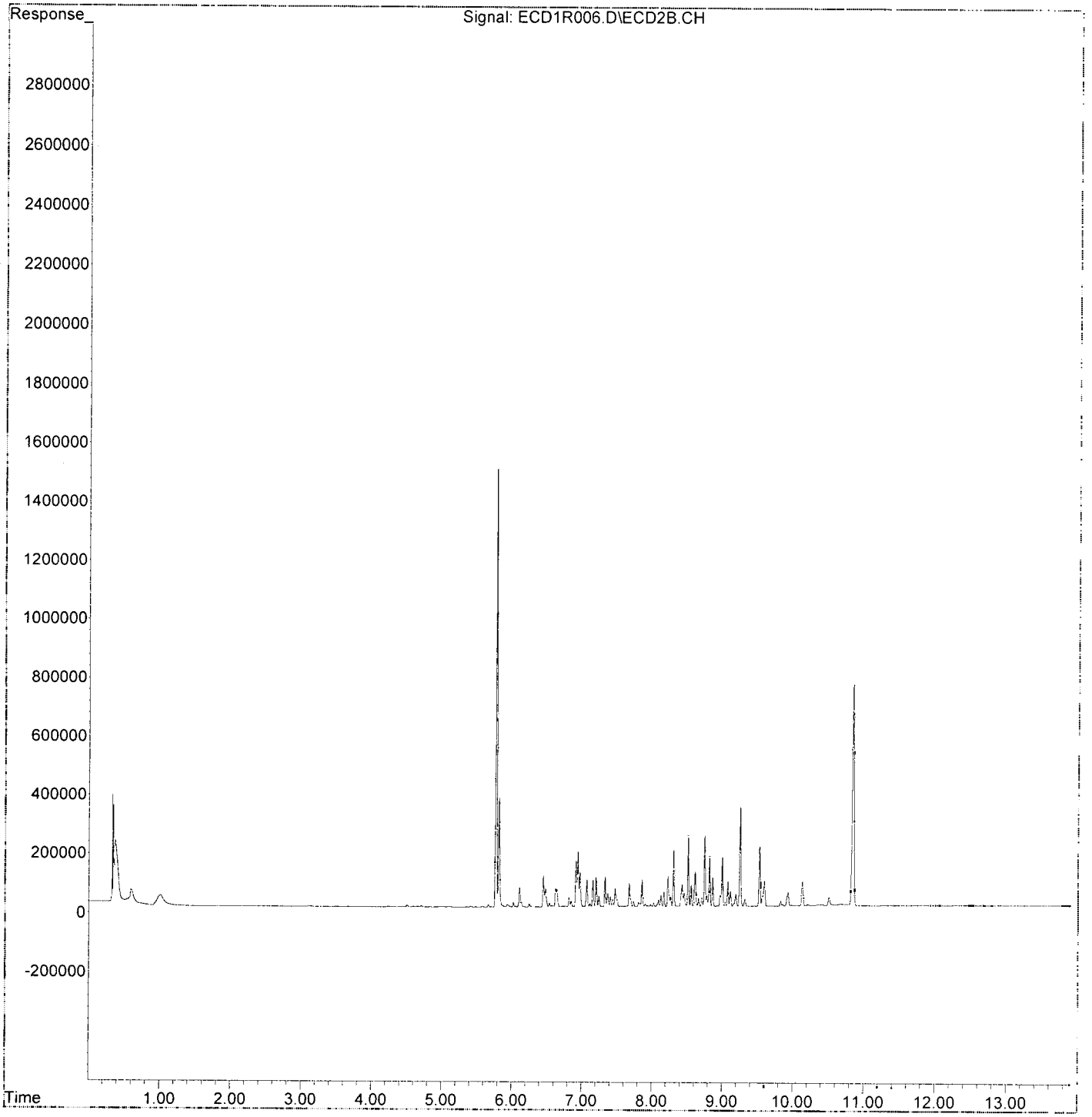
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R006.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:16
Operator : MJB / KAK
Sample : 9K14008-CAL3
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:17:36 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:18:45 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.771	2946461	99.648	ng/ml
62) S	DCBP (S)	10.844	1503461	104.335	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	192862	187.350	ng/ml
3)	Aroclor 1016 (2)	6.942	364568	192.018	ng/ml
4)	Aroclor 1016 (3)	7.070	167039	188.039	ng/ml
5)	Aroclor 1016 (4)	7.157	170996	187.265	ng/ml
6)	Aroclor 1016 (5)	7.202	185952	185.071	ng/ml
7)	Aroclor 1016 (6)	7.329	188795	188.583	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	361791	189.666	ng/ml
42)	Aroclor 1260 (2)	8.514	451338	193.829	ng/ml
43)	Aroclor 1260 (3)	8.749	466742	195.721	ng/ml
44)	Aroclor 1260 (4)	9.252	691570	205.235	ng/ml
45)	Aroclor 1260 (5)	9.528	409612	203.368	ng/ml
46)	Aroclor 1260 (6)	10.135	159199	204.544	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:18:45 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

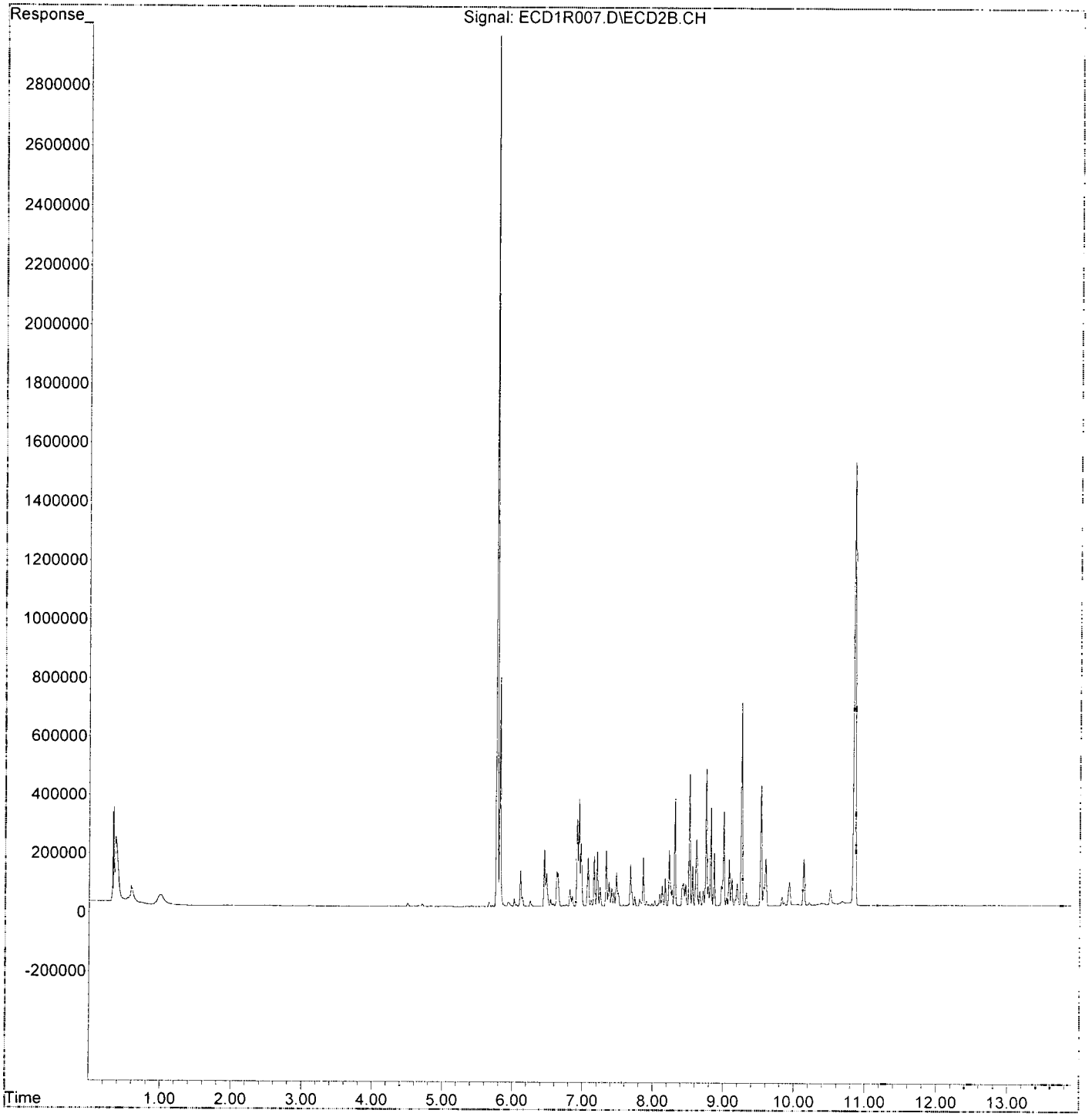
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R007.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:35
Operator : MJB / KAK
Sample : 9K14008-CAL4
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:18:45 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:13:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:13:15 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.772	7862730	265.915	ng/ml
62) S	DCBP (S)	10.846	3978485	276.094	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	465811	452.500	ng/ml
3)	Aroclor 1016 (2)	6.942	897218	472.563	ng/ml
4)	Aroclor 1016 (3)	7.070	407855	459.130	ng/ml
5)	Aroclor 1016 (4)	7.157	409046	447.962	ng/ml
6)	Aroclor 1016 (5)	7.203	458751	456.580	ng/ml
7)	Aroclor 1016 (6)	7.329	459123	458.609	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	900101	471.869	ng/ml
42)	Aroclor 1260 (2)	8.514	1136472	488.063	ng/ml
43)	Aroclor 1260 (3)	8.749	1135933	476.337	ng/ml
44)	Aroclor 1260 (4)	9.252	1738359	515.888	ng/ml
45)	Aroclor 1260 (5)	9.528	1002994	497.976	ng/ml
46)	Aroclor 1260 (6)	10.135	386173	496.168	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:13:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:13:15 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

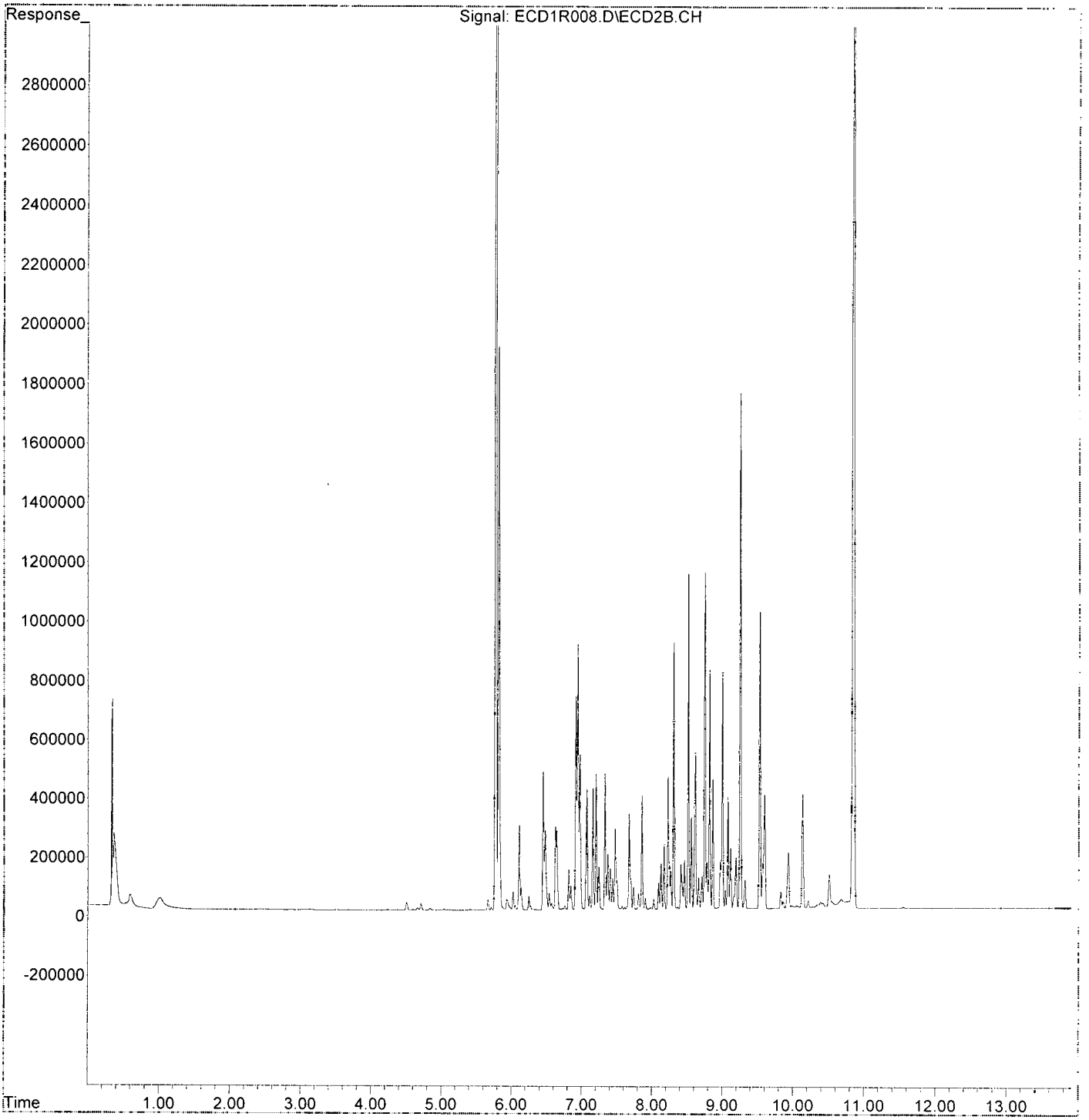
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R008.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 9:53
Operator : MJB / KAK
Sample : 9K14008-CAL5
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:13:22 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:13:15 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:20:06 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.772	14565057	492.585	ng/ml
62) S	DCBP (S)	10.844	7354134	510.353	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.447	910088	884.081	ng/ml
3)	Aroclor 1016 (2)	6.941	1760361	927.179	ng/ml
4)	Aroclor 1016 (3)	7.069	822421	925.814	ng/ml
5)	Aroclor 1016 (4)	7.157	798442	874.404	ng/ml
6)	Aroclor 1016 (5)	7.202	869103	864.989	ng/ml
7)	Aroclor 1016 (6)	7.329	865672	864.702	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	1784866	935.699	ng/ml
42)	Aroclor 1260 (2)	8.515	2167457	930.824	ng/ml
43)	Aroclor 1260 (3)	8.749	2304609	966.404	ng/ml
44)	Aroclor 1260 (4)	9.252	3418561	1014.516	ng/ml
45)	Aroclor 1260 (5)	9.529	1997897	991.936	ng/ml
46)	Aroclor 1260 (6)	10.134	745363	957.668	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:20:06 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

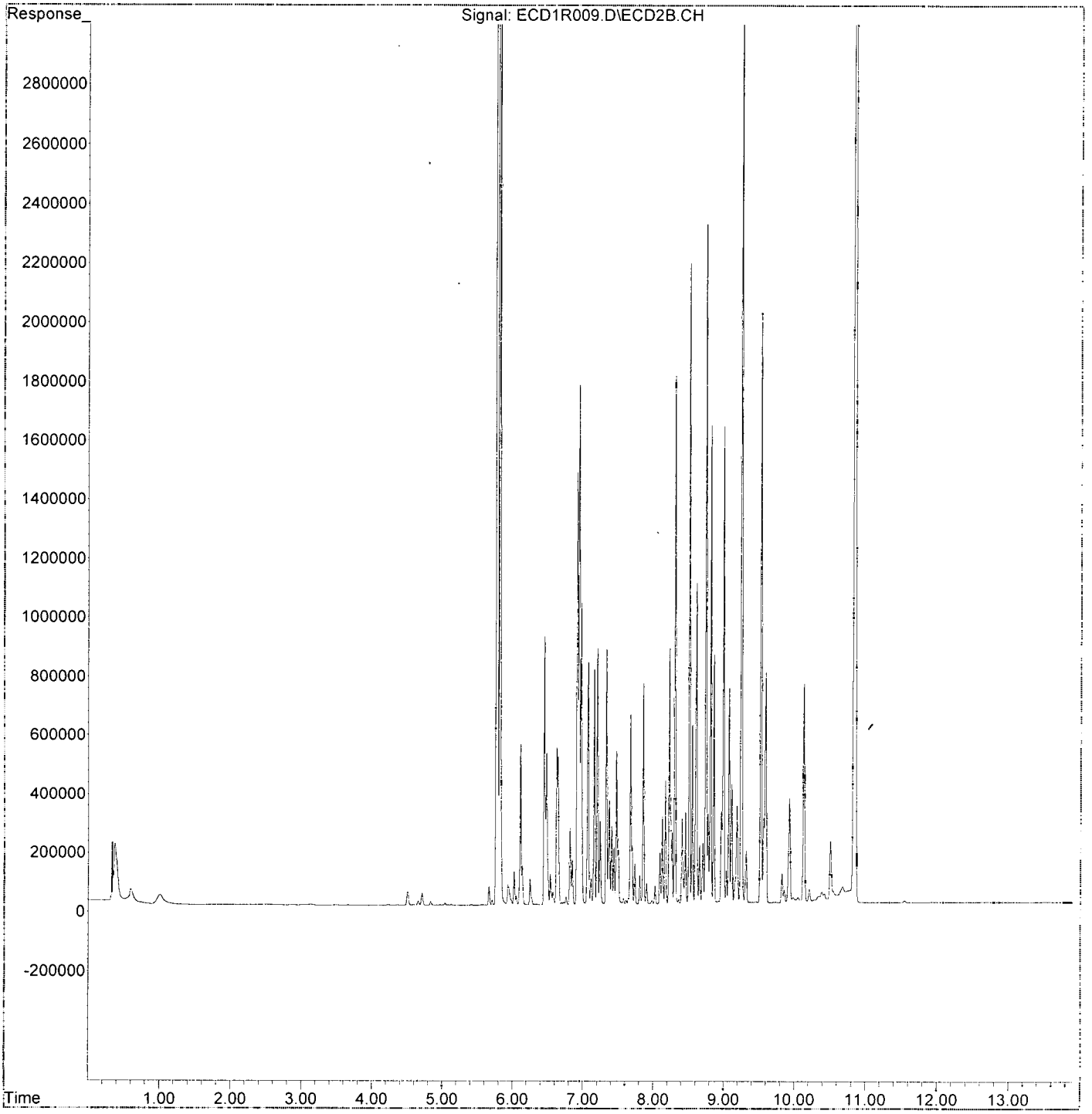
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R009.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:11
Operator : MJB / KAK
Sample : 9K14008-CAL6
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:20:06 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:21:21 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.772	24056561	813.585	ng/ml
62) S	DCBP (S)	10.846	13224446	917.734	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.448	1340249	1301.949	ng/ml
3)	Aroclor 1016 (2)	6.941	2709146	1426.902	ng/ml
4)	Aroclor 1016 (3)	7.070	1250324	1407.512	ng/ml
5)	Aroclor 1016 (4)	7.157	1212068	1327.382	ng/ml
6)	Aroclor 1016 (5)	7.202	1344409	1338.045	ng/ml
7)	Aroclor 1016 (6)	7.329	1366607	1365.077	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	8.307	2806486	1471.274	ng/ml
42)	Aroclor 1260 (2)	8.515	3389021	1455.430	ng/ml
43)	Aroclor 1260 (3)	8.749	3635158	1524.350	ng/ml
44)	Aroclor 1260 (4)	9.252	5421723	1608.989	ng/ml
45)	Aroclor 1260 (5)	9.529	3113269	1545.707	ng/ml
46)	Aroclor 1260 (6)	10.133	1189118	1527.820	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:21:21 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

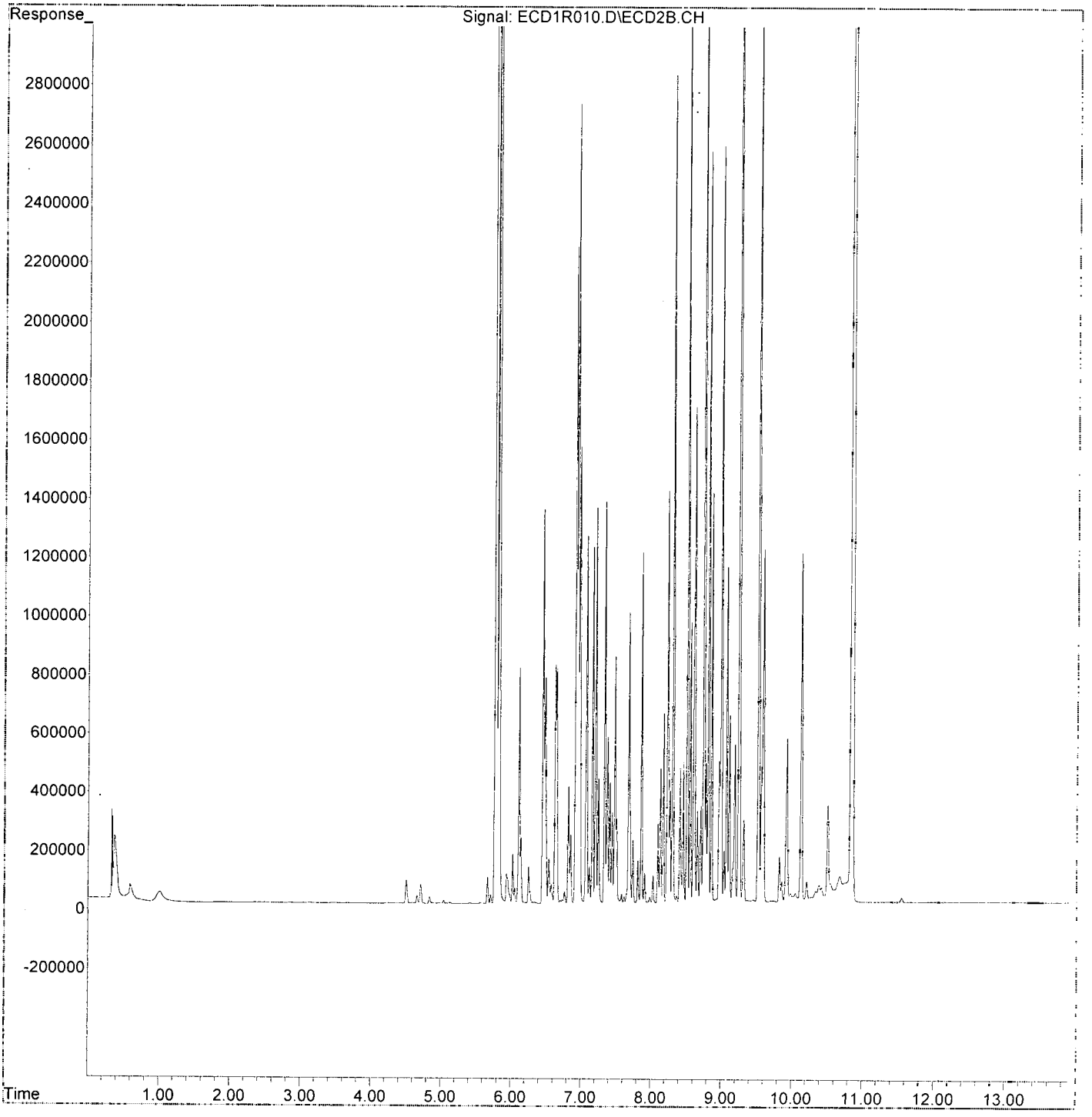
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D. ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D. ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D. ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D. ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D. ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D. ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R010.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 10:29
Operator : MJB / KAK
Sample : 9K14008-CAL7
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:21:21 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Sat Oct 19 13:26:36 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R013.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:24
Operator : MJB / KAK
Sample : 9K14008-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:23:24 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:23:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	5.948	127370	501.009	ng/ml
10)	Aroclor 1221 (2)	6.021	126878	528.345	ng/ml
11)	Aroclor 1221 (3)	6.109	419163	527.887	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R013.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:24
Operator : MJB / KAK
Sample : 9K14008-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:23:24 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:23:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

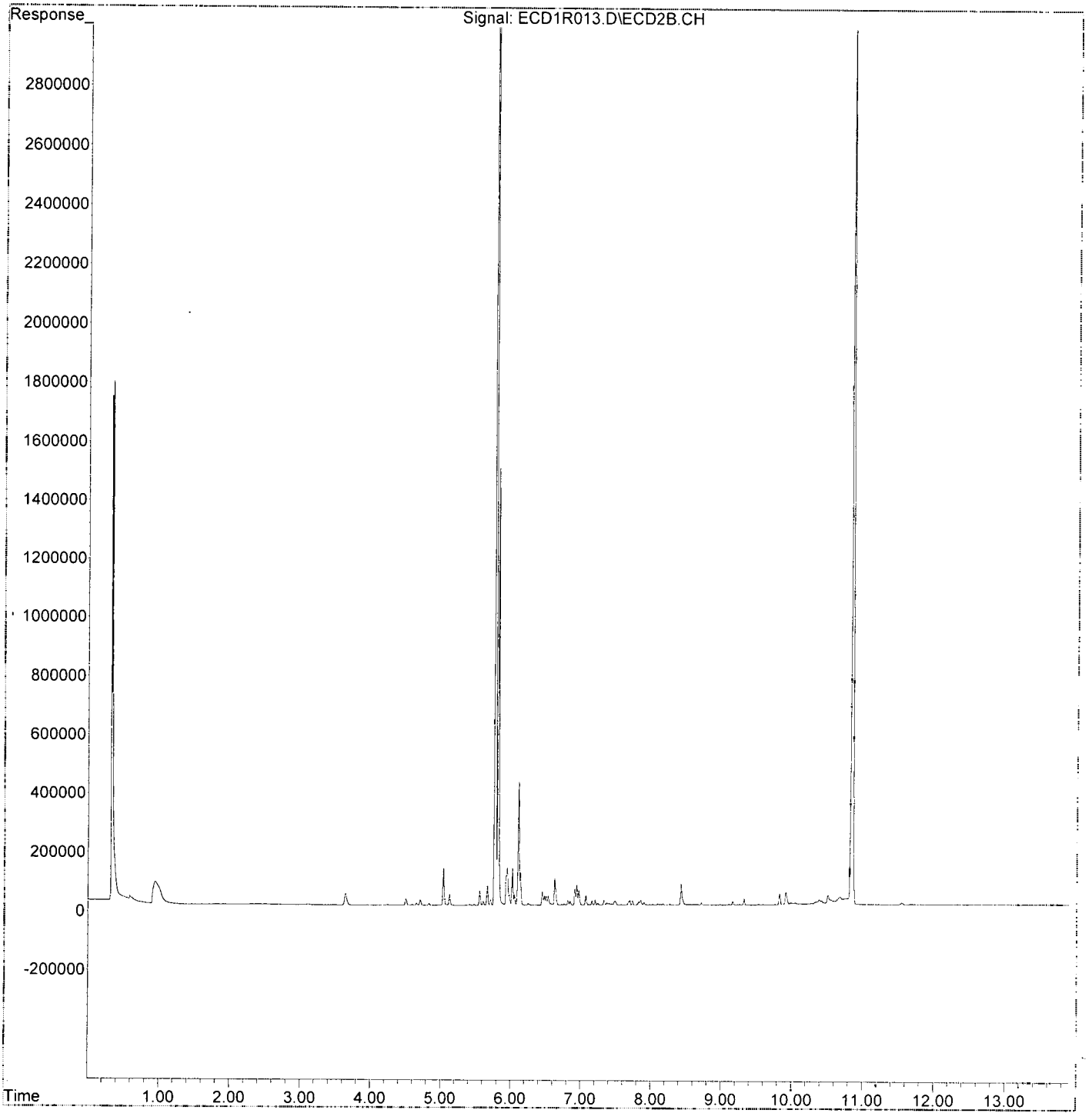
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R013.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:24
Operator : MJB / KAK
Sample : 9K14008-CAL8
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:23:24 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:23:18 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R014.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:42
Operator : MJB / KAK
Sample : 9K14008-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:25:37 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:25:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	6.109	319934	480.206	ng/ml
14)	Aroclor 1232 (2)	6.448	202088	474.976	ng/ml
15)	Aroclor 1232 (3)	6.942	381360	503.257	ng/ml
16)	Aroclor 1232 (4)	7.070	174293	504.762	ng/ml
17)	Aroclor 1232 (5)	7.157	149714	507.143	ng/ml
18)	Aroclor 1232 (6)	7.329	173150	493.932	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R014.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:42
Operator : MJB / KAK
Sample : 9K14008-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:25:37 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:25:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

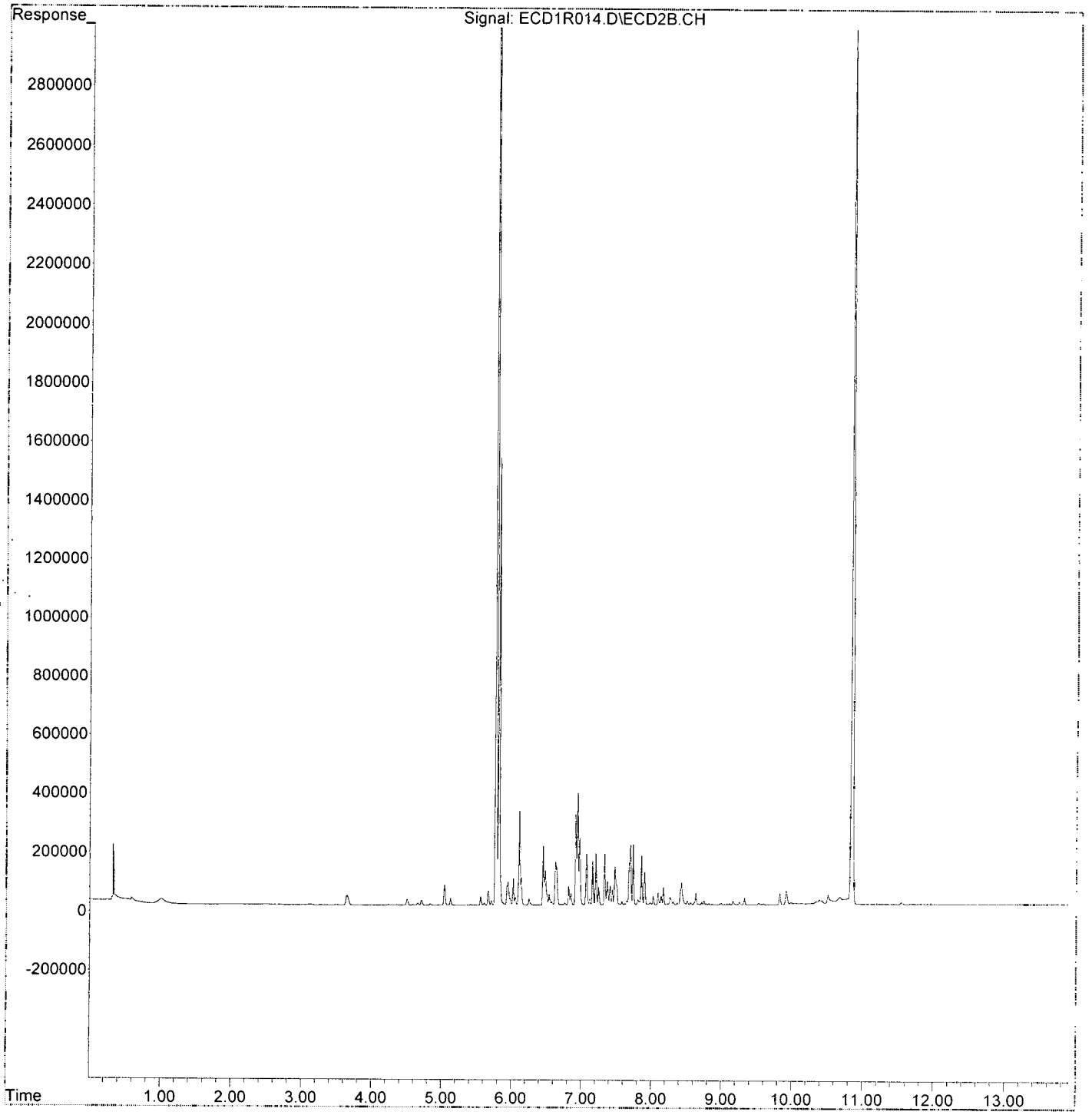
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R014.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 11:42
Operator : MJB / KAK
Sample : 9K14008-CAL9
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:25:37 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:25:19 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:00
Operator : MJB / KAK
Sample : 9K14008-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:27:17 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:27:11 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	6.449	365671	489.832	ng/ml
21)	Aroclor 1242 (2)	6.942	700975	501.771	ng/ml
22)	Aroclor 1242 (3)	7.070	332272	513.100	ng/ml
23)	Aroclor 1242 (4)	7.157	299679	502.654	ng/ml
24)	Aroclor 1242 (5)	7.203	352697	502.770	ng/ml
25)	Aroclor 1242 (6)	7.329	357139	513.905	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:00
Operator : MJB / KAK
Sample : 9K14008-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:27:17 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:27:11 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

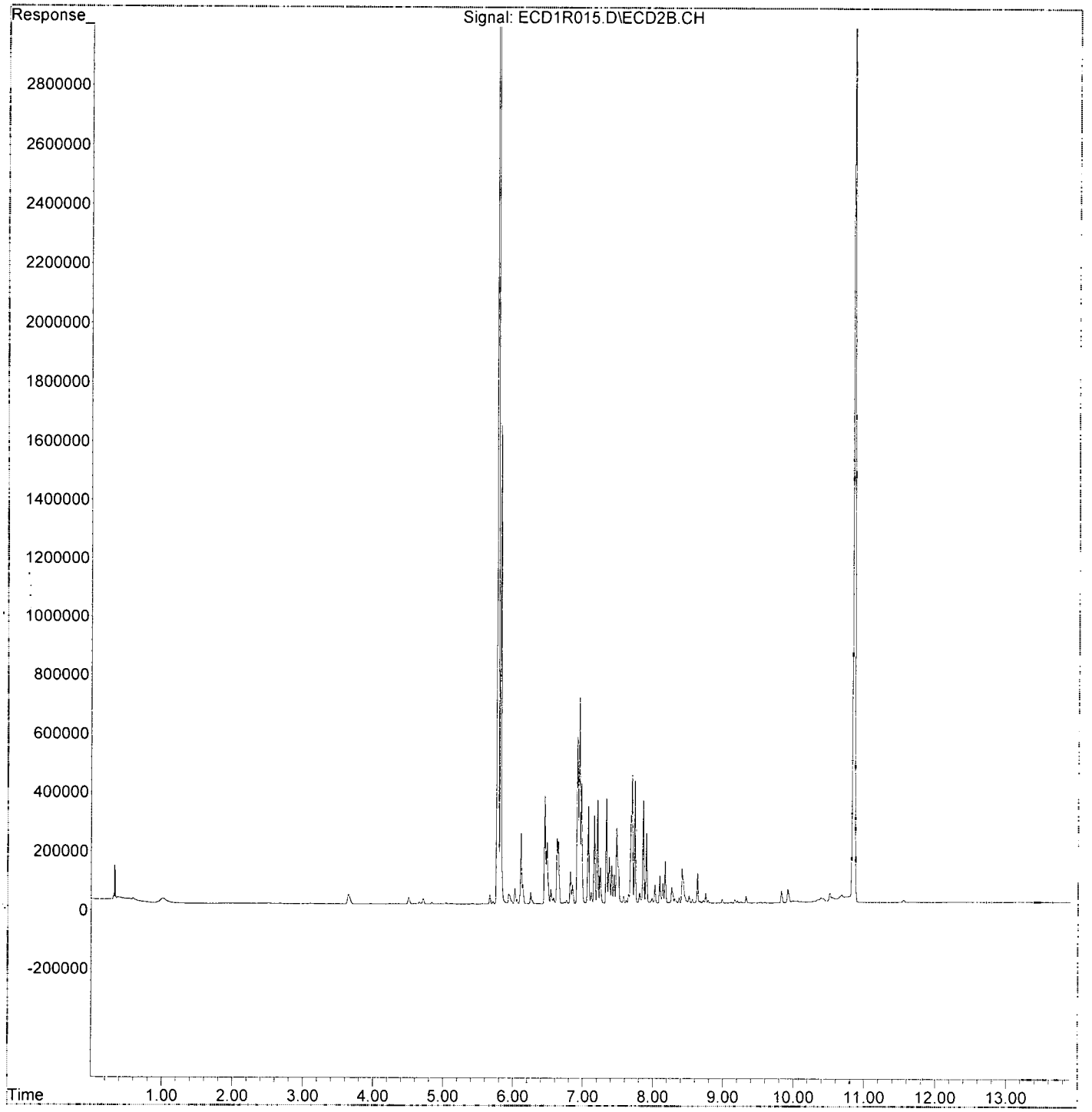
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R015.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:00
Operator : MJB / KAK
Sample : 9K14008-CALA
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:27:17 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:27:11 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:18
Operator : MJB / KAK
Sample : 9K14008-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:28:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:28:52 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
Target Compounds					
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	6.914	460864	517.702	ng/ml
28)	Aroclor 1248 (2)	7.157	586274	511.871	ng/ml
29)	Aroclor 1248 (3)	7.202	540072	507.621	ng/ml
30)	Aroclor 1248 (4)	7.328	652499	528.645	ng/ml
31)	Aroclor 1248 (5)	7.697	859229	542.971	ng/ml
32)	Aroclor 1248 (6)	7.856	739722	521.010	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:18
Operator : MJB / KAK
Sample : 9K14008-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:28:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:28:52 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

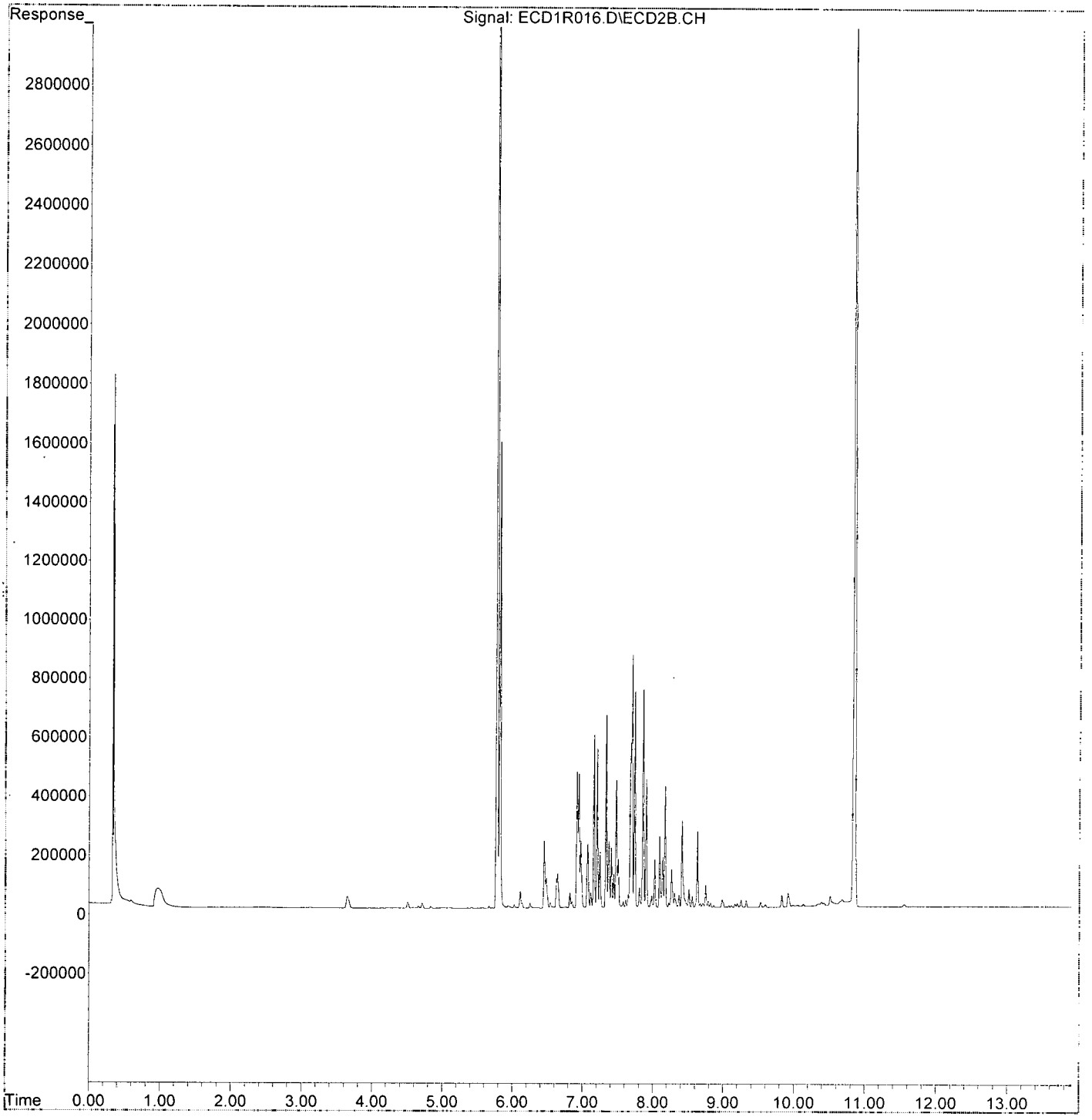
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R016.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:18
Operator : MJB / KAK
Sample : 9K14008-CALB
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:28:59 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:28:52 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R017.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14008-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:30:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:30:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	7.675	767030	507.856	ng/ml
35)	Aroclor 1254 (2)	7.857	1258116	529.229	ng/ml
36)	Aroclor 1254 (3)	8.170	1334963	539.287	ng/ml
37)	Aroclor 1254 (4)	8.411	960539	525.061	ng/ml
38)	Aroclor 1254 (5)	8.747	972369	536.619	ng/ml
39)	Aroclor 1254 (6)	8.982	292280	537.197	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

11/15/19

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R017.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14008-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:30:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:30:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

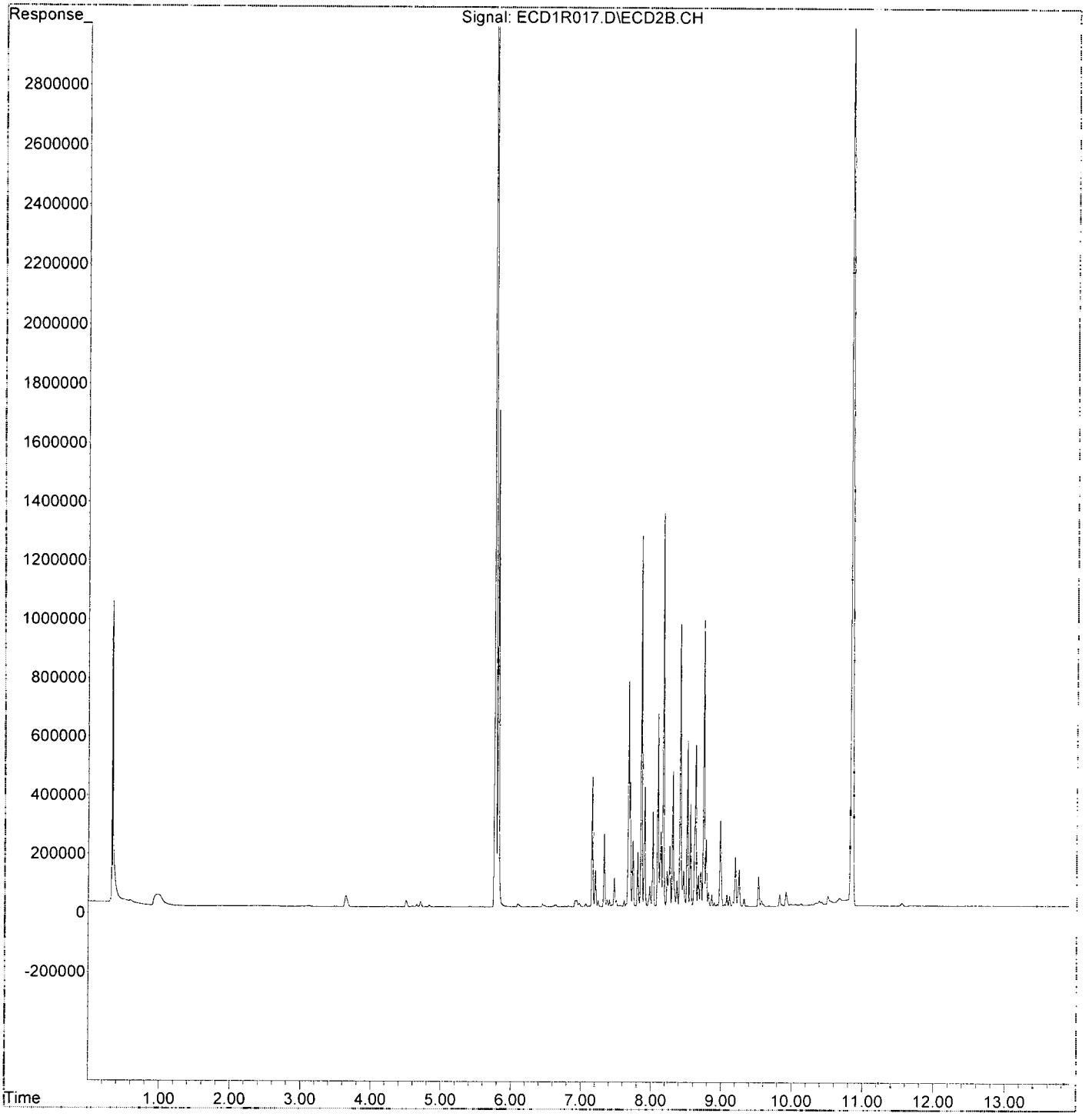
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R017.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:37
Operator : MJB / KAK
Sample : 9K14008-CALC
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:30:50 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:30:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R018.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9K14008-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:32:49 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:32:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R018.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9K14008-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:32:49 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:32:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.514	935313	529.890	ng/ml
49)	Aroclor 1262 (2)	8.818	1291965	521.861	ng/ml
50)	Aroclor 1262 (3)	8.999	1016313	554.907	ng/ml
51)	Aroclor 1262 (4)	9.252	2057705	535.098	ng/ml
52)	Aroclor 1262 (5)	9.529	1254473	527.209	ng/ml
53)	Aroclor 1262 (6)	10.134	564992	533.751	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

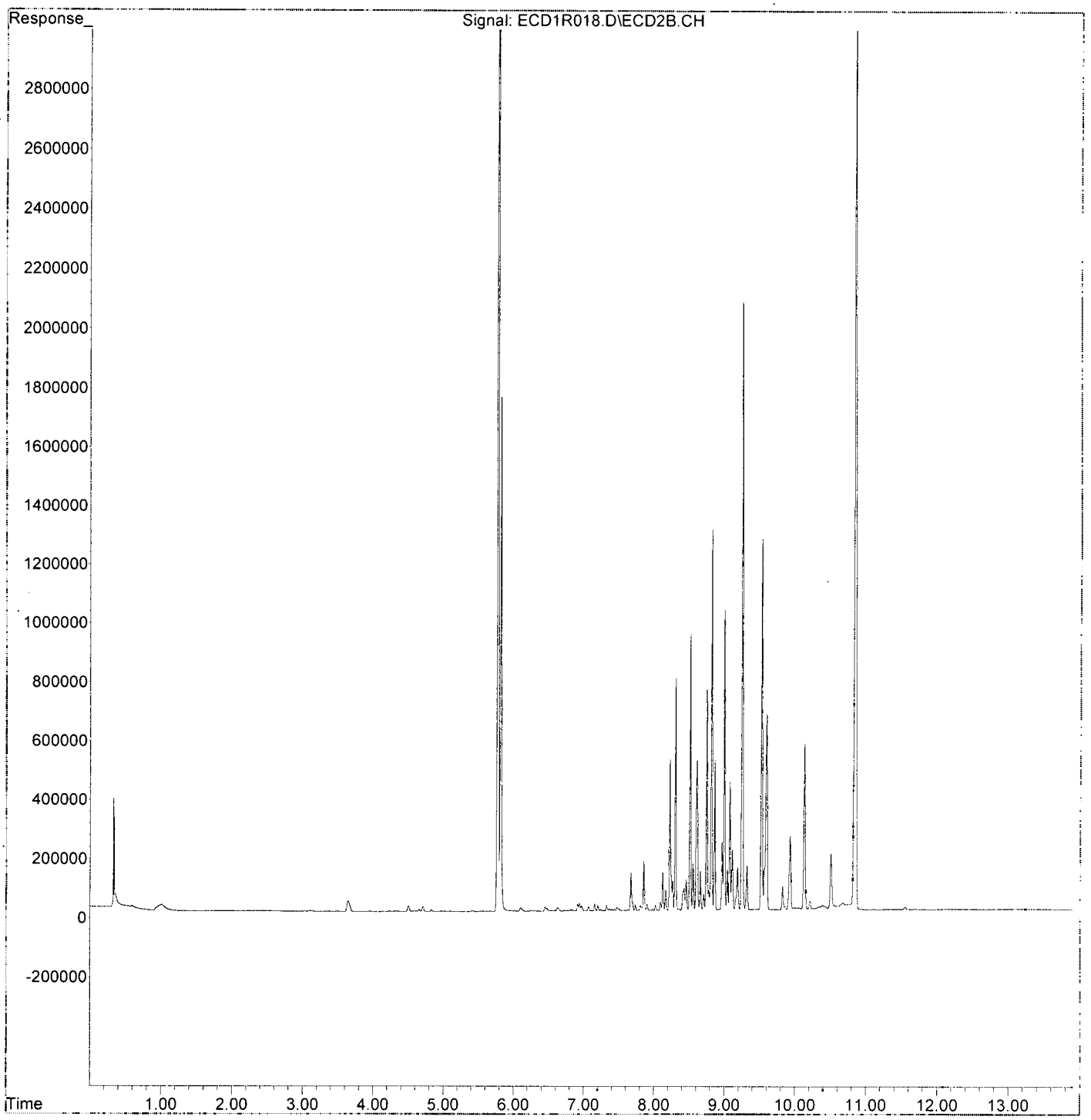
11/15/19

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R018.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 12:55
Operator : MJB / KAK
Sample : 9K14008-CALD
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:32:49 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:32:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R019.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9K14008-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:34:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:34:37 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

11/15/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	0.000	0	N.D.	ng/mld
62)	S DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R019.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9K14008-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:34:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:34:37 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	9.042	544245	547.792	ng/ml
56)	Aroclor 1268 (2)	9.530	2191628	533.016	ng/ml
57)	Aroclor 1268 (3)	9.600	1794415	546.941	ng/ml
58)	Aroclor 1268 (4)	9.828	1536987	550.315	ng/ml
59)	Aroclor 1268 (5)	10.134	615673	532.919	ng/ml
60)	Aroclor 1268 (6)	10.510	3841778	555.772	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

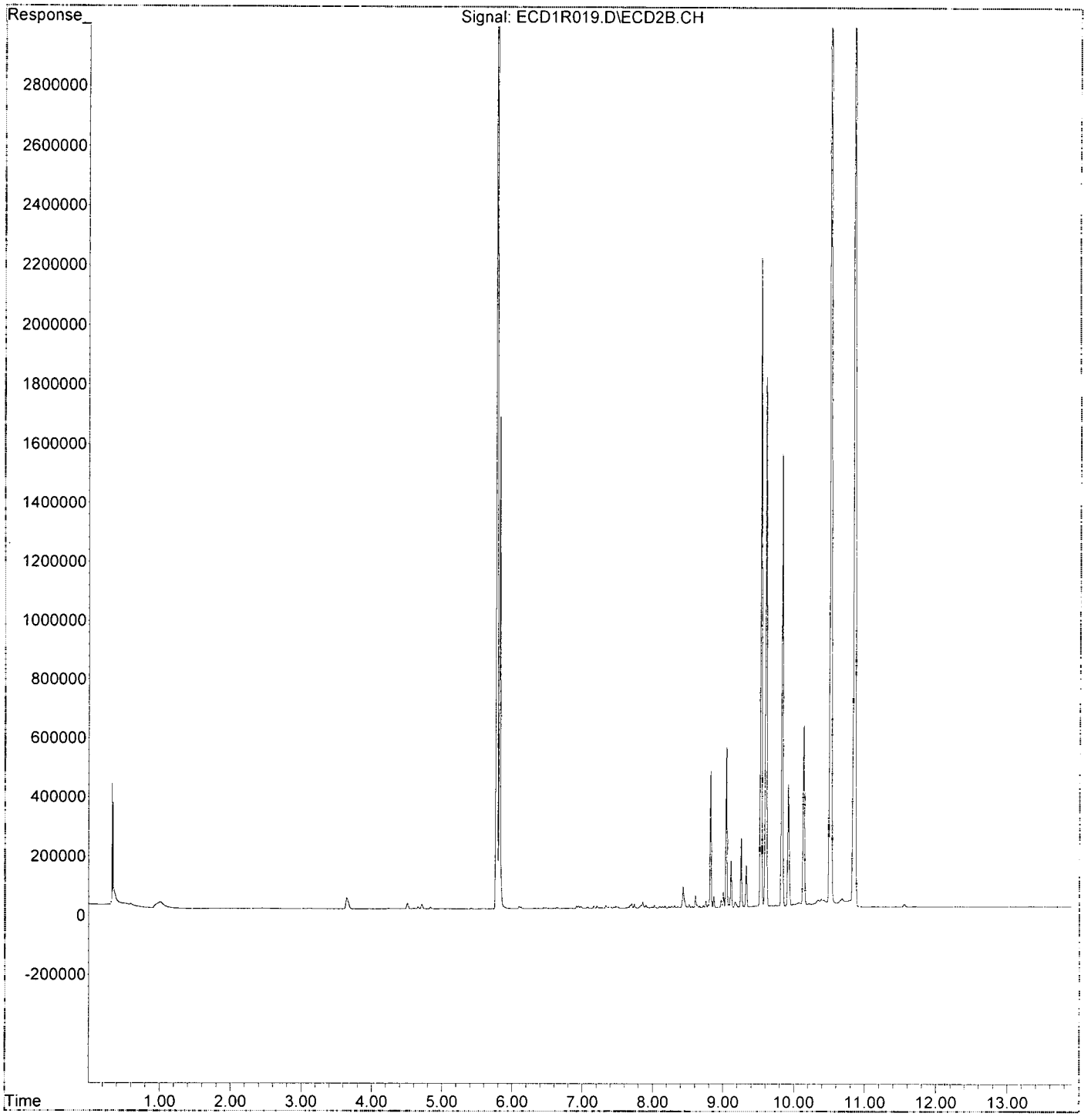
11/15/19

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

Quantitation Report (QT Reviewed)

Data Path : I:\DATA\9K14008\
Data File : ECD1R019.D
Signal(s) : ECD2B.CH
Acq On : 14 Nov 2019 13:13
Operator : MJB / KAK
Sample : 9K14008-CALE
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Nov 15 08:34:46 2019
Quant Method : J:\METHODS\RECD1_QUANTPCB_191114.M
Quant Title : PCB Data Analysis
QLast Update : Fri Nov 15 08:34:37 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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

Semivolatile Organic Compounds by EPA 8270D
Benchsheet & Analysis Sequence Data

Batch 9110772
Sequence 9K13053 (A9K0332-01,02)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 1 5 2019

BATCH #: 9110772 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9110772-BLK1		QC	11/13/19 15:27	1100	1				100					
	9110772-BSD1		QC	11/13/19 15:27	1000	1	A19J490		50	100					
	9110772-BS1		QC	11/13/19 15:27	1000	1	A19J490		50	100					
	A9K0332-01	E	8270D LL PAH/PHTH/Phenols	11/13/19 15:27	1040	1				100	PDI-FB-1911121146	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-02	E	8270D LL PAH/PHTH/Phenols	11/13/19 15:27	1070	1				100	PDI-RB-1911120944	PAHs,Bis2EHP,245TCP,PCP			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19H399	08/23/21	Conc. HCl - Omnitrace
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J490	04/28/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J495	04/28/20	PAH Soil and Water Surr. (50ppm)

3x rinse

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: AMS Date 11/14/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110772 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9110772-BLK1		QC	11/13/19 15:27	~~1000~~ 1100	1				100			✓		
	9110772-BSD1		QC	11/13/19 15:27	1000	1	A19J490		50	100			✓		
	9110772-BS1		QC	11/13/19 15:27	1000	1	A19J490		50	100			✓		
	A9K0332-01	E	8270D LL PAH/PHTH/Phenols	11/13/19 15:27	~~1000~~ 1040	1				100	PDI-FB-1911121 146	PAHs,Bis2EHP,245TCP,PCP	✓		
	A9K0332-02	E	8270D LL PAH/PHTH/Phenols	11/13/19 15:27	~~1000~~ 1070	1				100	PDI-RB-1911120 944	PAHs,Bis2EHP,245TCP,PCP	✓		

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19H399	08/23/21	Conc. HCl - Omnitrace
A19I263	03/18/20	DCM CHEM PROD. 194934
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J490	04/28/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J495	04/28/20	PAH Soil and Water Surr. (50ppm)

3x rinse ✓

Witness: JC 11/13/19

Bottle Check: JC 11/13/19

Prepared By: [signature] Date: 11/13/19

Reviewed By: CAS Date: 11/13/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K13053**	Instrument:	**SV-GCMS5**
Date:	**11/13/19 15:45**	Calibration:	**A9J0804**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K13053-TUN1	Water	QC	QC			A19I086	A19K083
2	9K13053-IBL1	Water	QC	QC			A19I086	
3	9K13053-CCV1	Water	QC	QC			A19I086	A19G243
4	9K13053-CCB1	Water	QC	QC			A19I086	
5	9110770-BLK1	Soil	QC	QC		9110770	A19I086	
6	A9K0302-02	Soil	8270D LL Full List		11/15/19	9110770	A19I086	
7	A9K0302-03	Soil	8270D LL Full List		11/15/19	9110770	A19I086	
8	9110771-BLK1	Water	QC	QC		9110771	A19I086	
9	A9K0302-01	Water	8270D LL Full List		11/15/19	9110771	A19I086	
10	9110772-BLK1	Water	QC	QC		9110772	A19I086	
11	9110772-BS1	Water	QC	QC		9110772	A19I086	
12	9110772-BSD1	Water	QC	QC		9110772	A19I086	
13	A9K0332-01	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110772	A19I086	
14	A9K0332-02	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110772	A19I086	
15	A9K0289-02RE1	Water	625 PAH/PCP/HCB (SW)		11/25/19	9110735	A19I086	
16	9K13053-IBL2	Water	QC	QC			A19I086	

Data Entered By: AMS 11/14/19

Data Reviewed By: [illegible] 11/14/19

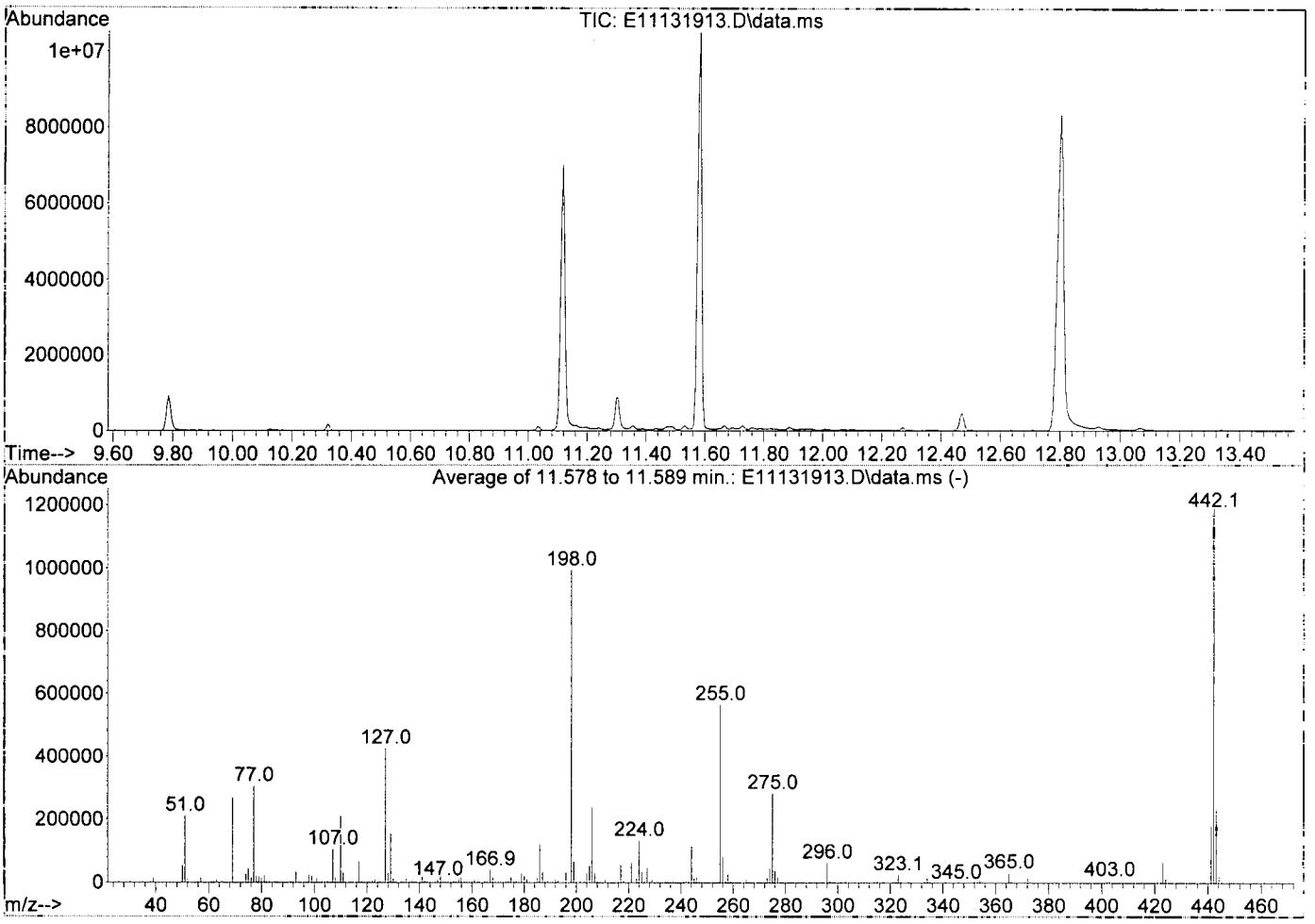
Comments:

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131913.D
Acq On : 13 Nov 2019 3:51 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Oct 10 09:06:57 2019

DTA 11/13/19



AutoFind: Scans 1494, 1495, 1496; Background Corrected with Scan 1489

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.2	3232	PASS
69	198	0.01	100	27.2	270646	PASS
70	69	0.00	2	0.5	1334	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	993792	PASS
199	198	5	9	6.8	68038	PASS
365	198	1	100	3.3	32419	PASS
441	443	0.01	150	79.0	180629	PASS
442	198	0.10	200	119.9	1191637	PASS
443	442	15	24	19.2	228693	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131913.D
Acq On : 13 Nov 2019 3:51 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 13 17:21:51 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JH 11/13/19

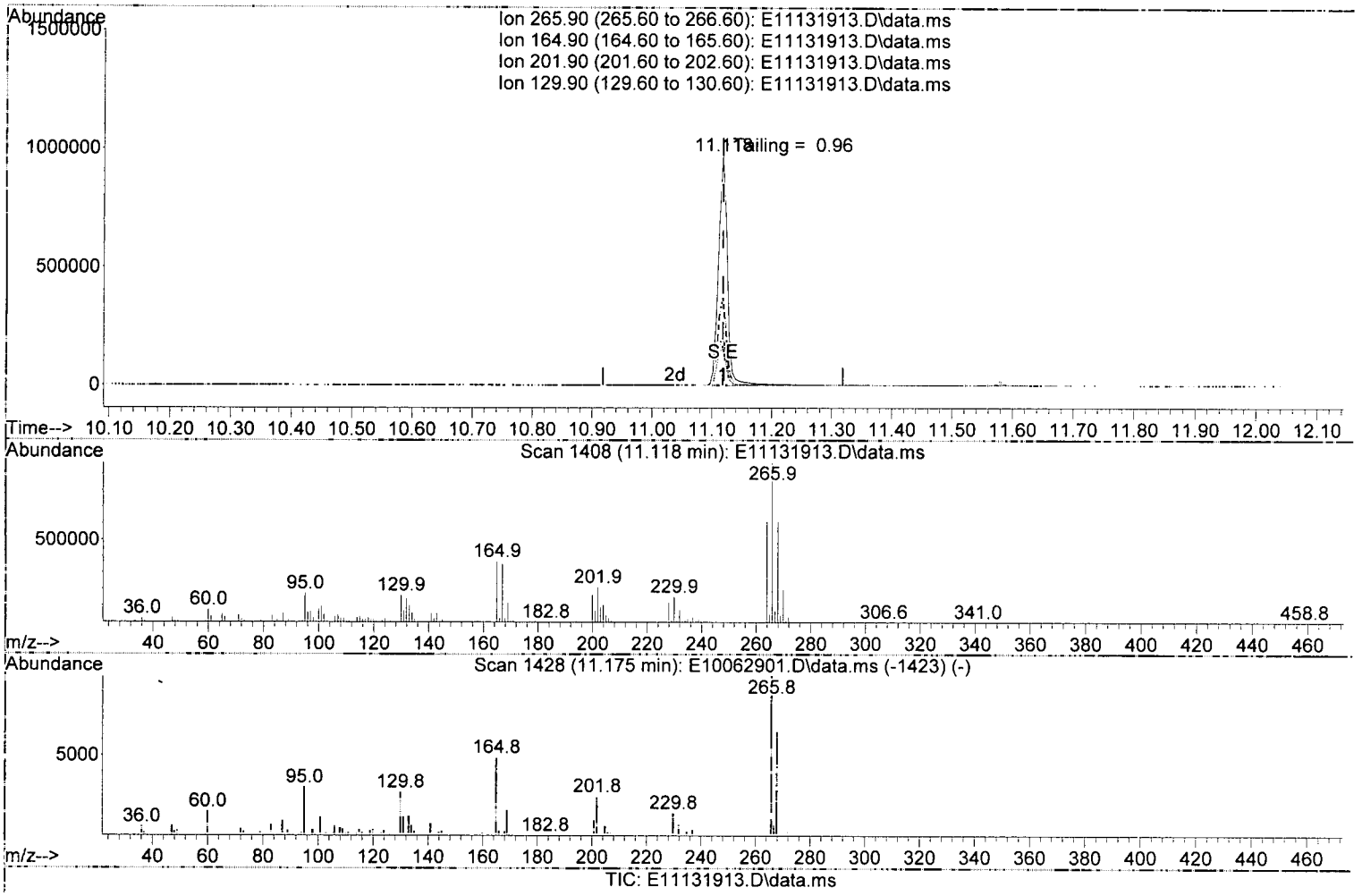
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.753	150	185124	2.00	ug/mL	0.00
2) Naphthalene-d8	8.010	136	415099	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.786	162	227647	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.300	188	385343	2.00	ug/mL	0.00
11) Chrysene-d12	15.087	240	332429	2.00	ug/mL	0.00
12) Perylene-d12	17.151	264	71	2.00	ug/mL	#-0.02
13) Dibenz(a,h)anthracene-...	18.424	292	18	2.00	ug/mL	#-0.07
Target Compounds						Qvalue
4) Pentachlorophenol	11.118	266	974082	45.31	ug/mL	87
6) DFTPP	11.583	442	1324598	42.58	ug/mL	83
7) Benzidine	12.803	184	5631576	41.08	ug/mL	97
8) 4,4-DDE	13.070	TIC	85263	No Calib		
9) 4,4-DDD	13.610	TIC	198939	No Calib		
10) 4,4-DDT	14.209	TIC	14838940	37.55	ug/mL	94

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131913.D
Acq On : 13 Nov 2019 3:51 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 13 17:21:51 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(4) Pentachlorophenol

11.118min (+ 0.000) 45.31 ug/mL

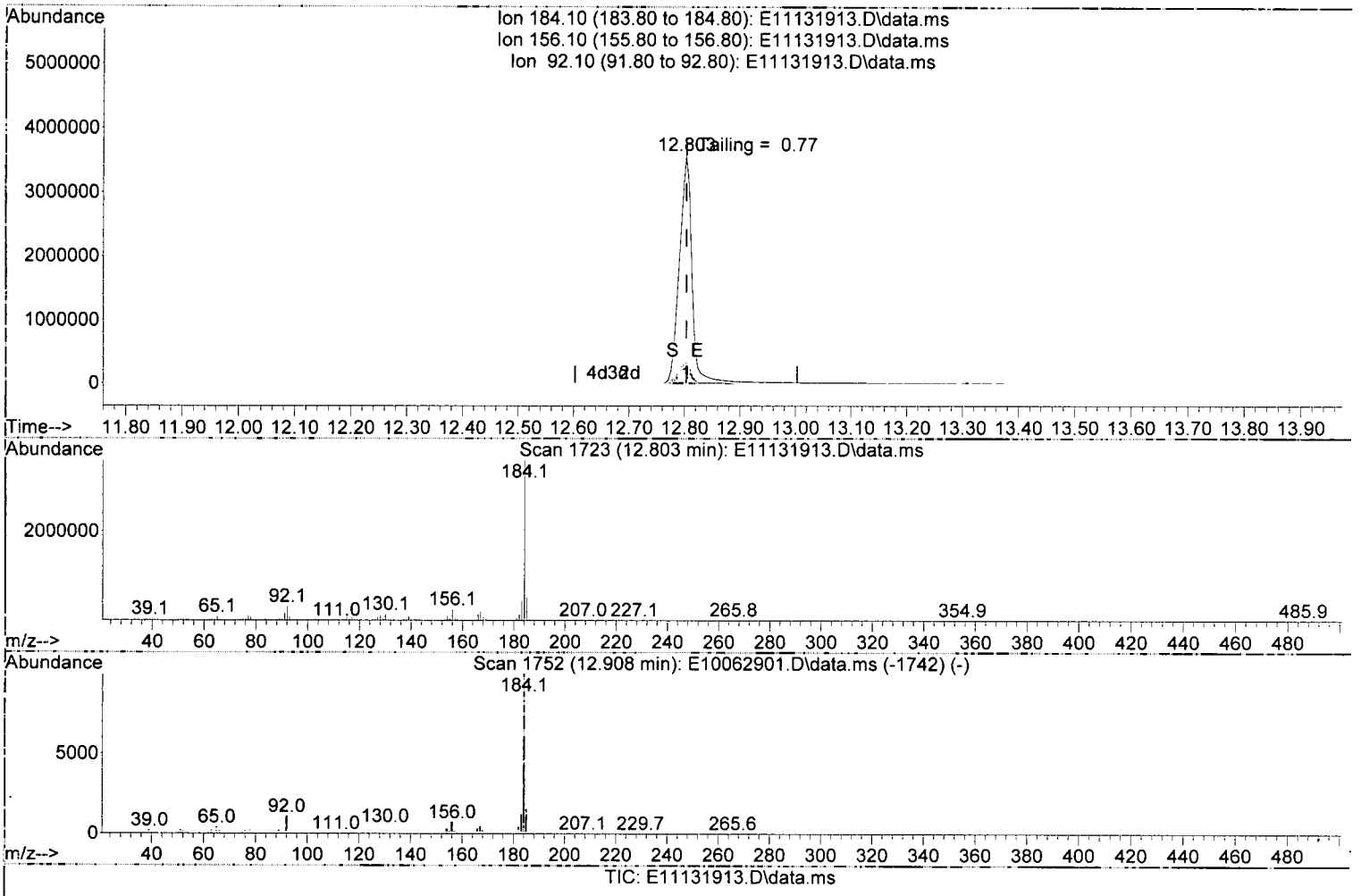
response 974082

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	38.04
201.90	23.20	21.85
129.90	27.10	16.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131913.D
Acq On : 13 Nov 2019 3:51 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 13 17:21:51 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11131913.D\data.ms

(7) Benzidine

12.803min (+ 0.000) 41.08 ug/mL

response 5631576

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	6.84
92.10	8.20	8.57
0.00	0.00	0.00

J

DDT Breakdown Check (Validated 5/1/2013)

From:
9K13053-TUN1
SV-GCMS5

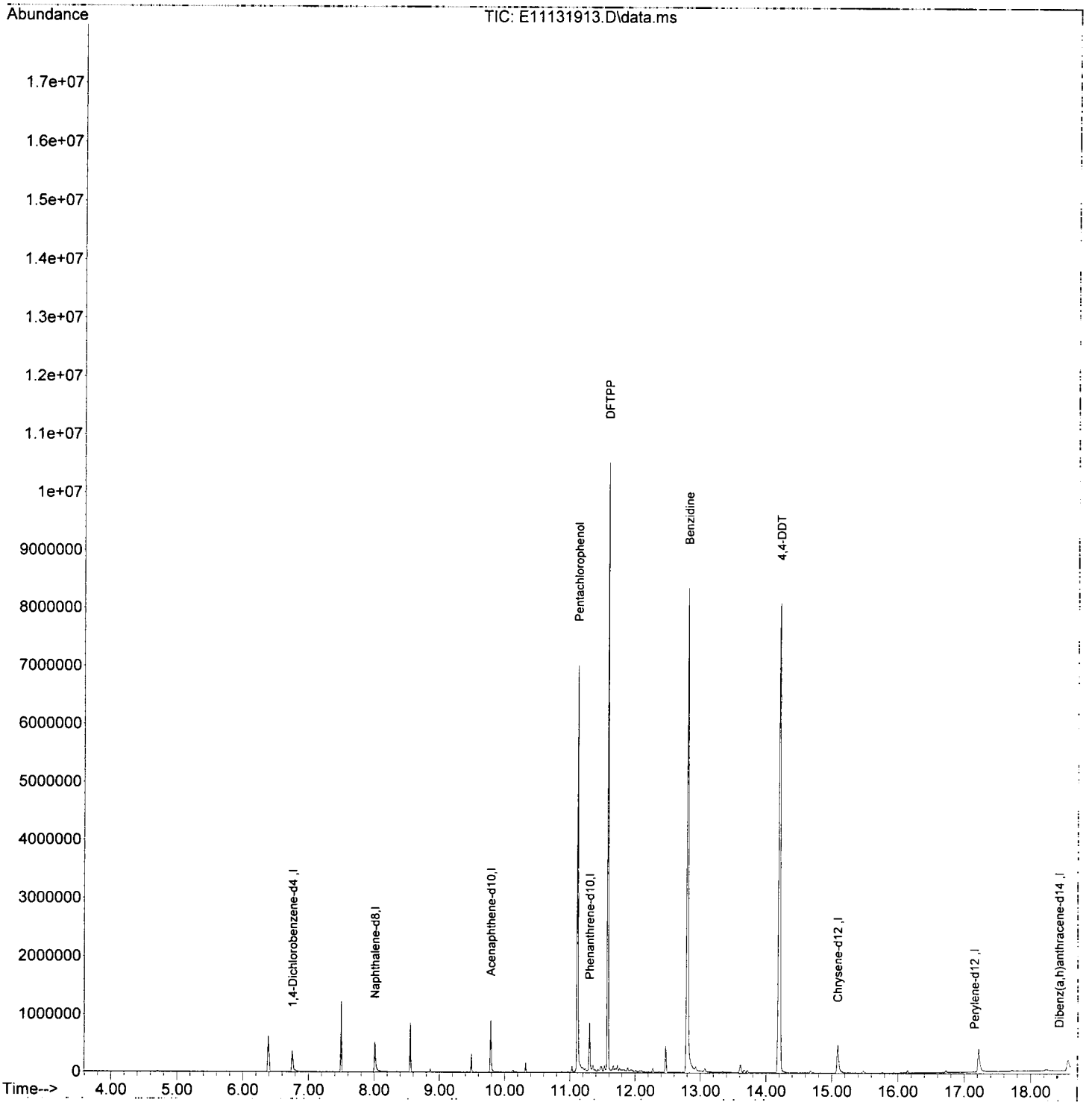
First Column Area Counts		Percent Breakdown
DDE	85263	
DDD	198939	
DDT	14838940	1.88 PASS

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131913.D
Acq On : 13 Nov 2019 3:51 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 13 17:21:51 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:43:15 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JNT 11/13/19

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	65	-0.02
2	T	N-Nitrosodimethylamine	1000.000	912.624	8.7	59	-0.01
3	T	Pyridine	1000.000	960.492	4.0	62	-0.02
4	S	2-Fluorophenol (Surr)	1000.000	1013.566	-1.4	64	0.00
5	S	Phenol-d6(Surr)	1000.000	1017.467	-1.7	63	0.00
6	T	Phenol	1000.000	1112.674	-11.3	69	0.00
7	T	Aniline	1000.000	1010.437	-1.0	66	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1020.769	-2.1	65	-0.02
9	T	2-Chlorophenol	1000.000	1059.639	-6.0	66	-0.01
10	T	1,3-Dichlorobenzene	1000.000	993.513	0.6	65	-0.02
11	T	1,4-Dichlorobenzene	1000.000	999.100	0.1	65	-0.02
12	T	Benzyl alcohol	1000.000	1290.389	-29.0#	80	-0.01
13	T	1,2-Dichlorobenzene	1000.000	1020.268	-2.0	67	-0.01
14	T	2-Methylphenol	1000.000	1094.104	-9.4	67	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1006.333	-0.6	65	-0.02
16	T	N-Nitrosodi-n-propylamine	1000.000	1277.201	-27.7#	77	-0.01
17	T	3+4-Methylphenol	1000.000	1187.563	-18.8	70	0.00
18	T	Hexachloroethane	1000.000	1006.627	-0.7	65	-0.02
19	S	Nitrobenzene-d5 (Surr)	1000.000	1174.457	-17.4	72	-0.01
20	T	Nitrobenzene	1000.000	1151.444	-15.1	71	-0.02
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	79	-0.02
22	T	Isophorone	1000.000	1127.382	-12.7	83	-0.02
23	T	2-Nitrophenol	1000.000	1135.475	-13.5	84	-0.02
24	T	2,4-Dimethylphenol	1000.000	856.695	14.3	63	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1079.561	-8.0	82	-0.01
26	T	Benzoic acid	2000.000	2372.823	-18.6	117	0.00
27	T	2,4-Dichlorophenol	1000.000	1172.025	-17.2	87	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	957.169	4.3	74	-0.02
29	T	Naphthalene	1000.000	997.168	0.3	77	-0.01
30	T	4-Chloroaniline	1000.000	1048.235	-4.8	85	-0.01
31	T	Hexachlorobutadiene	1000.000	949.456	5.1	74	-0.02
32	T	4-Chloro-3-methylphenol	1000.000	1267.467	-26.7#	102	0.00
33	T	2-Methylnaphthalene	1000.000	1146.784	-14.7	86	-0.01
34	T	1-Methylnaphthalene	1000.000	1153.103	-15.3	88	-0.01
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	97	-0.02
36	T	Hexachlorocyclopentadiene	1000.000	785.421	21.5#	73	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1064.394	-6.4	97	-0.01
38	T	2,4,5-Trichlorophenol	1000.000	1075.353	-7.5	101	0.00
39	T	1,1'-Biphenyl	1000.000	1001.578	-0.2	94	-0.02
40	S	2-Fluorobiphenyl (Surr)	1000.000	992.058	0.8	94	-0.01
41	T	2-Chloronaphthalene	1000.000	969.862	3.0	93	-0.01
42	T	2-Nitroaniline	1000.000	1184.224	-18.4	111	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1035.584	-3.6	95	-0.01
44	T	1,4-Dinitrobenzene	1000.000	1291.981	-29.2#	131	0.00
45	T	Dimethyl phthalate	1000.000	1097.163	-9.7	102	-0.01
46	T	1,3-Dinitrobenzene	1000.000	1192.748	-19.3	118	0.00
47	T	2,6-Dinitrotoluene	1000.000	1149.006	-14.9	110	-0.01

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:43:15 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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)
48	T	1,2-Dinitrobenzene	1000.000	1214.644	-21.5#	117	-0.01
49	T	Acenaphthylene	1000.000	1064.554	-6.5	97	-0.01
50	T	3-Nitroaniline	1000.000	1095.419	-9.5	111	0.00
51	T	Acenaphthene	1000.000	1026.360	-2.6	98	-0.02
52	T	2,4-Dinitrophenol	1000.000	1297.799	-29.8#	156	0.00
53	T	4-Nitrophenol	1000.000	1015.250	-1.5	100	0.02
54	T	2,4-Dinitrotoluene	1000.000	1197.296	-19.7	120	-0.01
55	T	Dibenzofuran	1000.000	1057.187	-5.7	101	-0.01
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1135.361	-13.5	107	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1135.158	-13.5	106	0.00
58	T	Diethyl phthalate	1000.000	1105.743	-10.6	100	-0.01
59	T	2,3,5-Trimethylnaphthalene	1000.000	1104.116	-10.4	101	-0.01
60	T	Fluorene	1000.000	1096.044	-9.6	101	-0.01
61	T	4-Chlorophenyl phenyl ether	1000.000	1084.987	-8.5	103	-0.02
62	T	4-Nitroaniline	1000.000	1082.344	-8.2	112	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1356.999	-35.7#	152	-0.01
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	104	-0.01
65	T	N-Nitrosodiphenylamine	1000.000	1094.317	-9.4	107	-0.01
66	T	Azobenzene (1,2-DPH)	1000.000	1009.832	-1.0	97	-0.01
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1143.496	-14.3	116	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1061.304	-6.1	108	-0.01
69	T	Hexachlorobenzene	1000.000	1016.909	-1.7	104	-0.01
70	T	Pentachlorophenol (PCP)	1000.000	888.812	11.1	88	0.00
71	T	Phenanthrene	1000.000	1004.396	-0.4	102	-0.01
72	T	Anthracene	1000.000	1072.154	-7.2	105	0.00
73	T	Carbazole	1000.000	1136.247	-13.6	111	-0.01
74	T	Di-n-butyl phthalate	1000.000	1122.746	-12.3	107	-0.01
75	T	Fluoranthene	1000.000	1126.227	-12.6	109	-0.01
76	T	Benzidine	2000.000	1873.354	6.3	97	0.00
77	T	Pyrene	1000.000	1125.622	-12.6	110	-0.01
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	119	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1033.740	-3.4	120	-0.01
80	T	Butyl benzyl phthalate	1000.000	1052.569	-5.3	121	-0.02
81	T	Bis(2-ethylhexyl) adipate	1000.000	1057.765	-5.8	130	-0.02
82	T	3,3-Dichlorobenzidine	2000.000	2679.386	-34.0#	175	0.00
83	T	Benz(a)anthracene	1000.000	1025.710	-2.6	119	-0.01
84	T	Chrysene	1000.000	1009.385	-0.9	118	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	983.779	1.6	119	-0.03
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	120	-0.01
87	T	Di-n-octyl phthalate	1000.000	1115.445	-11.5	137	-0.03
88	T	Benzo(b)fluoranthene	1000.000	1030.780	-3.1	118	-0.02
89	T	Benzo(k)fluoranthene	1000.000	1026.275	-2.6	119	-0.02
90	T	Benzo(b+k)fluoranthene	2000.000	2079.208	-4.0	120	-0.02
91	T	Benzo(e)pyrene	1000.000	1026.290	-2.6	119	0.00
92	T	Benzo(a)pyrene	1000.000	1070.331	-7.0	119	0.00
93	T	Perylene	1000.000	1042.708	-4.3	120	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:43:15 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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)
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	128	0.00
95	T	Indeno(1,2,3-cd)pyrene	1000.000	914.240	8.6	120	0.00
96	T	Dibenz(a,h)anthracene	1000.000	988.422	1.2	126	0.00
97	T	Benzo(g,h,i)perylene	1000.000	935.605	6.4	113	-0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 17:27:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/13/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	331106	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1548239	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.788	162	981079	2000.00	ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.301	188	1906580	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.238	240	1969960	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.747	264	1850282	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.143	292	1481619	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	196209	1013.57	ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	244368	1017.47	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	224805	1174.46	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.092	172	729090	992.06	ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.595	330	98994	1143.50	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	919132	1033.74	ng/ml	-0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.295	74	118425	912.62	ng/ml	94
3) Pyridine	4.316	79	204384	960.49	ng/ml	99
6) Phenol	6.423	94	277590	1112.67	ng/ml	99
7) Aniline	6.450	93	320930	1010.44	ng/ml	99
8) Bis(2-chloroethyl) ether	6.498	93	226237	1020.77	ng/ml	98
9) 2-Chlorophenol	6.568	128	227515	1059.64	ng/ml	100
10) 1,3-Dichlorobenzene	6.712	146	256947	993.51	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	261339	999.10	ng/ml	98
12) Benzyl alcohol	6.889	108	148653	1290.39	ng/ml	96
13) 1,2-Dichlorobenzene	6.931	146	253995	1020.27	ng/ml	98
14) 2-Methylphenol	6.996	107	178432	1094.10	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	253855	1006.33	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.140	70	181398	1277.20	ng/ml	94
17) 3+4-Methylphenol	7.145	107	238860	1187.56	ng/ml	99
18) Hexachloroethane	7.258	117	89628	1006.63	ng/ml	99
20) Nitrobenzene	7.311	77	225852	1151.44	ng/ml	98
22) Isophorone	7.541	82	517102	1127.38	ng/ml	100
23) 2-Nitrophenol	7.627	139	137591	1135.48	ng/ml	99
24) 2,4-Dimethylphenol	7.664	122	177994	856.69	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.750	93	331996	1079.56	ng/ml	99
26) Benzoic acid	7.755	105	159070	2372.82	ng/ml	96
27) 2,4-Dichlorophenol	7.873	162	202391	1172.03	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.953	180	236755	957.17	ng/ml	100
29) Naphthalene	8.033	128	820834	997.17	ng/ml	99
30) 4-Chloroaniline	8.081	127	321696	1048.24	ng/ml	98
31) Hexachlorobutadiene	8.156	225	119930	949.46	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	228748	1267.47	ng/ml	98
33) 2-Methylnaphthalene	8.729	142	636156	1146.78	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	607076	1153.10	ng/ml	99
36) Hexachlorocyclopentadiene	8.894	237	113949	785.42	ng/ml	98
37) 2,4,6-Trichlorophenol	9.012	196	170860	1064.39	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	176274	1075.35	ng/ml	99
39) 1,1'-Biphenyl	9.194	154	832337	1001.58	ng/ml	100
41) 2-Chloronaphthalene	9.221	162	608005	969.86	ng/ml	99
42) 2-Nitroaniline	9.322	138	205769	1184.22	ng/ml	92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 17:27:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

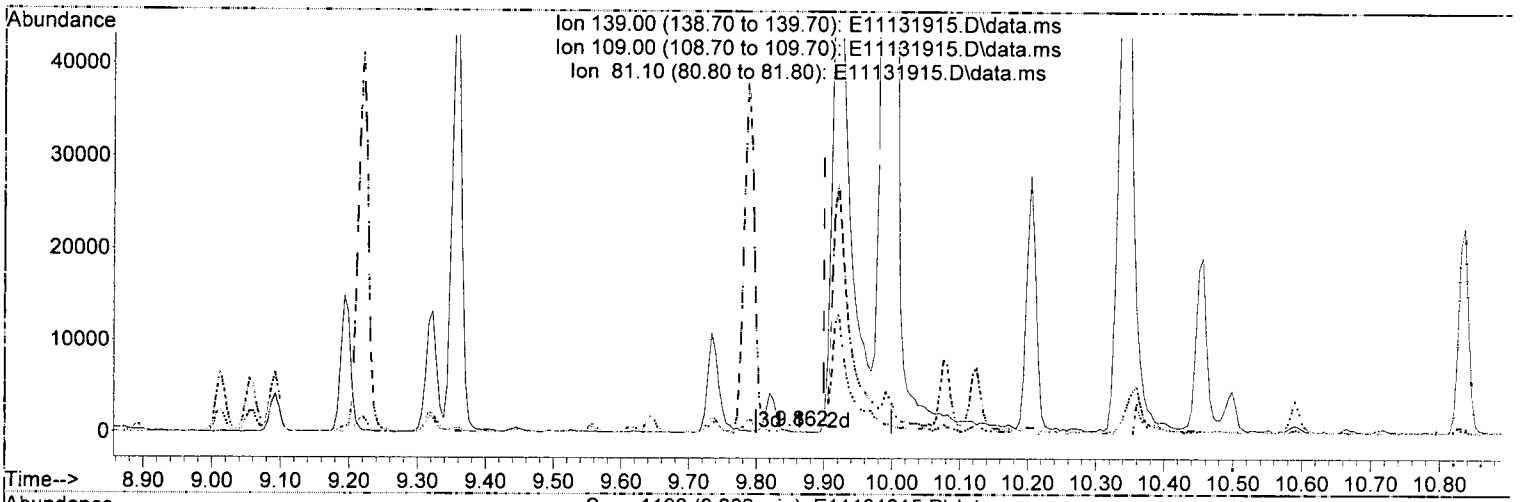
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	622328	1035.58	ng/ml	98
44) 1,4-Dinitrobenzene	9.445	168	98960	1291.98	ng/ml	98
45) Dimethyl phthalate	9.499	163	736811	1097.16	ng/ml	100
46) 1,3-Dinitrobenzene	9.531	168	115433	1192.75	ng/ml	93
47) 2,6-Dinitrotoluene	9.558	165	170335	1149.01	ng/ml	95
48) 1,2-Dinitrobenzene	9.616	168	80084	1214.64	ng/ml	90
49) Acenaphthylene	9.643	152	1009586	1064.55	ng/ml	100
50) 3-Nitroaniline	9.734	138	171094	1095.42	ng/ml	96
51) Acenaphthene	9.820	153	669440	1026.36	ng/ml	99
52) 2,4-Dinitrophenol	9.841	184	38868	1297.80	ng/ml	91
53) 4-Nitrophenol	~~9.862~~	~~139~~	~~79~~	~~84.14~~	~~ng/ml#~~	~~38~~ mI
54) 2,4-Dinitrotoluene	9.969	165	219515	1197.30	ng/ml	96
55) Dibenzofuran	9.996	168	920693	1057.19	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	10.082	232	145074	1135.36	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.125	232	162288	1135.16	ng/ml	98
58) Diethyl phthalate	10.210	149	713932	1105.74	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.205	170	610879	1104.12	ng/ml	99
60) Fluorene	10.344	166	758296	1096.04	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.333	204	357375	1084.99	ng/ml	98
62) 4-Nitroaniline	10.360	138	171455	1082.34	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.387	198	80770	1357.00	ng/ml	96
65) N-Nitrosodiphenylamine	10.456	169	652426	1094.32	ng/ml	100
66) Azobenzene (1,2-DPH)	10.499	77	626300	1009.83	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.836	248	208759	1061.30	ng/ml	96
69) Hexachlorobenzene	10.916	284	225026	1016.91	ng/ml	98
70) Pentachlorophenol (PCP)	11.114	266	76371	888.81	ng/ml	98
71) Phenanthrene	11.328	178	1089375	1004.40	ng/ml	100
72) Anthracene	11.381	178	1111197	1072.15	ng/ml	100
73) Carbazole	11.537	167	971126	1136.25	ng/ml	100
74) Di-n-butyl phthalate	11.874	149	1205197	1122.75	ng/ml	99
75) Fluoranthene	12.628	202	1173462	1126.23	ng/ml	100
76) Benzidine	12.794	184	842972	1873.35	ng/ml	99
77) Pyrene	12.938	202	1206833	1125.62	ng/ml	100
80) Butyl benzyl phthalate	13.997	149	486791	1052.57	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.173	129	445091	1057.76	ng/ml	99
82) 3,3-Dichlorobenzidine	15.179	252	685308	2679.39	ng/ml	99
83) Benz(a)anthracene	15.211	228	1086942	1025.71	ng/ml	99
84) Chrysene	15.297	228	1068356	1009.38	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.361	149	697140	983.78	ng/ml	98
87) Di-n-octyl phthalate	17.035	149	1076790	1115.44	ng/ml	98
88) Benzo(b)fluoranthene	17.821	252	1027121	1030.78	ng/ml	97
89) Benzo(k)fluoranthene	17.885	252	1035372	1026.27	ng/ml	99
90) Benzo(b+k)fluoranthene	17.885	252	2154517	2079.21	ng/ml	99
91) Benzo(e)pyrene	18.479	252	1026491	1026.29	ng/ml	99
92) Benzo(a)pyrene	18.602	252	953662	1070.33	ng/ml	99
93) Perylene	18.805	252	919817	1042.71	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.148	276	824238	914.24	ng/ml	99
96) Dibenz(a,h)anthracene	21.207	278	820756	988.42	ng/ml	99
97) Benzo(g,h,i)perylene	21.678	276	810210	935.61	ng/ml	97

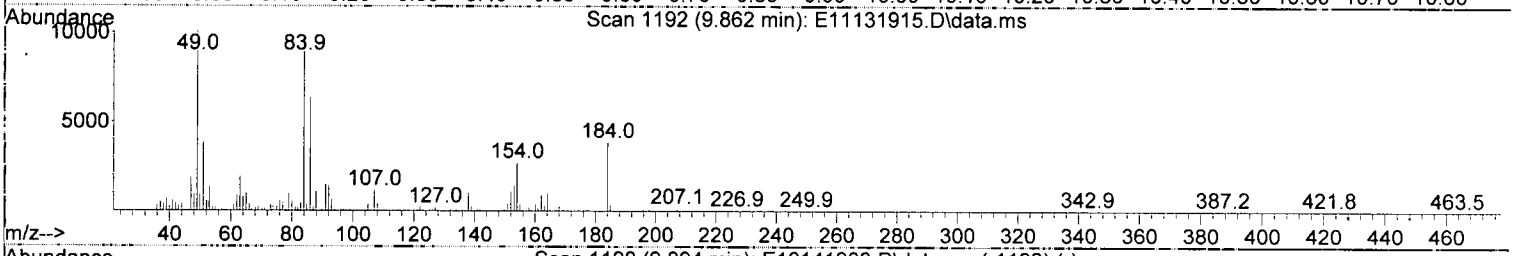
(#) = qualifier out of range (m) = manual integration (+) = signals summed

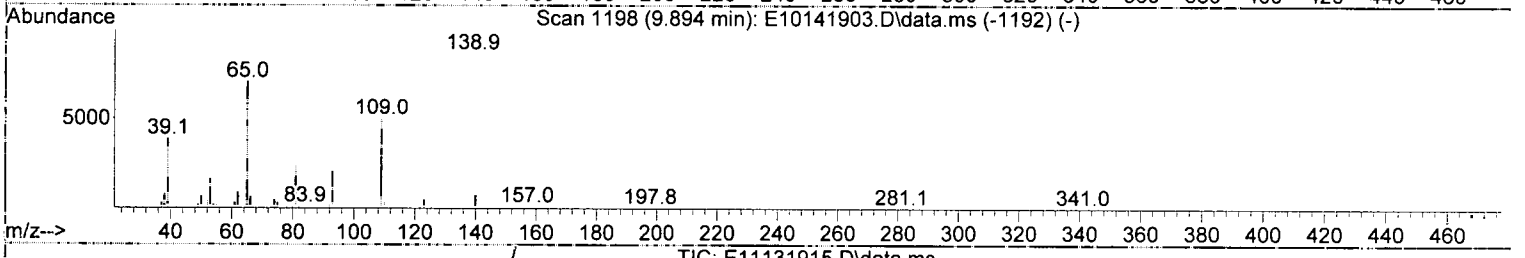
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 17:27:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E11131915.D\data.ms

(53) 4-Nitrophenol (T)

9.862min (-0.037) 84.14 ng/ml

response 79

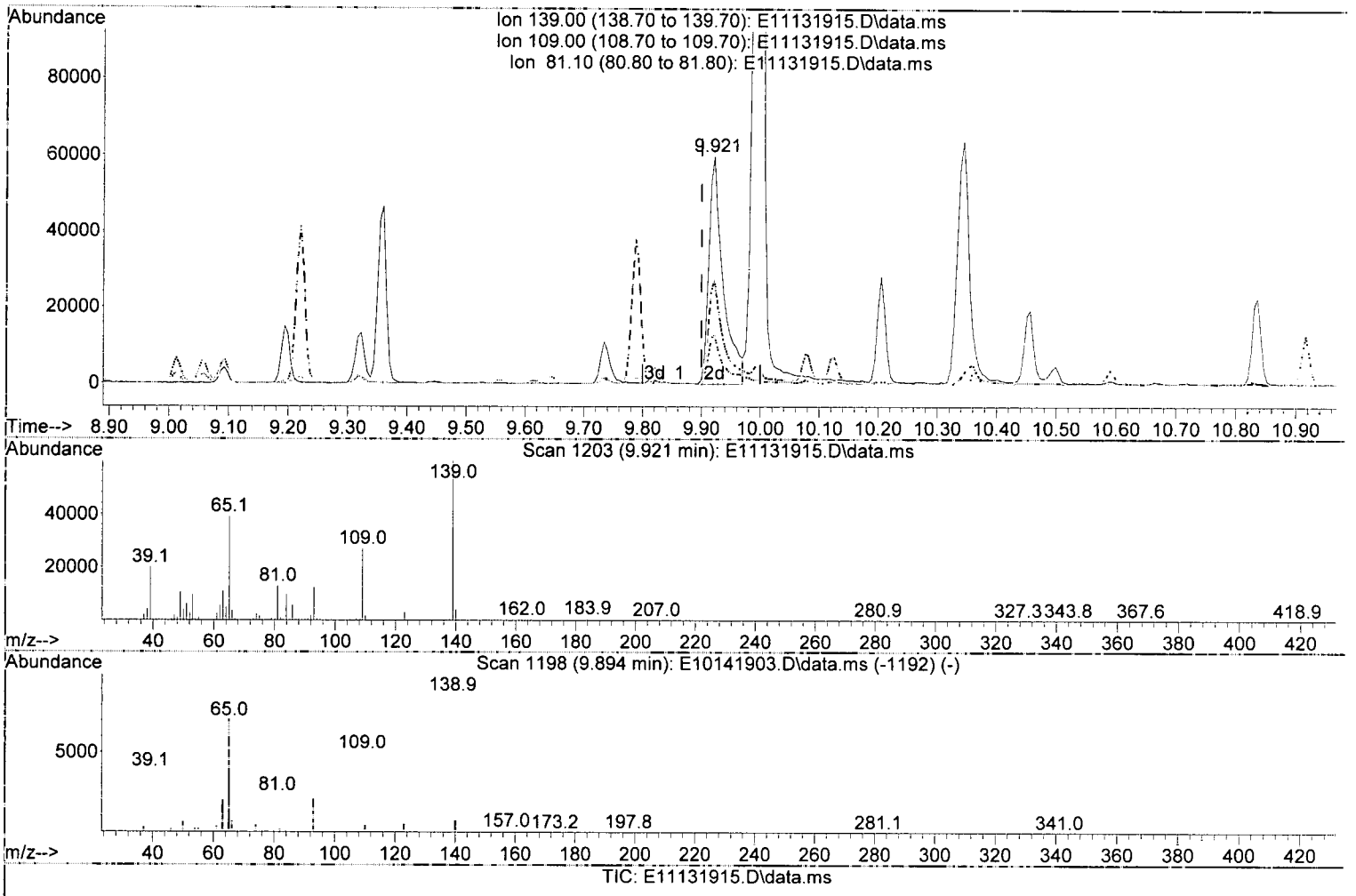
Ion	Exp%	Act%
139.00	100.00	100.00
109.00	51.30	38.17
81.10	24.30	100.76#
0.00	0.00	0.00

MT ✓

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 17:27:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(53) 4-Nitrophenol (T)

9.921min (+ 0.022) 1015.25 ng/ml m

response 101032

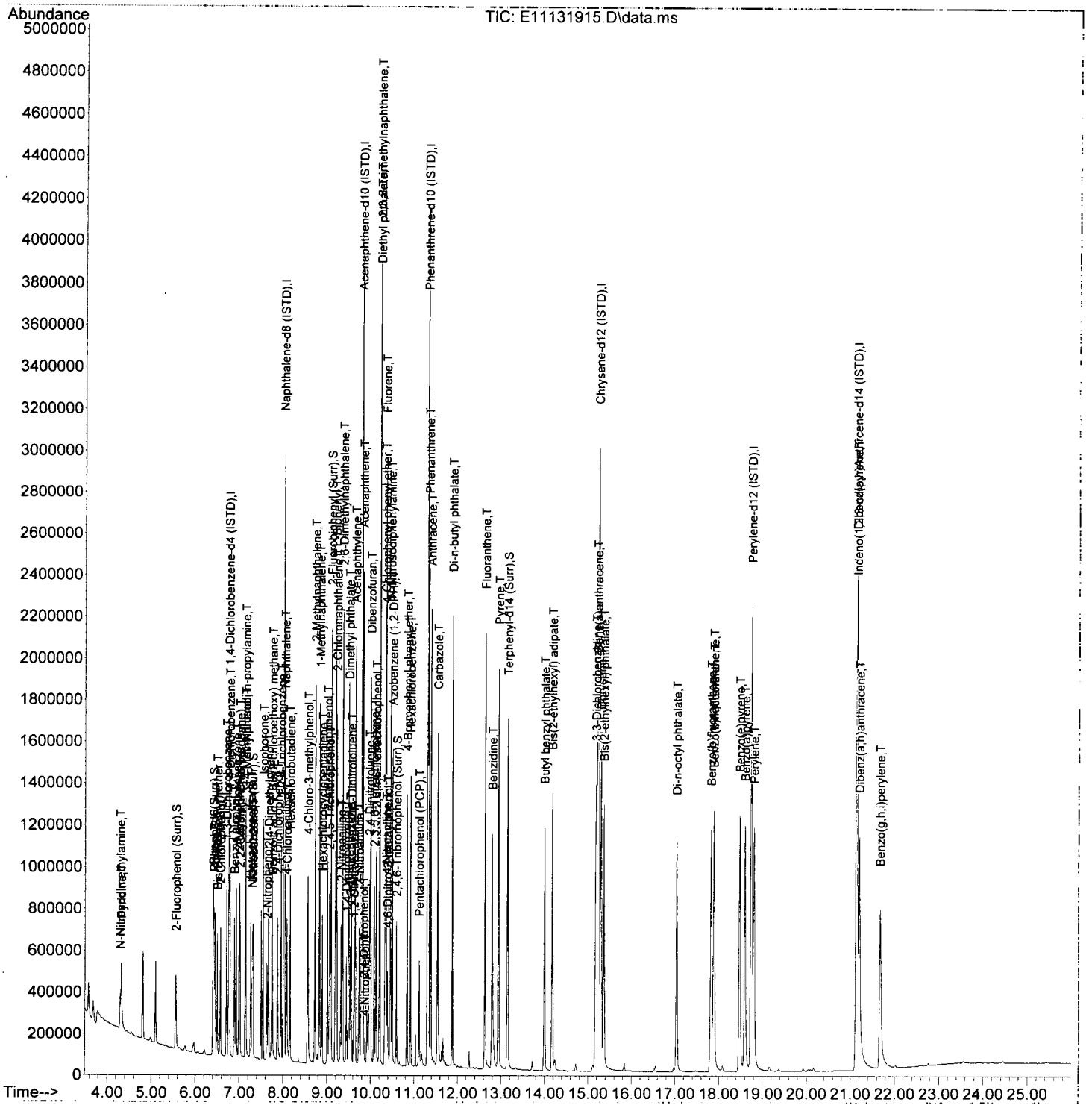
Ion	Exp%	Act%
139.00	100.00	100.00
109.00	51.30	45.35
81.10	24.30	21.77
0.00	0.00	0.00

DTH 11/13/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131915.D
Acq On : 13 Nov 2019 4:54 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 17:27:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131916.D
Acq On : 13 Nov 2019 5:30 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:43 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/13/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	486683	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	2016309	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.787	162	1061715	2000.00	ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.301	188	2141179	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.232	240	2045118	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.741	264	1860303	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1448220	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)	7.284	82	120	0.43	ng/ml	-0.02
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	4.289	74	132	N.D.		
3) Pyridine	4.289	79	74	N.D.		
6) Phenol	6.396	94	86	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	6.765	146	68	N.D.		
11) 1,4-Dichlorobenzene	6.765	146	68	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	7.028	107	52	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	7.108	70	209	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	7.225	117	64	N.D.		
20) Nitrobenzene	7.311	77	144	N.D.		
22) Isophorone	7.536	82	98	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	8.028	128	153	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.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131916.D
Acq On : 13 Nov 2019 5:30 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:43 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

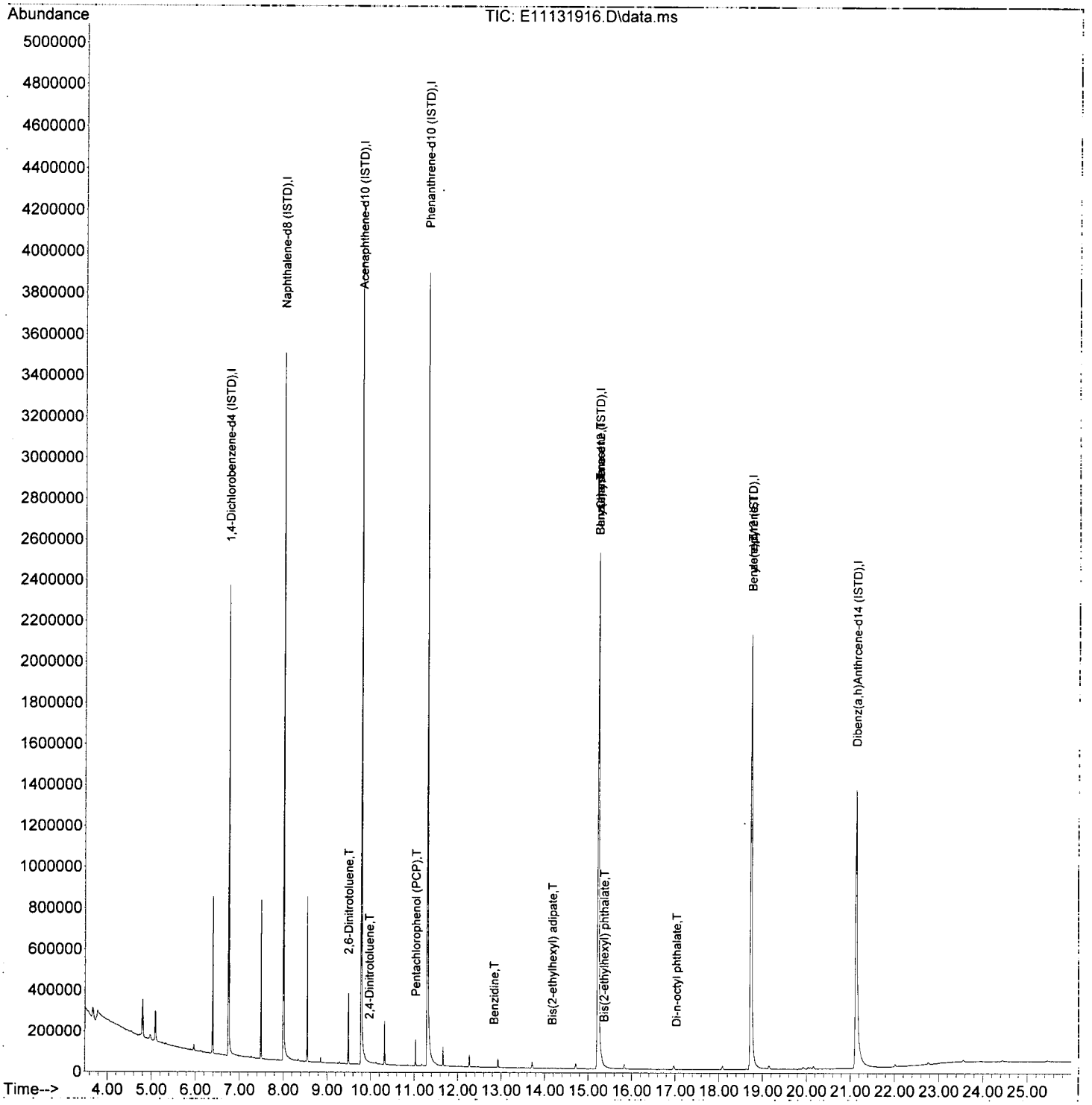
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.488	156	124	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.488	163	182	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.488	165	63	30.91 ng/ml#	10
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.664	152	116	N.D.	
50) 3-Nitroaniline	9.787	138	174	N.D.	
51) Acenaphthene	9.825	153	71	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.964	165	313	62.22 ng/ml#	32
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	10.221	149	114	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.333	170	92	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)	10.499	77	132	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.034	266	87	61.63 ng/ml#	1
71) Phenanthrene	11.333	178	92	N.D.	
72) Anthracene	11.333	178	92	N.D.	
73) Carbazole	11.553	167	54	N.D.	
74) Di-n-butyl phthalate	11.879	149	71	N.D.	
75) Fluoranthene	12.660	202	73	N.D.	
76) Benzidine	12.836	184	107	152.53 ng/ml	68
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.173	129	898	55.19 ng/ml	79
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	4430	4.03 ng/ml	65
84) Chrysene	15.227	228	4290	3.90 ng/ml	62
85) Bis(2-ethylhexyl) phth...	15.366	149	201	58.77 ng/ml	51
87) Di-n-octyl phthalate	17.029	149	67	74.19 ng/ml#	1
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	18.741	252	6047	14.42 ng/ml#	33
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.741	252	6047	6.82 ng/ml	76
95) Indeno(1,2,3-cd)pyrene	21.132	276	340	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	354	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 : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131916.D
Acq On : 13 Nov 2019 5:30 pm
Operator : JK/ AMS /DTH
Sample : 9K13053-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:43 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131917.D
Acq On : 13 Nov 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9110770-BLK1
Misc : 1x, 8270D LL FULL LIST BQC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:47 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DT 11/13/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	225454	2000.00 ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.006	136	1224346	2000.00 ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.788	162	964468	2000.00 ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.301	188	2311559	2000.00 ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.232	240	2274093	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.747	264	2063103	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1569888	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	241579	1832.74 ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	319732	1955.11 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	294901	2262.65 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.092	172	1184794	1639.89 ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.595	330	167399	1563.31 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.146	244	2036102	1983.73 ng/ml	-0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.311	74	130	N.D.	
3) Pyridine	4.321	79	139	N.D.	
6) Phenol	6.423	94	496	2.92 ng/ml#	1
7) Aniline	6.423	93	229	N.D.	
8) Bis(2-chloroethyl) ether	6.487	93	570	3.78 ng/ml#	40
9) 2-Chlorophenol	6.568	128	109	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.910	108	130	36.44 ng/ml#	69
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.905	107	81	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.065	45	53	N.D.	
16) N-Nitrosodi-n-propylamine	7.140	70	55	N.D.	
17) 3+4-Methylphenol	7.188	107	69	N.D.	
18) Hexachloroethane	7.263	117	178	2.94 ng/ml#	12
20) Nitrobenzene	7.295	77	1089	8.15 ng/ml#	27
22) Isophorone	7.552	82	558	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	7.723	105	55	820.18 ng/ml#	30
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	1233	N.D.	
30) 4-Chloroaniline	8.028	127	152	11.31 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.563	107	50	65.20 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	231	N.D.	
34) 1-Methylnaphthalene	8.825	142	227	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	9.194	154	1844	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131917.D
Acq On : 13 Nov 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9110770-BLK1
Misc : 1x, 8270D LL FULL LIST BQC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:47 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

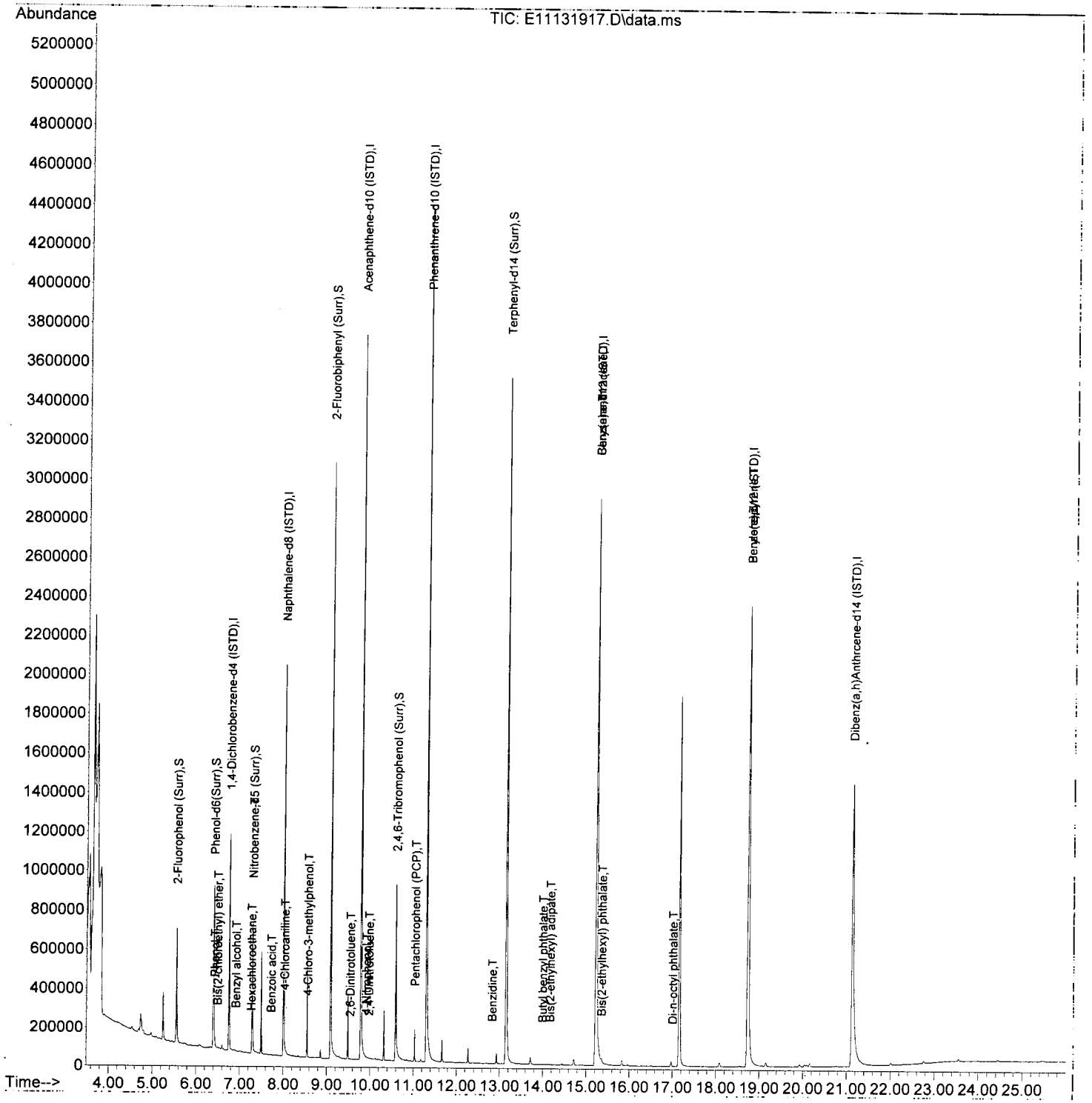
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.445	156	60	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.488	163	557	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.536	165	67	30.97 ng/ml#	41
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	133	N.D.	
50) 3-Nitroaniline	9.782	138	109	N.D.	
51) Acenaphthene	9.820	153	160	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.911	139	62	83.99 ng/ml#	1
54) 2,4-Dinitrotoluene	9.969	165	71	61.08 ng/ml#	28
55) Dibenzofuran	10.001	168	82	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	10.205	149	358	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.183	170	67	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)	10.504	77	170	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.034	266	159	62.26 ng/ml#	1
71) Phenanthrene	11.323	178	580	N.D.	
72) Anthracene	11.365	178	73	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.879	149	1277	N.D.	
75) Fluoranthene	12.638	202	97	N.D.	
76) Benzidine	12.826	184	78	152.46 ng/ml	68
77) Pyrene	12.943	202	214	N.D.	
80) Butyl benzyl phthalate	13.992	149	69	32.69 ng/ml#	26
81) Bis(2-ethylhexyl) adipate	14.163	129	789	54.77 ng/ml	87
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.232	228	5398	4.41 ng/ml	74
84) Chrysene	15.232	228	5484	4.49 ng/ml	70
85) Bis(2-ethylhexyl) phth...	15.355	149	7852	67.62 ng/ml	96
87) Di-n-octyl phthalate	17.003	149	50	74.17 ng/ml#	1
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	18.747	252	6562	14.29 ng/ml#	20
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.747	252	6562	6.67 ng/ml	74
95) Indeno(1,2,3-cd)pyrene	21.127	276	330	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	178	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 : C:\msdchem\1\DATA\2019-11\9K13053\
Data File : E11131917.D
Acq On : 13 Nov 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9110770-BLK1
Misc : 1x, 8270D LL FULL LIST BQC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 13 19:44:47 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131922.D
Acq On : 13 Nov 2019 9:04 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BLK1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 11/14/19

Quant Time: Nov 14 07:46:28 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	224439	2000.00 ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	896578	2000.00 ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.787	162	617901	2000.00 ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.306	188	1530735	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1386425	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.752	264	1205005	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.153	292	912905	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	281327	2143.94 ng/ml	0.00
5) Phenol-d6(Surr)	6.412	99	181324	1113.78 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	491737	3789.94 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.092	172	1663865	3594.67 ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.595	330	293165	3821.08 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	3078398	4919.48 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.289	74	87	N.D.	
3) Pyridine	4.337	79	52	N.D.	
6) Phenol	6.423	94	2257	13.35 ng/ml#	1
7) Aniline	6.434	93	534	N.D.	
8) Bis(2-chloroethyl) ether	6.487	93	2137	14.22 ng/ml#	33
9) 2-Chlorophenol	6.568	128	184	N.D.	
10) 1,3-Dichlorobenzene	6.707	146	51	N.D.	
11) 1,4-Dichlorobenzene	6.776	146	184	N.D.	
12) Benzyl alcohol	6.904	108	660	43.33 ng/ml	88
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.006	107	285	2.58 ng/ml	73
15) 2,2'-Oxybis(1-Chloropr...	7.006	45	116	N.D.	
16) N-Nitrosodi-n-propylamine	7.134	70	90	N.D.	
17) 3+4-Methylphenol	7.113	107	54	N.D.	
18) Hexachloroethane	7.268	117	337	5.58 ng/ml#	12
20) Nitrobenzene	7.295	77	1521	11.44 ng/ml#	26
22) Isophorone	7.562	82	425	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.755	93	259	N.D.	
26) Benzoic acid	7.734	105	1014	837.99 ng/ml#	60
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.028	128	3896	8.17 ng/ml	100
30) 4-Chloroaniline	8.081	127	68	11.06 ng/ml#	52
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.579	107	400	68.56 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	1163	3.62 ng/ml	89
34) 1-Methylnaphthalene	8.830	142	937	3.07 ng/ml	92
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	9.199	154	3186	6.09 ng/ml	80
41) 2-Chloronaphthalene	9.220	162	71	N.D.	
42) 2-Nitroaniline	9.247	138	205	31.77 ng/ml#	78
43) 2,6-Dimethylnaphthalene	9.365	156	448	N.D.	

J

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131922.D
Acq On : 13 Nov 2019 9:04 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BLK1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:28 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

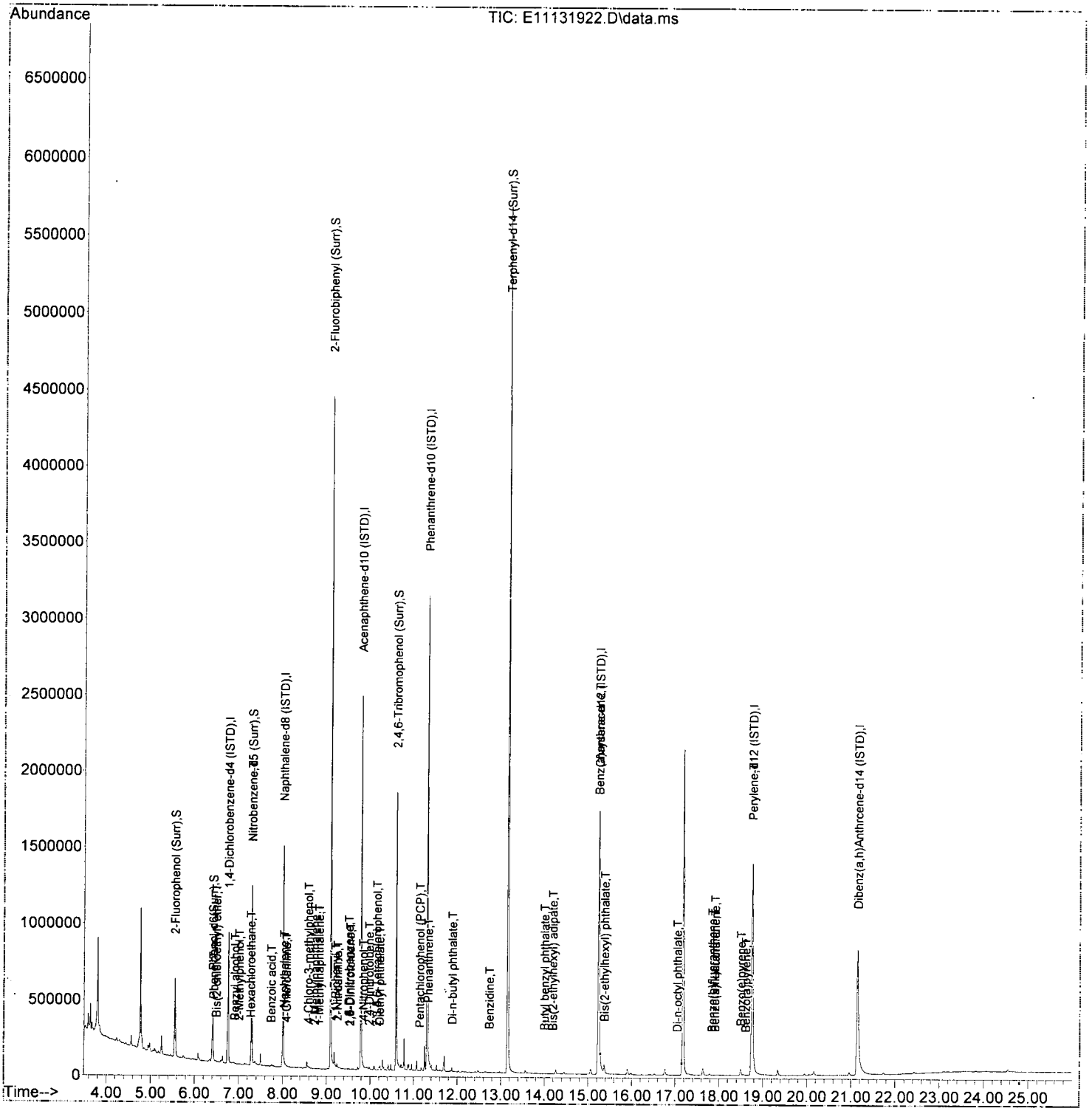
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.504	168	50	64.97 ng/ml#	1
45)	Dimethyl phthalate	9.499	163	814	N.D.	
46)	1,3-Dinitrobenzene	9.504	168	60	60.33 ng/ml#	1
47)	2,6-Dinitrotoluene	9.541	165	170	32.32 ng/ml#	58
48)	1,2-Dinitrobenzene	0.000		0	N.D.	
49)	Acenaphthylene	9.648	152	302	N.D.	
50)	3-Nitroaniline	9.787	138	168	N.D.	
51)	Acenaphthene	9.825	153	803	N.D.	
52)	2,4-Dinitrophenol	0.000		0	N.D.	
53)	4-Nitrophenol	9.836	139	71	84.47 ng/ml#	1
54)	2,4-Dinitrotoluene	9.969	165	107	61.60 ng/ml#	40
55)	Dibenzofuran	10.001	168	646	N.D.	
56)	2,3,5,6-Tetrachlorophenol	10.146	232	109	40.64 ng/ml#	54
57)	2,3,4,6-Tetrachlorophenol	10.146	232	109	29.33 ng/ml#	41
58)	Diethyl phthalate	10.210	149	1876	4.61 ng/ml	92
59)	2,3,5-Trimethylnaphtha...	10.215	170	387	N.D.	
60)	Fluorene	10.349	166	685	N.D.	
61)	4-Chlorophenyl phenyl ...	10.338	204	82	N.D.	
62)	4-Nitroaniline	10.306	138	149	N.D.	
63)	4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65)	N-Nitrosodiphenylamine	10.461	169	427	N.D.	
66)	Azobenzene (1,2-DPH)	10.504	77	727	N.D.	
68)	4-Bromophenyl phenyl e...	10.836	248	132	N.D.	
69)	Hexachlorobenzene	0.000		0	N.D.	
70)	Pentachlorophenol (PCP)	11.130	266	134	62.67 ng/ml	83
71)	Phenanthrene	11.328	178	3768	4.33 ng/ml	95
72)	Anthracene	11.381	178	634	N.D.	
73)	Carbazole	11.547	167	494	N.D.	
74)	Di-n-butyl phthalate	11.879	149	14873	17.26 ng/ml	97
75)	Fluoranthene	12.633	202	1456	N.D.	
76)	Benzidine	12.729	184	136	152.68 ng/ml	62
77)	Pyrene	12.943	202	1723	N.D.	
80)	Butyl benzyl phthalate	13.997	149	702	34.73 ng/ml	84
81)	Bis(2-ethylhexyl) adipate	14.184	129	895	56.13 ng/ml	78
82)	3,3-Dichlorobenzidine	0.000		0	N.D.	
83)	Benz(a)anthracene	15.232	228	3899	5.23 ng/ml	72
84)	Chrysene	15.291	228	1040	N.D.	
85)	Bis(2-ethylhexyl) phth...	15.371	149	29184	114.06 ng/ml	98
87)	Di-n-octyl phthalate	17.040	149	251	74.52 ng/ml#	1
88)	Benzo(b)fluoranthene	17.837	252	322	10.57 ng/ml	89
89)	Benzo(k)fluoranthene	17.901	252	148	10.91 ng/ml	62
90)	Benzo(b+k)fluoranthene	17.901	252	148	19.33 ng/ml	62
91)	Benzo(e)pyrene	18.495	252	613	9.33 ng/ml#	10
92)	Benzo(a)pyrene	18.607	252	182	13.52 ng/ml	60
93)	Perylene	18.752	252	3988	6.94 ng/ml	67
95)	Indeno(1,2,3-cd)pyrene	21.137	276	422	N.D.	
96)	Dibenz(a,h)anthracene	21.137	278	244	N.D.	
97)	Benzo(g,h,i)perylene	0.000		0	N.D.	

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131922.D
Acq On : 13 Nov 2019 9:04 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BLK1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:28 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131923.D
Acq On : 13 Nov 2019 9:39 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BS1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 11/14/19

Quant Time: Nov 14 07:46:33 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	204276	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1149663	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.793	162	856167	2000.00	ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.307	188	1652854	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.259	240	1543056	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.773	264	1451346	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.175	292	1155526	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	310103	2596.50	ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	268740	1813.67	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	705726	5976.09	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	2542930	3964.93	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	439272	5102.38	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.163	244	3375537	4846.76	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.289	74	105561	1318.57	ng/ml	95
3) Pyridine	4.327	79	136	N.D.		
6) Phenol	6.423	94	238921	1552.27	ng/ml	99
7) Aniline	6.450	93	3856	19.68	ng/ml	53
8) Bis(2-chloroethyl) ether	6.498	93	492030	3598.36	ng/ml	97
9) 2-Chlorophenol	6.568	128	469646	3545.43	ng/ml	98
10) 1,3-Dichlorobenzene	6.707	146	482929	3026.65	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	492212	3050.05	ng/ml	99
12) Benzyl alcohol	6.889	108	250608	3259.82	ng/ml	98
13) 1,2-Dichlorobenzene	6.926	146	494520	3219.75	ng/ml	98
14) 2-Methylphenol	6.996	107	388596	3862.19	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	540787	3474.82	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.140	70	472361	5390.77	ng/ml	96
17) 3+4-Methylphenol	7.145	107	492476	3968.70	ng/ml	99
18) Hexachloroethane	7.258	117	170275	3099.74	ng/ml	94
20) Nitrobenzene	7.317	77	563824	4659.21	ng/ml	95
22) Isophorone	7.547	82	1438895	4224.66	ng/ml	98
23) 2-Nitrophenol	7.632	139	371474	3740.06	ng/ml	97
24) 2,4-Dimethylphenol	7.664	122	532038	3403.99	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.750	93	904604	3961.33	ng/ml	99
26) Benzoic acid	7.777	105	326825	4667.08	ng/ml	96
27) 2,4-Dichlorophenol	7.873	162	580537	4001.15	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.953	180	543467	2958.90	ng/ml	99
29) Naphthalene	8.033	128	2020963	3306.27	ng/ml	99
30) 4-Chloroaniline	8.081	127	53937	245.91	ng/ml	98
31) Hexachlorobutadiene	8.162	225	259844	2770.30	ng/ml	99
32) 4-Chloro-3-methylphenol	8.568	107	738833	5035.23	ng/ml	97
33) 2-Methylnaphthalene	8.729	142	1722551	4181.74	ng/ml	100
34) 1-Methylnaphthalene	8.830	142	1632154	4174.97	ng/ml	100
36) Hexachlorocyclopentadiene	8.894	237	325880	2573.92	ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	572930	3717.92	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	608367	3896.56	ng/ml	100
39) 1,1'-Biphenyl	9.199	154	2345106	3233.65	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	1702594	3112.14	ng/ml	99
42) 2-Nitroaniline	9.328	138	697103	4072.27	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.360	156	1758886	3353.89	ng/ml	99

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Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131923.D
Acq On : 13 Nov 2019 9:39 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BS1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

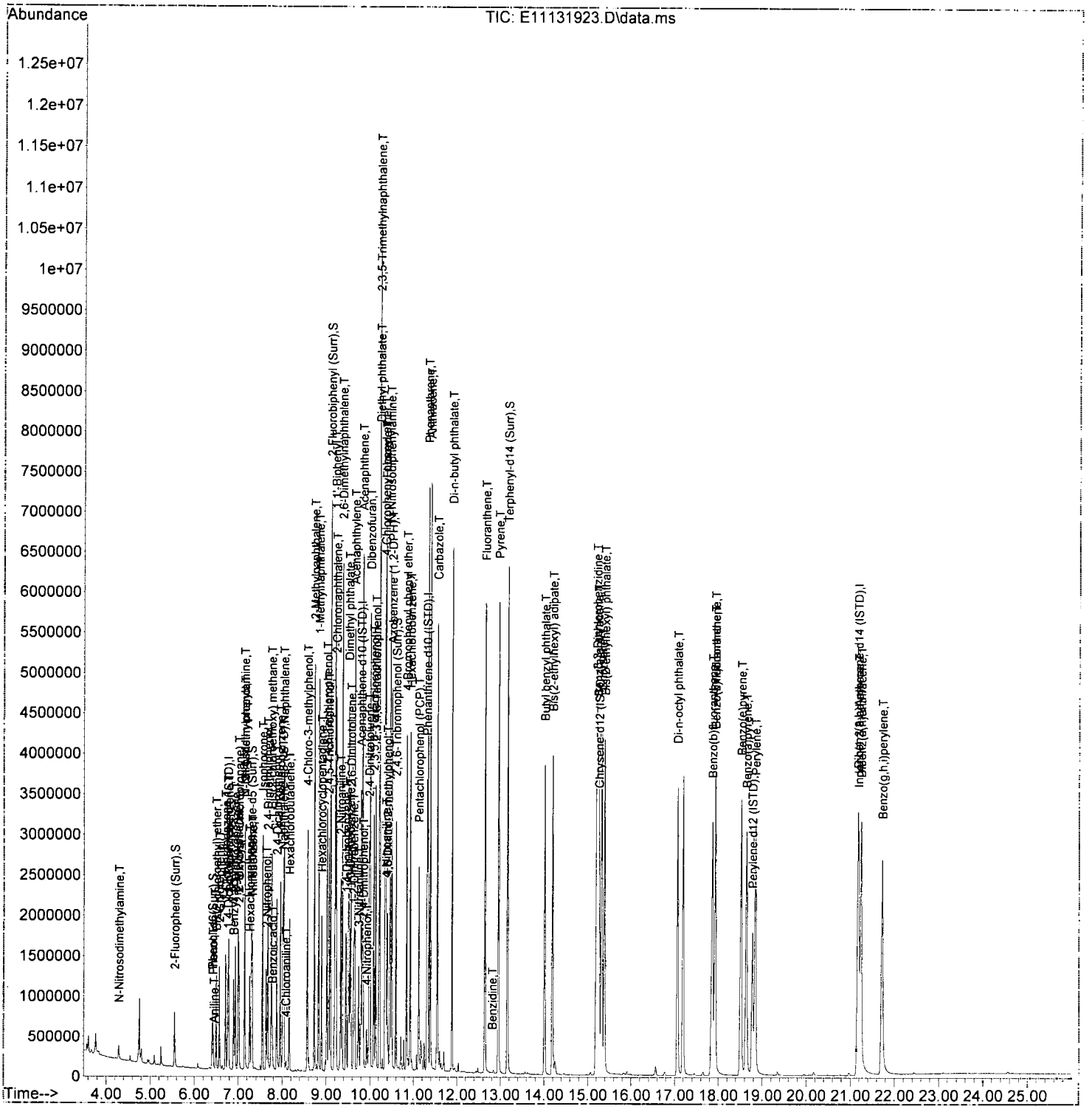
Quant Time: Nov 14 07:46:33 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	339205	4187.65	ng/ml	91
45) Dimethyl phthalate	9.510	163	2319193	3957.29	ng/ml	100
46) 1,3-Dinitrobenzene	9.542	168	394863	4115.09	ng/ml	92
47) 2,6-Dinitrotoluene	9.568	165	565515	4075.02	ng/ml	91
48) 1,2-Dinitrobenzene	9.627	168	259493	4103.62	ng/ml	92
49) Acenaphthylene	9.649	152	2962936	3580.08	ng/ml	100
50) 3-Nitroaniline	9.745	138	322690	2367.43	ng/ml	93
51) Acenaphthene	9.830	153	1939120	3406.73	ng/ml	99
52) 2,4-Dinitrophenol	9.847	184	260984	4626.84	ng/ml	94
53) 4-Nitrophenol	9.927	139	159127	1713.80	ng/ml	95
54) 2,4-Dinitrotoluene	9.980	165	724067	4160.05	ng/ml	95
55) Dibenzofuran	10.002	168	2766272	3639.80	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	10.087	232	537201	4130.23	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.130	232	548659	3991.07	ng/ml	98
58) Diethyl phthalate	10.221	149	2149289	3814.50	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.216	170	1741021	3605.86	ng/ml	99
60) Fluorene	10.355	166	2236408	3704.13	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.339	204	1088646	3787.32	ng/ml	97
62) 4-Nitroaniline	10.371	138	535168	3871.25	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.403	198	407354	4772.30	ng/ml	90
65) N-Nitrosodiphenylamine	10.462	169	1994742	3859.39	ng/ml	99
66) Azobenzene (1,2-DPH)	10.504	77	1893776	3522.22	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.841	248	667374	3913.67	ng/ml	97
69) Hexachlorobenzene	10.927	284	711927	3711.13	ng/ml	96
70) Pentachlorophenol (PCP)	11.120	266	369589	3758.83	ng/ml	98
71) Phenanthrene	11.333	178	3316085	3526.74	ng/ml	99
72) Anthracene	11.387	178	3390192	3773.21	ng/ml	99
73) Carbazole	11.547	167	3042547	4106.34	ng/ml	99
74) Di-n-butyl phthalate	11.884	149	3781976	4064.09	ng/ml	100
75) Fluoranthene	12.644	202	3608171	3994.52	ng/ml	98
76) Benzidine	12.810	184	1535	156.04	ng/ml	60
77) Pyrene	12.949	202	3711440	3993.08	ng/ml	99
80) Butyl benzyl phthalate	14.013	149	1609353	3932.56	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.195	129	1480599	4058.28	ng/ml	99
82) 3,3-Dichlorobenzidine	15.201	252	2032454	8254.57	ng/ml	98
83) Benz(a)anthracene	15.233	228	3347705	4033.12	ng/ml	99
84) Chrysene	15.324	228	3205480	3866.42	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.388	149	2381625	3968.98	ng/ml	98
87) Di-n-octyl phthalate	17.062	149	3753276	4092.04	ng/ml	99
88) Benzo(b)fluoranthene	17.859	252	3119304	3695.93	ng/ml	99
89) Benzo(k)fluoranthene	17.923	252	3085780	3838.46	ng/ml	99
90) Benzo(b+k)fluoranthene	17.923	252	6494323	7646.63	ng/ml	99
91) Benzo(e)pyrene	18.522	252	3082544	3790.95	ng/ml	100
92) Benzo(a)pyrene	18.640	252	2755404	3657.29	ng/ml	100
93) Perylene	18.843	252	2890766	4177.74	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.186	276	2630449	3741.06	ng/ml	99
96) Dibenz(a,h)anthracene	21.244	278	2630566	4061.95	ng/ml	99
97) Benzo(g,h,i)perylene	21.731	276	2607513	3860.81	ng/ml	94

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

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131923.D
Acq On : 13 Nov 2019 9:39 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BS1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:33 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131924.D
Acq On : 13 Nov 2019 10:15 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BSD1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Q-19

AMS 11/14/19

Quant Time: Nov 14 07:46:39 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	281215	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1406454	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.793	162	900335	2000.00	ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.312	188	1776076	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.259	240	1828467	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.773	264	1764298	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.180	292	1427023	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	375240	2282.29	ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	311293	1526.07	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	884953	5443.52	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	2631842	3902.25	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	455671	4947.93	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.163	244	3756529	4551.87	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.289	74	121921	1106.26	ng/ml	97
3) Pyridine	4.316	79	191	N.D.		
6) Phenol	6.423	94	285448	1347.16	ng/ml	99
7) Aniline	6.450	93	5919	21.94	ng/ml#	50
8) Bis(2-chloroethyl) ether	6.498	93	671405	3566.79	ng/ml	98
9) 2-Chlorophenol	6.568	128	649040	3559.16	ng/ml	98
10) 1,3-Dichlorobenzene	6.712	146	624380	2842.55	ng/ml	98
11) 1,4-Dichlorobenzene	6.776	146	645731	2906.60	ng/ml	99
12) Benzyl alcohol	6.889	108	282932	2723.59	ng/ml	97
13) 1,2-Dichlorobenzene	6.931	146	644397	3047.69	ng/ml	98
14) 2-Methylphenol	6.996	107	482456	3483.15	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	710271	3315.19	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.145	70	568048	4709.13	ng/ml	91
17) 3+4-Methylphenol	7.145	107	573156	3355.17	ng/ml	99
18) Hexachloroethane	7.258	117	222865	2947.10	ng/ml	96
20) Nitrobenzene	7.317	77	716921	4303.47	ng/ml	94
22) Isophorone	7.547	82	1663617	3992.65	ng/ml	98
23) 2-Nitrophenol	7.632	139	472613	3873.08	ng/ml	97
24) 2,4-Dimethylphenol	7.664	122	623255	3260.69	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.750	93	1036139	3708.90	ng/ml	99
26) Benzoic acid	7.771	105	324285	4033.19	ng/ml	97
27) 2,4-Dichlorophenol	7.873	162	709258	3996.54	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.953	180	655614	2917.76	ng/ml	100
29) Naphthalene	8.033	128	2398098	3206.95	ng/ml	100
30) 4-Chloroaniline	8.081	127	64949	242.22	ng/ml	98
31) Hexachlorobutadiene	8.162	225	315471	2749.28	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	770414	4340.66	ng/ml	97
33) 2-Methylnaphthalene	8.729	142	1859974	3690.94	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	1794972	3753.14	ng/ml	100
36) Hexachlorocyclopentadiene	8.894	237	369510	2775.35	ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	619461	3811.15	ng/ml	100
38) 2,4,5-Trichlorophenol	9.060	196	654139	3976.24	ng/ml	99
39) 1,1'-Biphenyl	9.199	154	2458583	3223.82	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	1813996	3153.11	ng/ml	99
42) 2-Nitroaniline	9.328	138	736845	4090.59	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.360	156	1810111	3282.25	ng/ml	99

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131924.D
Acq On : 13 Nov 2019 10:15 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BSD1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:39 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

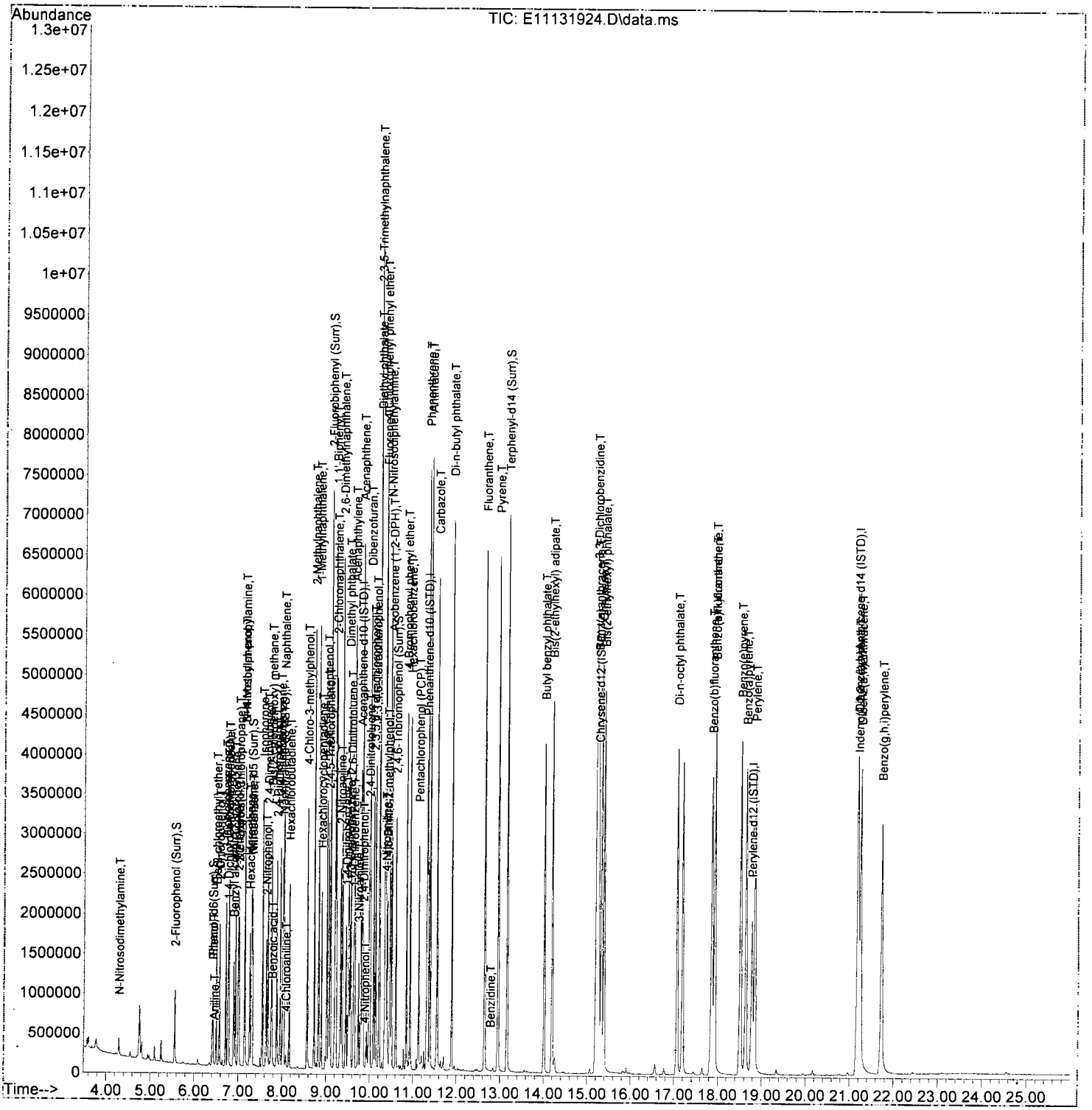
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	374755	4359.37	ng/ml	90
45) Dimethyl phthalate	9.509	163	2421172	3928.63	ng/ml	100
46) 1,3-Dinitrobenzene	9.542	168	423284	4185.11	ng/ml	91
47) 2,6-Dinitrotoluene	9.568	165	589159	4039.80	ng/ml	92
48) 1,2-Dinitrobenzene	9.633	168	274839	4130.13	ng/ml	82
49) Acenaphthylene	9.649	152	3078202	3536.89	ng/ml	99
50) 3-Nitroaniline	9.745	138	340619	2376.37	ng/ml	92
51) Acenaphthene	9.825	153	2022428	3378.79	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	306685	4935.69	ng/ml	93
53) 4-Nitrophenol	9.884	139	90	84.33	ng/ml#	37
54) 2,4-Dinitrotoluene	9.980	165	772371	4215.45	ng/ml	95
55) Dibenzofuran	10.002	168	2862768	3581.98	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	10.087	232	573651	4184.46	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.130	232	585582	4044.55	ng/ml	97
58) Diethyl phthalate	10.221	149	2233149	3768.90	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.210	170	1811538	3567.85	ng/ml	99
60) Fluorene	10.355	166	2324561	3661.25	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	1136176	3758.77	ng/ml	98
62) 4-Nitroaniline	10.371	138	575637	3959.71	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.403	198	455054	4967.74	ng/ml	90
65) N-Nitrosodiphenylamine	10.462	169	2126121	3828.19	ng/ml	100
66) Azobenzene (1,2-DPH)	10.504	77	1988294	3441.45	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.841	248	709360	3871.28	ng/ml	97
69) Hexachlorobenzene	10.927	284	754338	3659.39	ng/ml	97
70) Pentachlorophenol (PCP)	11.119	266	417016	3904.79	ng/ml	99
71) Phenanthrene	11.333	178	3525105	3488.94	ng/ml	99
72) Anthracene	11.387	178	3663557	3794.57	ng/ml	99
73) Carbazole	11.547	167	3379495	4244.66	ng/ml	99
74) Di-n-butyl phthalate	11.884	149	4117812	4117.97	ng/ml	100
75) Fluoranthene	12.644	202	4031591	4153.62	ng/ml	98
76) Benzidine	12.772	184	124	152.61	ng/ml#	1
77) Pyrene	12.949	202	4140559	4145.70	ng/ml	99
80) Butyl benzyl phthalate	14.013	149	1845510	3820.61	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.190	129	1698438	3939.79	ng/ml	98
82) 3,3-Dichlorobenzidine	15.206	252	2390121	8205.27	ng/ml	99
83) Benz(a)anthracene	15.238	228	3934800	4000.47	ng/ml	99
84) Chrysene	15.323	228	3730083	3796.90	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.382	149	2745112	3866.30	ng/ml	97
87) Di-n-octyl phthalate	17.067	149	4511388	4053.70	ng/ml	98
88) Benzo(b)fluoranthene	17.859	252	3846742	3744.63	ng/ml	99
89) Benzo(k)fluoranthene	17.928	252	3692330	3779.06	ng/ml	99
90) Benzo(b+k)fluoranthene	17.928	252	7788318	7548.70	ng/ml	99
91) Benzo(e)pyrene	18.522	252	3735347	3779.42	ng/ml	99
92) Benzo(a)pyrene	18.640	252	3327795	3635.57	ng/ml	100
93) Perylene	18.848	252	3474684	4130.88	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.191	276	3306772	3808.18	ng/ml	99
96) Dibenz(a,h)anthracene	21.250	278	3245315	4057.80	ng/ml	97
97) Benzo(g,h,i)perylene	21.731	276	3212739	3851.91	ng/ml	98

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131924.D
Acq On : 13 Nov 2019 10:15 pm
Operator : JK/ AMS /DTH
Sample : 9110772-BSD1
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:39 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131925.D
Acq On : 13 Nov 2019 10:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-01
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 11/14/19

Quant Time: Nov 14 07:46:45 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	211577	2000.00 ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1136944	2000.00 ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.788	162	811975	2000.00 ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.307	188	1753537	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	1671351	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.752	264	1521039	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.154	292	1198960	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.552	112	262009	2118.11 ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	193280	1259.39 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	655537	5359.53 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	2250111	3699.31 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	381922	4284.23 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	3480765	4614.21 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.295	74	177	N.D.	
3) Pyridine	4.321	79	54	N.D.	
6) Phenol	6.423	94	1570	9.85 ng/ml#	1
7) Aniline	6.445	93	447	N.D.	
8) Bis(2-chloroethyl) ether	6.488	93	2236	15.79 ng/ml#	38
9) 2-Chlorophenol	6.573	128	319	N.D.	
10) 1,3-Dichlorobenzene	6.776	146	167	N.D.	
11) 1,4-Dichlorobenzene	6.776	146	167	N.D.	
12) Benzyl alcohol	6.894	108	1910	61.06 ng/ml	82
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.974	107	82	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.006	45	55	N.D.	
16) N-Nitrosodi-n-propylamine	7.124	70	236	2.60 ng/ml	54
17) 3+4-Methylphenol	7.161	107	540	4.20 ng/ml#	73
18) Hexachloroethane	7.274	117	336	5.91 ng/ml#	12
20) Nitrobenzene	7.295	77	2105	16.79 ng/ml#	31
22) Isophorone	7.541	82	980	2.91 ng/ml	63
23) 2-Nitrophenol	7.627	139	119	28.97 ng/ml#	9
24) 2,4-Dimethylphenol	7.686	122	493	13.52 ng/ml#	73
25) Bis(2-chloroethoxy) me...	7.750	93	201	N.D.	
26) Benzoic acid	7.728	105	12780	1002.17 ng/ml	96
27) 2,4-Dichlorophenol	7.889	162	164	8.52 ng/ml#	1
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	11884	19.66 ng/ml	98
30) 4-Chloroaniline	8.087	127	84	11.05 ng/ml#	42
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.584	107	3066	87.18 ng/ml#	1
33) 2-Methylnaphthalene	8.729	142	3273	8.03 ng/ml	81
34) 1-Methylnaphthalene	8.830	142	1928	4.99 ng/ml	83
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.023	196	181	12.89 ng/ml#	71
38) 2,4,5-Trichlorophenol	9.023	196	181	30.00 ng/ml#	71
39) 1,1'-Biphenyl	9.199	154	5142	7.48 ng/ml	91
41) 2-Chloronaphthalene	9.226	162	169	N.D.	
42) 2-Nitroaniline	9.328	138	68	30.34 ng/ml#	63
43) 2,6-Dimethylnaphthalene	9.370	156	927	N.D.	

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131925.D
Acq On : 13 Nov 2019 10:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-01
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:45 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

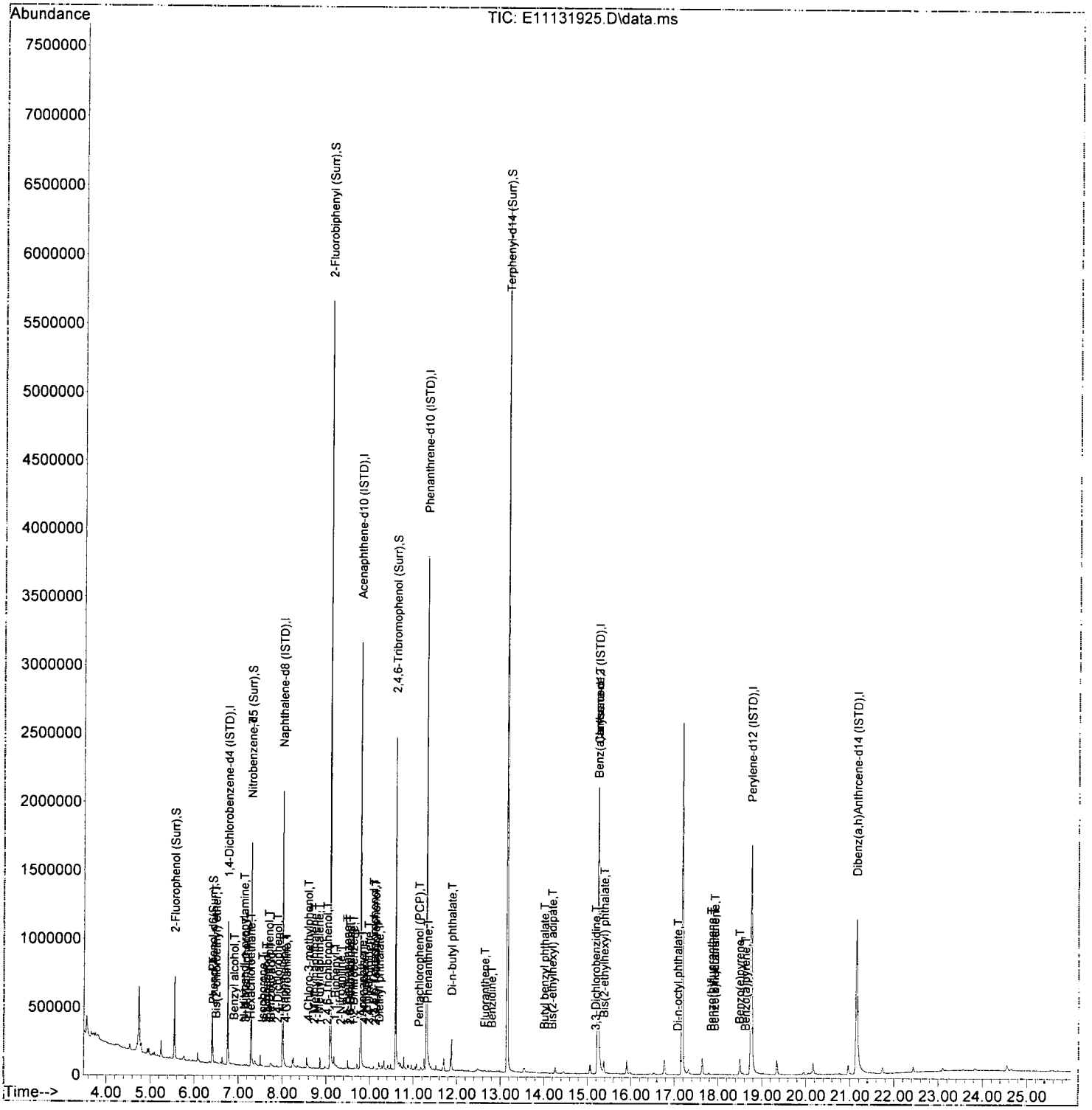
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.472	168	74	65.10 ng/ml#	1
45) Dimethyl phthalate	9.499	163	1159	N.D.	
46) 1,3-Dinitrobenzene	9.531	168	70	60.23 ng/ml#	1
47) 2,6-Dinitrotoluene	9.547	165	1169	39.98 ng/ml	64
48) 1,2-Dinitrobenzene	9.622	168	50	33.74 ng/ml#	1
49) Acenaphthylene	9.649	152	581	N.D.	
50) 3-Nitroaniline	9.729	138	50	N.D.	
51) Acenaphthene	9.820	153	1513	2.80 ng/ml	87
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.873	139	102	84.57 ng/ml#	1
54) 2,4-Dinitrotoluene	9.970	165	102	61.35 ng/ml	89
55) Dibenzofuran	10.002	168	1222	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.082	232	180	40.99 ng/ml#	53
57) 2,3,4,6-Tetrachlorophenol	10.125	232	492	32.30 ng/ml#	63
58) Diethyl phthalate	10.210	149	3930	7.35 ng/ml	88
59) 2,3,5-Trimethylnaphtha...	10.210	170	859	N.D.	
60) Fluorene	10.349	166	1129	N.D.	
61) 4-Chlorophenyl phenyl ...	10.333	204	156	N.D.	
62) 4-Nitroaniline	10.344	138	101	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.462	169	410	N.D.	
66) Azobenzene (1,2-DPH)	10.510	77	1354	N.D.	
68) 4-Bromophenyl phenyl e...	10.841	248	89	N.D.	
69) Hexachlorobenzene	10.916	284	119	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	203	63.30 ng/ml	87
71) Phenanthrene	11.328	178	5544	5.56 ng/ml	98
72) Anthracene	11.382	178	605	N.D.	
73) Carbazole	11.547	167	743	N.D.	
74) Di-n-butyl phthalate	11.879	149	133527	135.25 ng/ml	99
75) Fluoranthene	12.638	202	2570	2.68 ng/ml	87
76) Benzidine	12.794	184	72	152.49 ng/ml#	23
77) Pyrene	12.943	202	2233	N.D.	
80) Butyl benzyl phthalate	14.008	149	1163	35.54 ng/ml#	53
81) Bis(2-ethylhexyl) adipate	14.184	129	1308	56.75 ng/ml	63
82) 3,3-Dichlorobenzidine	15.184	252	425	26.83 ng/ml	89
83) Benz(a)anthracene	15.238	228	5178	5.76 ng/ml	80
84) Chrysene	15.302	228	1194	N.D.	
85) Bis(2-ethylhexyl) phth...	15.377	149	40953	123.17 ng/ml	96
87) Di-n-octyl phthalate	17.067	149	183	74.35 ng/ml#	1
88) Benzo(b)fluoranthene	17.837	252	584	10.79 ng/ml	84
89) Benzo(k)fluoranthene	17.912	252	250	10.99 ng/ml#	53
90) Benzo(b+k)fluoranthene	17.912	252	1625	21.03 ng/ml#	53
91) Benzo(e)pyrene	18.485	252	1052	9.67 ng/ml#	59
92) Benzo(a)pyrene	18.618	252	251	13.55 ng/ml#	39
93) Perylene	18.800	252	504	N.D.	
95) Indeno(1,2,3-cd)pyrene	21.143	276	1064	N.D.	
96) Dibenz(a,h)anthracene	21.207	278	415	N.D.	
97) Benzo(g,h,i)perylene	21.688	276	239	N.D.	

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131925.D
Acq On : 13 Nov 2019 10:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-01
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:45 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 11/14/19

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	212839	2000.00 ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1085022	2000.00 ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.787	162	759398	2000.00 ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.306	188	1691315	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	1602066	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.752	264	1475630	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.148	292	1168196	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	275563	2214.47 ng/ml	0.00
5) Phenol-d6(Surr)	6.412	99	204119	1322.13 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	675439	5489.50 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.092	172	2255032	3964.09 ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.595	330	376466	4367.41 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	3204040	4431.07 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.289	74	129	N.D.	
3) Pyridine	4.310	79	175	N.D.	
6) Phenol	6.423	94	1753	10.93 ng/ml#	1
7) Aniline	6.455	93	77	N.D.	
8) Bis(2-chloroethyl) ether	6.487	93	2688	18.87 ng/ml#	33
9) 2-Chlorophenol	6.573	128	178	N.D.	
10) 1,3-Dichlorobenzene	6.771	146	190	N.D.	
11) 1,4-Dichlorobenzene	6.771	146	190	N.D.	
12) Benzyl alcohol	6.867	108	103	36.17 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.001	107	406	3.87 ng/ml	79
15) 2,2'-Oxybis(1-Chloropr...	7.017	45	91	N.D.	
16) N-Nitrosodi-n-propylamine	7.129	70	141	N.D.	
17) 3+4-Methylphenol	7.156	107	343	2.65 ng/ml#	1
18) Hexachloroethane	7.274	117	259	4.53 ng/ml#	12
20) Nitrobenzene	7.295	77	2213	17.55 ng/ml#	28
22) Isophorone	7.541	82	1313	4.08 ng/ml	67
23) 2-Nitrophenol	7.637	139	120	29.05 ng/ml#	46
24) 2,4-Dimethylphenol	7.669	122	66	10.77 ng/ml#	24
25) Bis(2-chloroethoxy) me...	7.750	93	419	N.D.	
26) Benzoic acid	7.728	105	15783	1055.22 ng/ml	94
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	18085	31.35 ng/ml	99
30) 4-Chloroaniline	8.033	127	2517	22.33 ng/ml#	33
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.531	107	68	65.38 ng/ml#	1
33) 2-Methylnaphthalene	8.728	142	3437	8.84 ng/ml	97
34) 1-Methylnaphthalene	8.830	142	1891	5.13 ng/ml	72
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.023	196	100	12.32 ng/ml#	12
38) 2,4,5-Trichlorophenol	9.023	196	100	29.46 ng/ml#	12
39) 1,1'-Biphenyl	9.194	154	5034	7.83 ng/ml	90
41) 2-Chloronaphthalene	9.242	162	296	N.D.	
42) 2-Nitroaniline	9.354	138	63	30.33 ng/ml#	38
43) 2,6-Dimethylnaphthalene	9.370	156	763	N.D.	

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

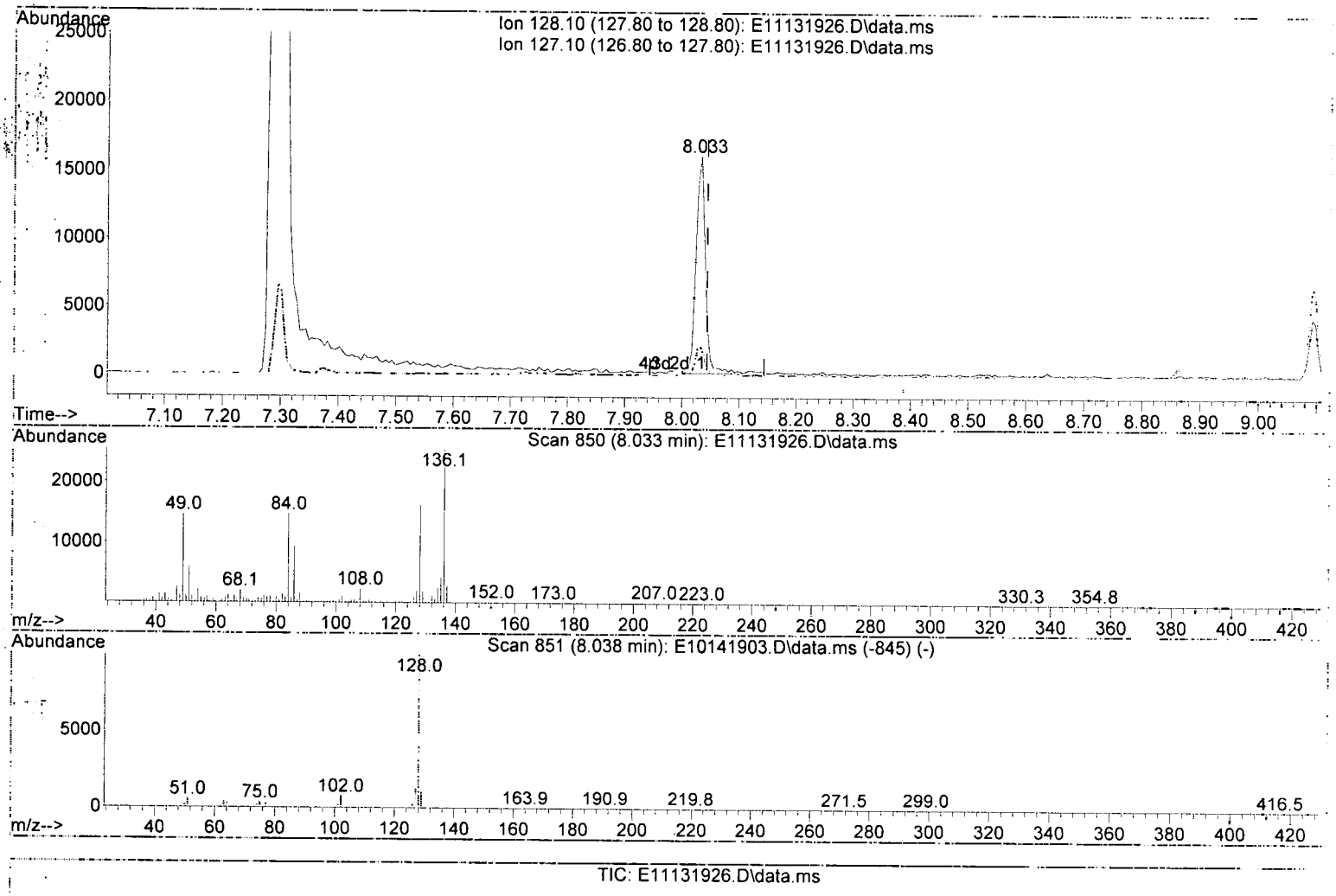
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.472	168	130	66.15 ng/ml	75
45) Dimethyl phthalate	9.493	163	1212	N.D.	
46) 1,3-Dinitrobenzene	9.547	168	51	60.04 ng/ml#	1
47) 2,6-Dinitrotoluene	9.541	165	526	35.07 ng/ml	90
48) 1,2-Dinitrobenzene	9.547	168	51	33.83 ng/ml#	1
49) Acenaphthylene	9.643	152	928	N.D.	
50) 3-Nitroaniline	9.681	138	89	N.D.	
51) Acenaphthene	9.820	153	1484	2.94 ng/ml	75
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.905	139	56	84.08 ng/ml#	1
54) 2,4-Dinitrotoluene	9.959	165	81	61.25 ng/ml	95
55) Dibenzofuran	9.996	168	869	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.092	232	51	39.78 ng/ml#	1
57) 2,3,4,6-Tetrachlorophenol	10.092	232	51	28.57 ng/ml#	10
58) Diethyl phthalate	10.210	149	3078	6.16 ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.205	170	319	N.D.	
60) Fluorene	10.349	166	1157	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.365	138	419	3.42 ng/ml#	30
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.456	169	620	N.D.	
66) Azobenzene (1,2-DPH)	10.510	77	1408	2.56 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.782	248	110	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.130	266	391	65.87 ng/ml#	56
71) Phenanthrene	11.328	178	15091	(15.68) ng/ml	98
72) Anthracene	11.381	178	2163	N.D.	
73) Carbazole	11.547	167	835	N.D.	
74) Di-n-butyl phthalate	11.879	149	107579	112.97 ng/ml	98
75) Fluoranthene	12.633	202	33338	[36.07] ng/ml	98
76) Benzidine	12.799	184	50	[52.45] ng/ml#	1
77) Pyrene	12.943	202	43855	[46.11] ng/ml	98
80) Butyl benzyl phthalate	14.008	149	1455	36.45 ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.184	129	1840	58.41 ng/ml	95
82) 3,3-Dichlorobenzidine	15.168	252	202	25.74 ng/ml#	49
83) Benz(a)anthracene	15.232	228	10132	(11.76) ng/ml	89
84) Chrysene	15.297	228	8393	9.75 ng/ml	95
85) Bis(2-ethylhexyl) phth...	15.371	149	58893	155.48 ng/ml	99
87) Di-n-octyl phthalate	17.046	149	196	74.38 ng/ml#	1
88) Benzo(b)fluoranthene	17.843	252	2897	13.77 ng/ml	95
89) Benzo(k)fluoranthene	17.843	252	3333	14.80 ng/ml	92
90) Benzo(b+k)fluoranthene	17.843	252	4495	24.58 ng/ml	92
91) Benzo(e)pyrene	18.495	252	2750	11.84 ng/ml#	10
92) Benzo(a)pyrene	18.607	252	1822	(15.81) ng/ml	87
93) Perylene	18.816	252	478	N.D.	
95) Indeno(1,2,3-cd)pyrene	21.153	276	1490	N.D.	
96) Dibenz(a,h)anthracene	21.201	278	423	N.D.	
97) Benzo(g,h,i)perylene	21.688	276	539	N.D.	

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

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11131926.D\data.ms

(29) Naphthalene (T)

8.033min (-0.011) 31.35 ng/ml

response 18085

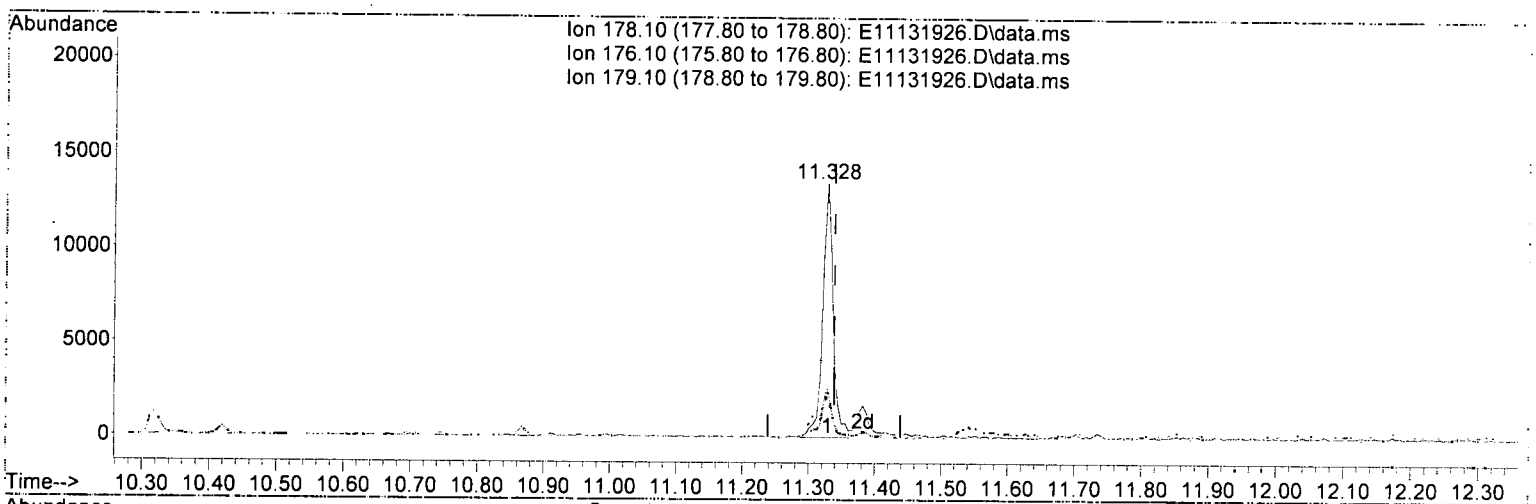
Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	12.83
0.00	0.00	0.00
0.00	0.00	0.00

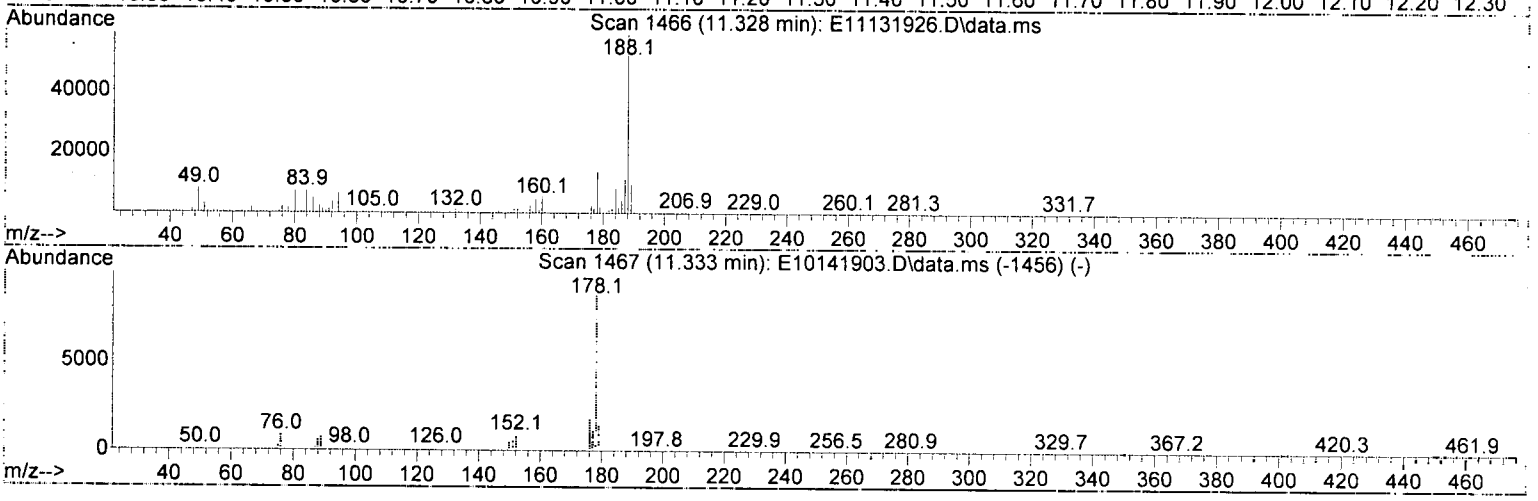
J

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5





TIC: E11131926.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.011) 15.68 ng/ml

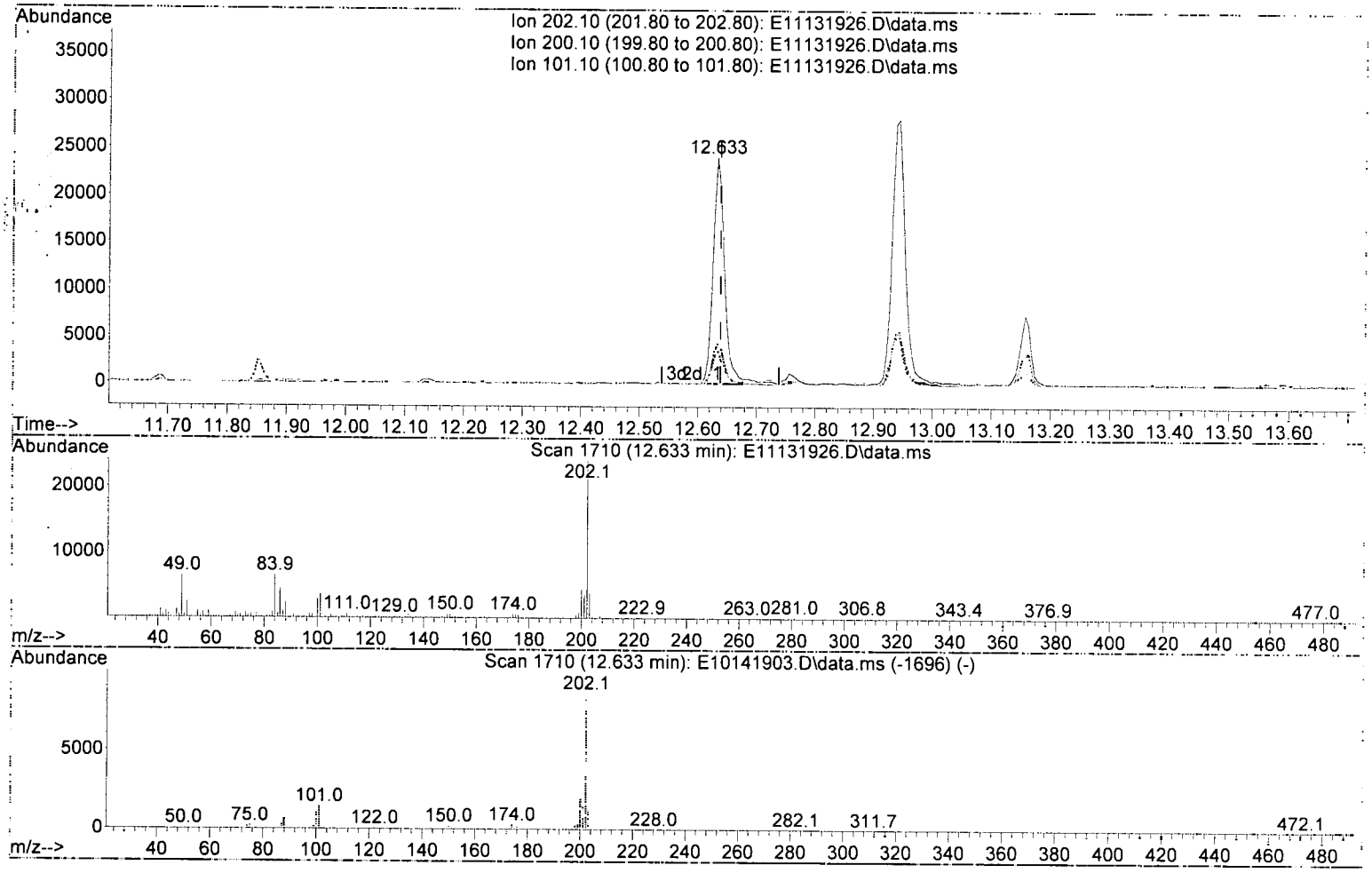
response 15091

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	19.31
179.10	15.20	15.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11131926.D\data.ms

(75) Fluoranthene (T)

12.633min (-0.005) 36.07 ng/ml

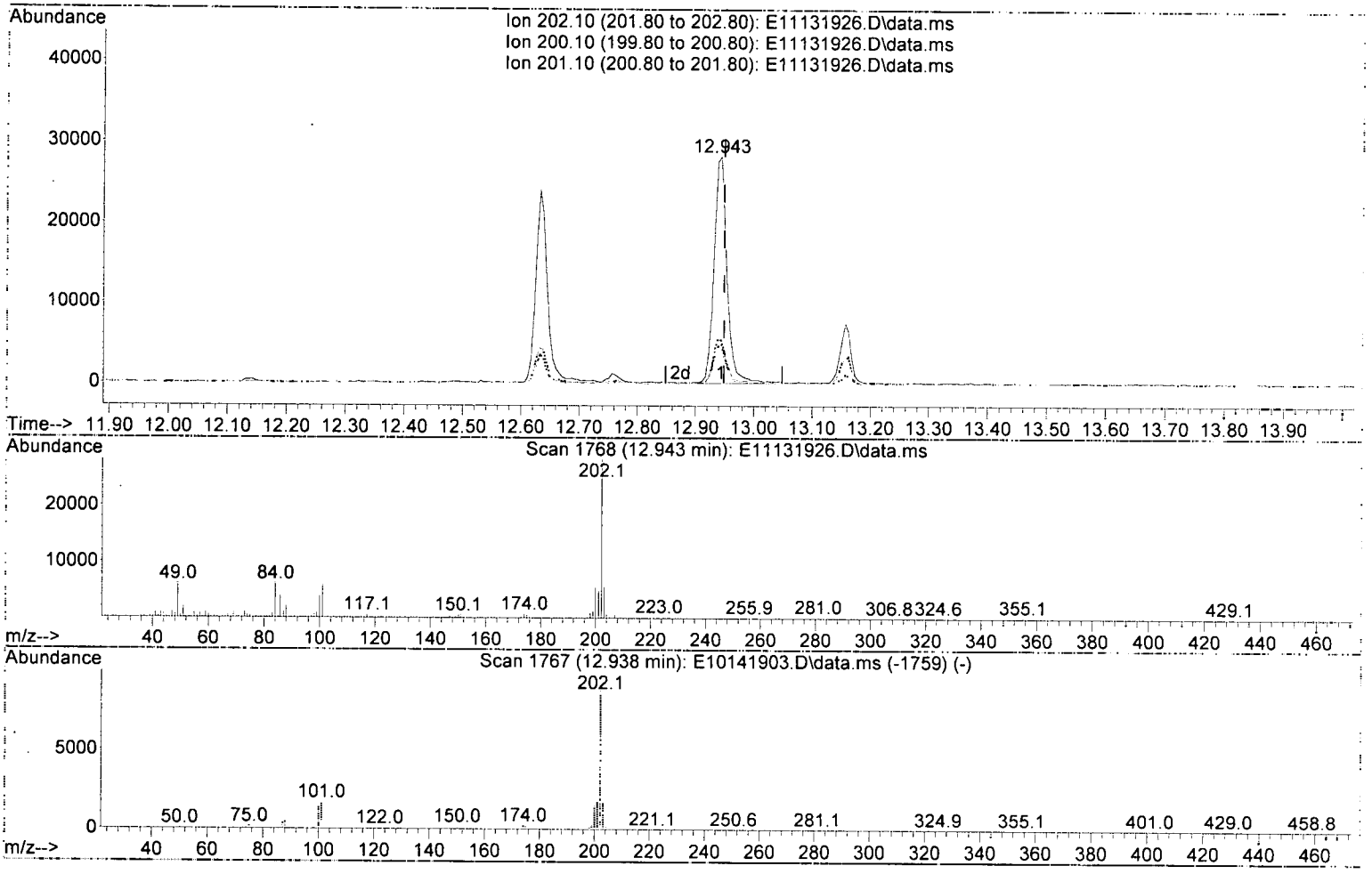
response 33338

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	18.21
101.10	14.50	15.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11131926.D\data.ms

(77) Pyrene (T)

12.943min (-0.005) 46.11 ng/ml

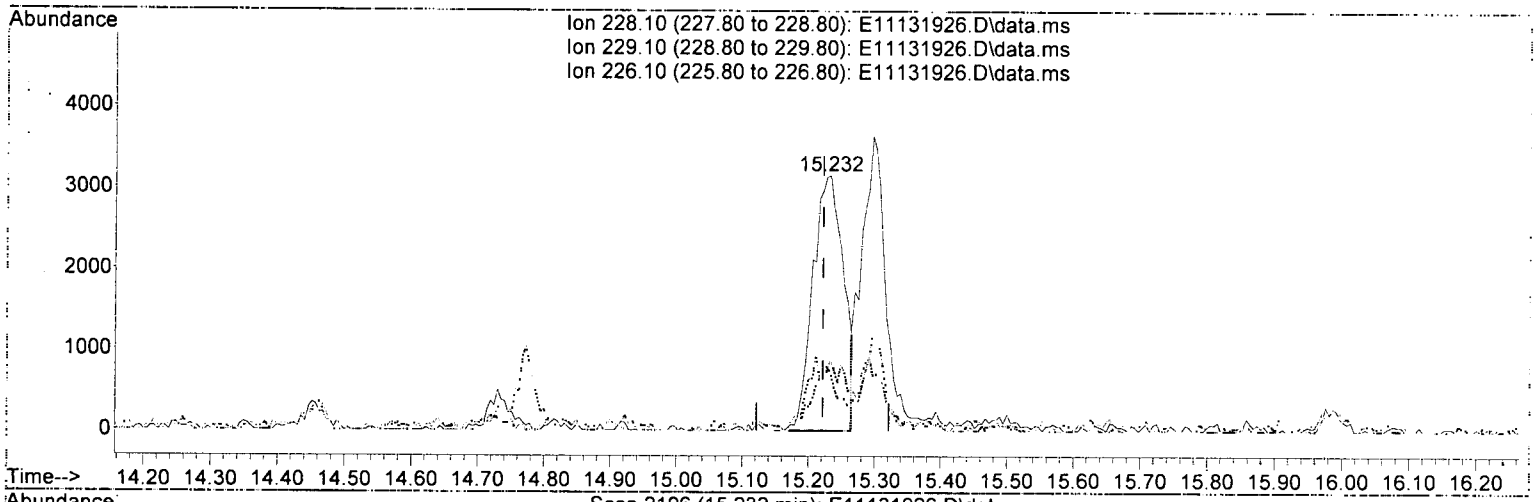
response 43855

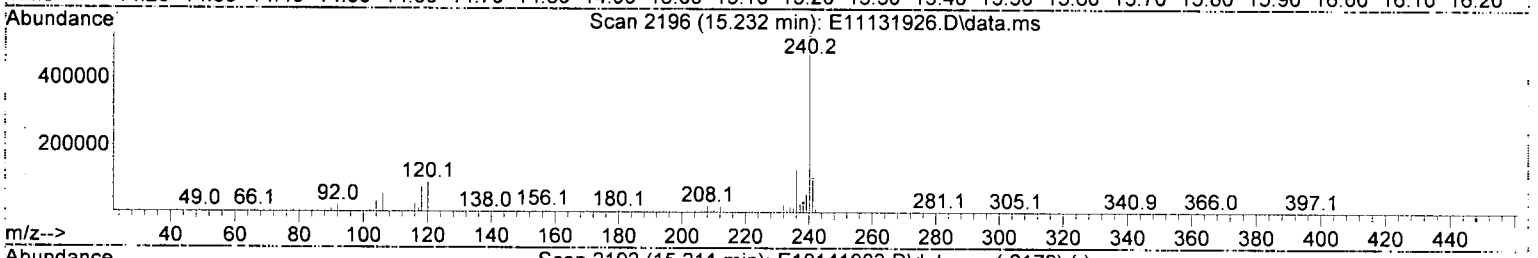
Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	19.23
201.10	16.80	17.45
0.00	0.00	0.00

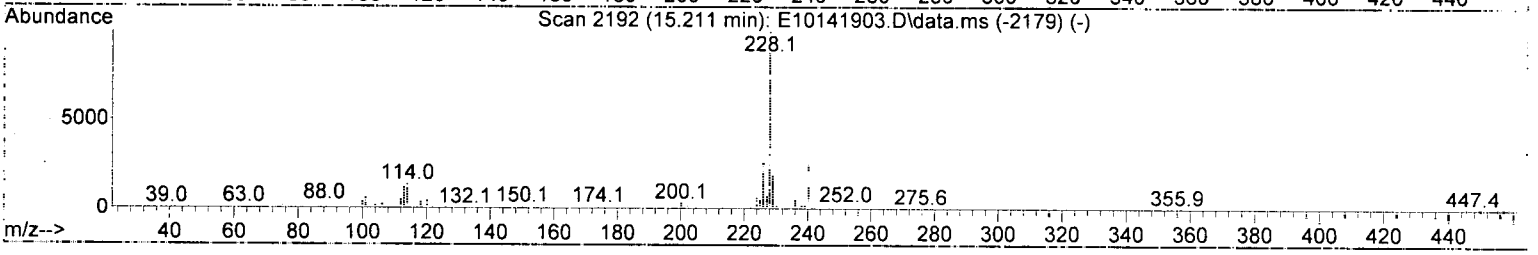
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E11131926.D\data.ms

(83) Benz(a)anthracene (T)

15.232min (+ 0.011) 11.76 ng/ml

response 10132

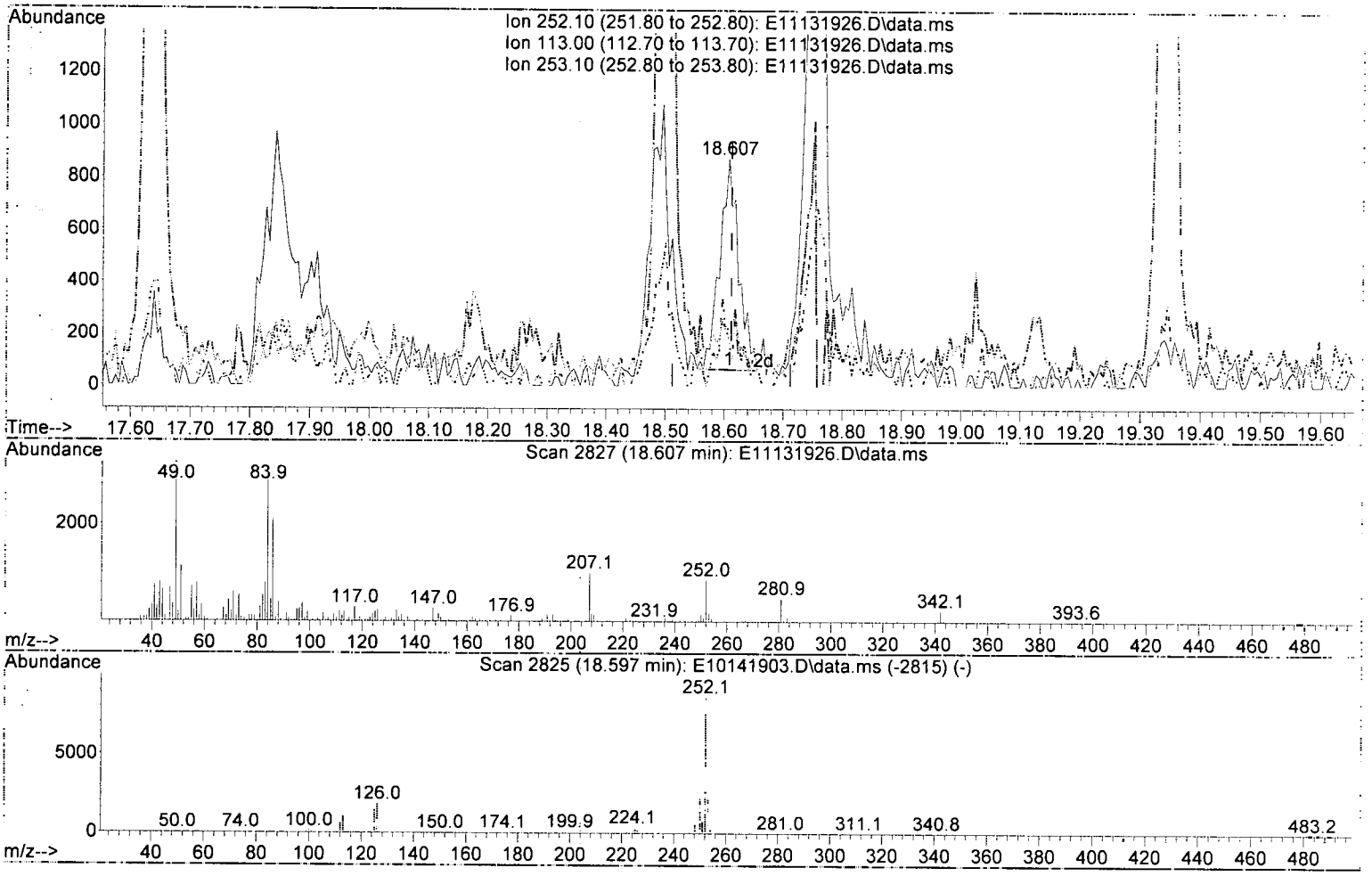
Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	27.73
226.10	25.90	22.78
0.00	0.00	0.00

J

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11131926.D\data.ms

(92) Benzo(a)pyrene (T)

18.607min (-0.005) 15.81 ng/ml

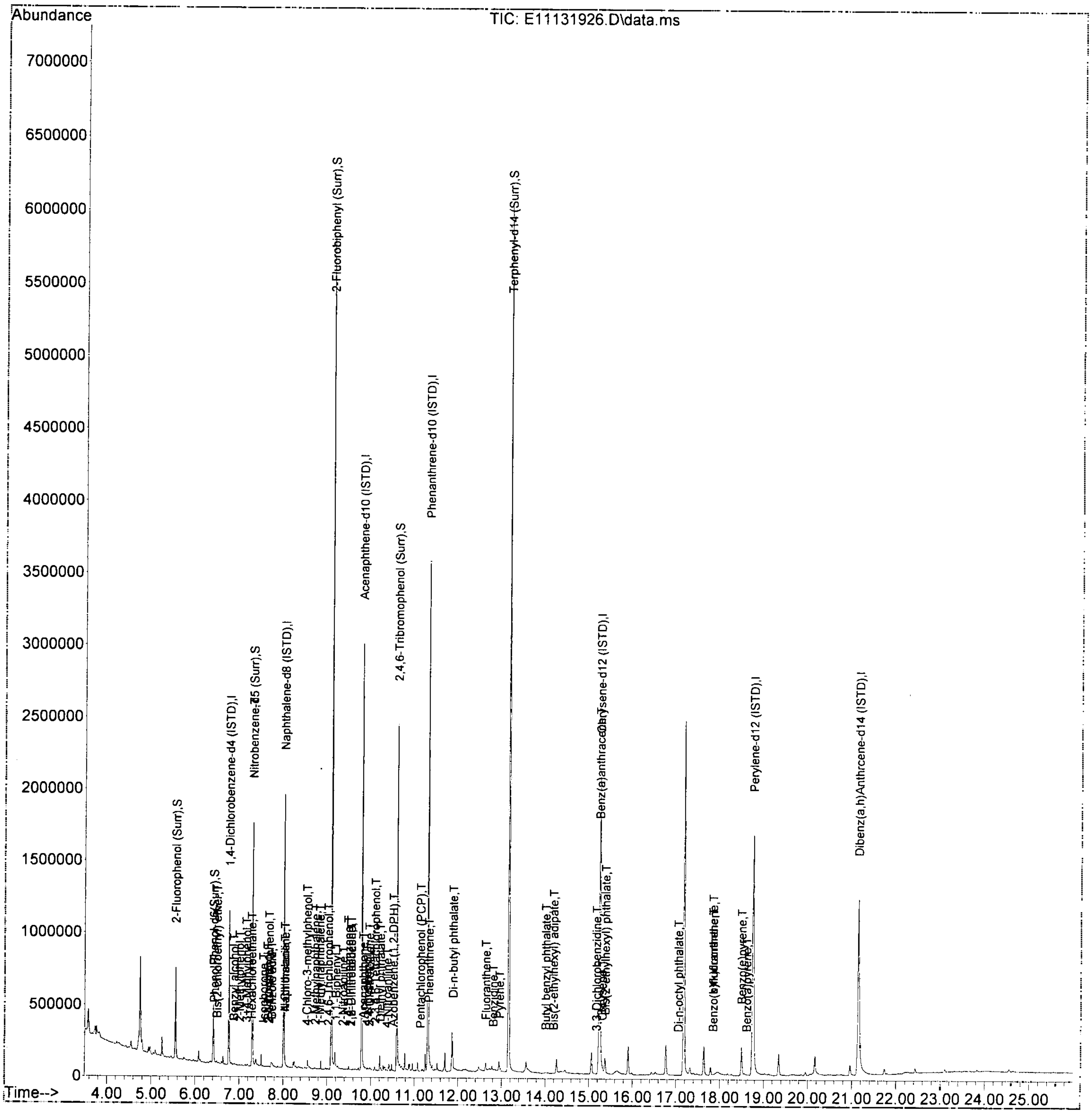
response 1822

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	25.60
253.10	21.70	21.49
0.00	0.00	0.00

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-11\9K13053\
Data File : E11131926.D
Acq On : 13 Nov 2019 11:25 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-02
Misc : 1x, 8270D LL P/P/P CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 07:46:51 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



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

Semivolatile Organic Compounds by EPA 8270D
Benchsheet & Analysis Sequence Data

Batch 9110781
Sequence 9K14015 (A9K0332-04,06,07,09RE1,10)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 2 0 2019

BATCH #: 9110781 (Soil)

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
	9110781-BLK1		QC	11/14/19 07:10	16	2				100					
	9110781-BLK2		QC	11/14/19 07:10	16	2				100		Added 11/15/2019 by DTH			
	9110781-BSD1		QC	11/14/19 07:10	15	2	A19J490		100	100					
	9110781-BS1		QC	11/14/19 07:10	15	2	A19J490		100	100					
	A9K0332-04	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.6	2				100	PDI-140RAB-00-10-191108	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-05	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.13	2				100	PDI-140RAB-10-12.7-191108	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-05RE1	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.13	2				100	PDI-140RAB-10-12.7-191108	Added 11/15/2019 By DTH			
	A9K0332-06	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.08	2				100	PDI-141RAB-00-10-191107	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-07	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.59	5				100	PDI-141RAB-10-17.7-191107	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-08	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.54	2				100	PDI-143RAB-00-10-191111	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-08RE1	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.54	2				100	PDI-143RAB-00-10-191111	Added 11/15/2019 By DTH			
	A9K0332-09	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.03	2				100	PDI-143RAB-10-20-191112	PAHs,Bis2EHP,245TCP,PCP			
	A9K0332-09RE1	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.03	2				100	PDI-143RAB-10-20-191112	Added 11/15/2019 by DTH			
	A9K0332-10	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.09	2				100	PDI-143RAB-20-31.1-191111	PAHs,Bis2EHP,245TCP,PCP			

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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J490	04/28/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J495	04/28/20	PAH Soil and Water Surr. (50ppm)

Prepared By: Date

AMS 11/18/19

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110781 (Soil)

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

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110781 (Soil)

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
11	9110781-BLK1		QC	11/14/19 07:10	~~15~~ 16.0	2				100					
12	9110781-BSD1		QC	11/14/19 07:10	15	2	A19J490		100	100					
13	9110781-BS1		QC	11/14/19 07:10	15	2	A19J490		100	100					
14	A9K0332-04	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	~~15~~ 15.60	2				100	PDI-140RAB-00-10-191108	PAHs,Bis2EHP,245TCP,PCP Soil			
15	A9K0332-05	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.13	2				100	PDI-140RAB-10-12.7-191108	PAHs,Bis2EHP,245TCP,PCP Soil			
16	A9K0332-06	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.08	2				100	PDI-141RAB-00-10-191107	PAHs,Bis2EHP,245TCP,PCP Soil			
17	A9K0332-07	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.59	5				100	PDI-141RAB-10-17.7-191107	PAHs,Bis2EHP,245TCP,PCP Soil color ★, S			
18	A9K0332-08	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.54	2				100	PDI-143RAB-00-10-191111	PAHs,Bis2EHP,245TCP,PCP Sand/Soil			
19	A9K0332-09	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.03	2				100	PDI-143RAB-10-20-191112	PAHs,Bis2EHP,245TCP,PCP Sand/SOil			
20	A9K0332-10	E	8270D LL PAH/PHTH/Phenols	11/14/19 07:10	15.09	2				100	PDI-143RAB-20-31.1-191111	PAHs,Bis2EHP,245TCP,PCP Sand/SOil			

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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J490	04/28/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J495	04/28/20	PAH Soil and Water Surr. (50ppm)

Method 3546 digestion time and temperture achieved.

Initial: JAG

Witness: JAG 11/14/19

S = Heavy Staining on turnover tube

★ = Blown-down separate from batch and QC to avoid contamination.

Prepared By: JAG — Date: 11/14/19 11/14/19

Reviewed By: CAH — Date: 11/14/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9K14015**	Instrument:	**SV-GCMS5**
Date:	**11/14/19 08:06**	Calibration:	**A9J0804**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K14015-TUN1	Soil	QC	QC			A19I086	A19K083
2	9K14015-IBL1	Soil	QC	QC			A19I086	
3	9K14015-CCV1	Soil	QC	QC			A19I086	A19G243
4	9K14015-CCB1	Soil	QC	QC			A19I086	
5	9110781-BLK1	Soil	QC	QC		9110781	A19I086	
6	9110781-BS1	Soil	QC	QC		9110781	A19I086	
7	9110781-BSD1	Soil	QC	QC		9110781	A19I086	
8	A9K0332-07	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
9	A9K0332-06	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
10	A9K0332-10	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
11	A9K0332-09	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
12	A9K0332-04	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
13	A9K0332-05	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
14	A9K0332-08	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
15	A9K0332-09RE1	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
16	9110811-BLK1	Soil	QC	QC		9110811	A19I086	
17	9110811-BS1	Soil	QC	QC		9110811	A19I086	
18	9110811-BLK2	Soil	QC	QC		9110811	A19I086	
19	A9K0387-01	Soil	8270D LL Full List		11/15/19	9110811	A19I086	
20	A9K0387-01RE1	Soil	8270D LL Full List		11/15/19	9110811	A19I086	
21	9110811-DUP1	Soil	QC	QC		9110811	A19I086	
22	9110811-MS1	Soil	QC	QC		9110811	A19I086	
23	9K14015-IBL2	Soil	QC	QC			A19I086	

Data Entered By: DTH 11/15/19

Data Reviewed By: [illegible] 11/15/19

Comments:

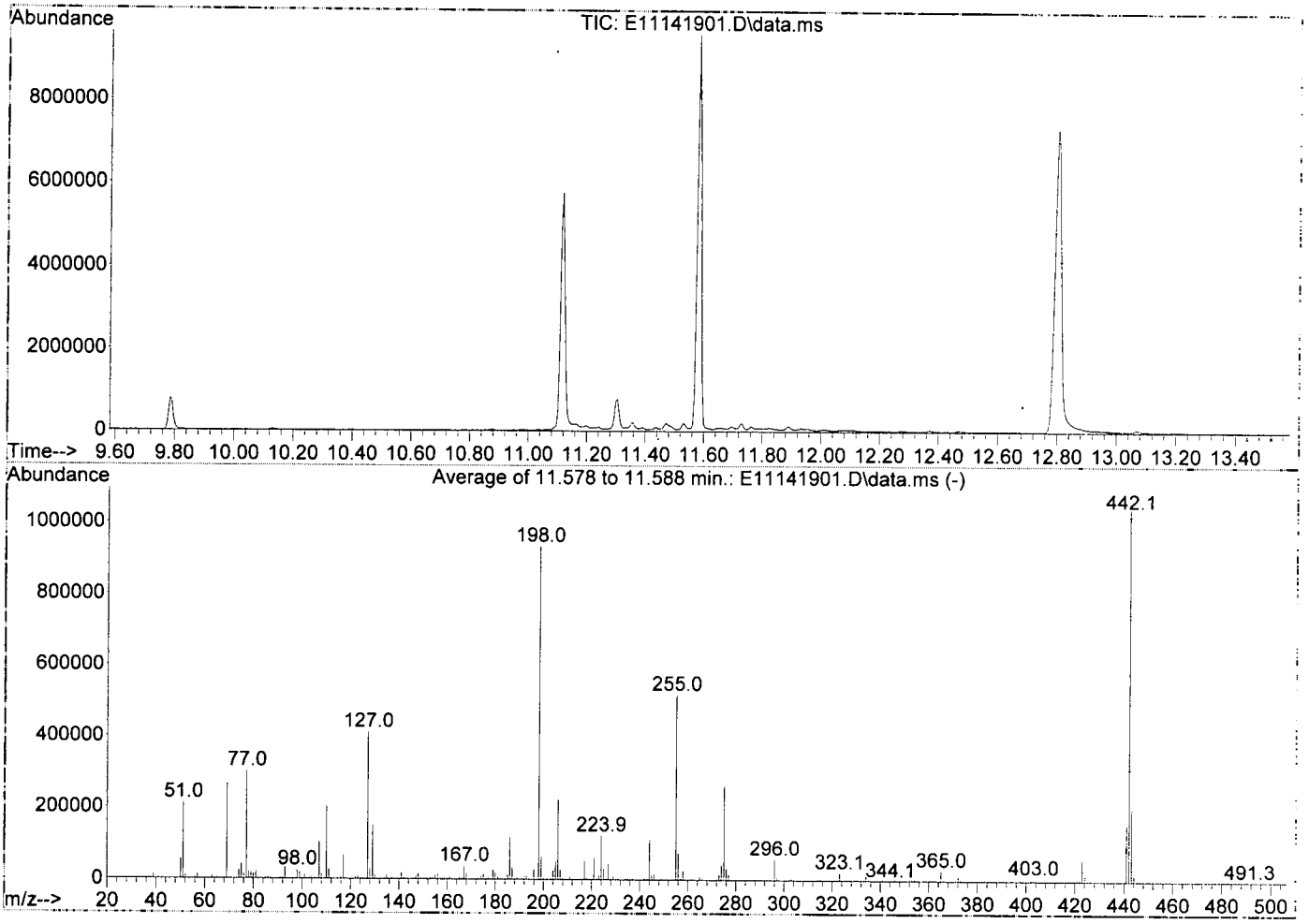
DFTPP-8270.m

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141901.D
Acq On : 14 Nov 2019 8:13 am
Operator : JK/ AMS /DTH
Sample : 9K14015-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Oct 10 09:06:57 2019

DH 11/14/19



AutoFind: Scans 1494, 1495, 1496; Background Corrected with Scan 1489

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.2	3153	PASS
69	198	0.01	100	28.6	266915	PASS
70	69	0.00	2	0.5	1273	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	933835	PASS
199	198	5	9	6.8	63180	PASS
365	198	1	100	3.1	28696	PASS
441	443	0.01	150	79.5	158971	PASS
442	198	0.10	200	111.9	1044523	PASS
443	442	15	24	19.1	199872	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141901.D
Acq On : 14 Nov 2019 8:13 am
Operator : JK/ AMS /DTH
Sample : 9K14015-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 14 08:33:07 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DMT 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.753	150	157546	2.00	ug/mL	0.00
2) Naphthalene-d8	8.010	136	366461	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.786	162	199796	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.305	188	332778	2.00	ug/mL	0.00
11) Chrysene-d12	15.092	240	275558	2.00	ug/mL	0.00
12) Perylene-d12	17.146	264	50	2.00	ug/mL	#-0.03
13) Dibenz(a,h)anthracene-...	18.456	292	35	2.00	ug/mL	#-0.04
Target Compounds						Qvalue
4) Pentachlorophenol	11.118	266	861446	45.66	ug/mL	87
6) DFTPP	11.583	442	1189264	44.27	ug/mL	92
7) Benzidine	12.803	184	5110958	43.17	ug/mL	97
8) 4,4-DDE	13.070	TIC	73239	No Calib		
9) 4,4-DDD	13.610	TIC	208489	No Calib		
10) 4,4-DDT	14.204	TIC	12813660	37.55	ug/mL	94

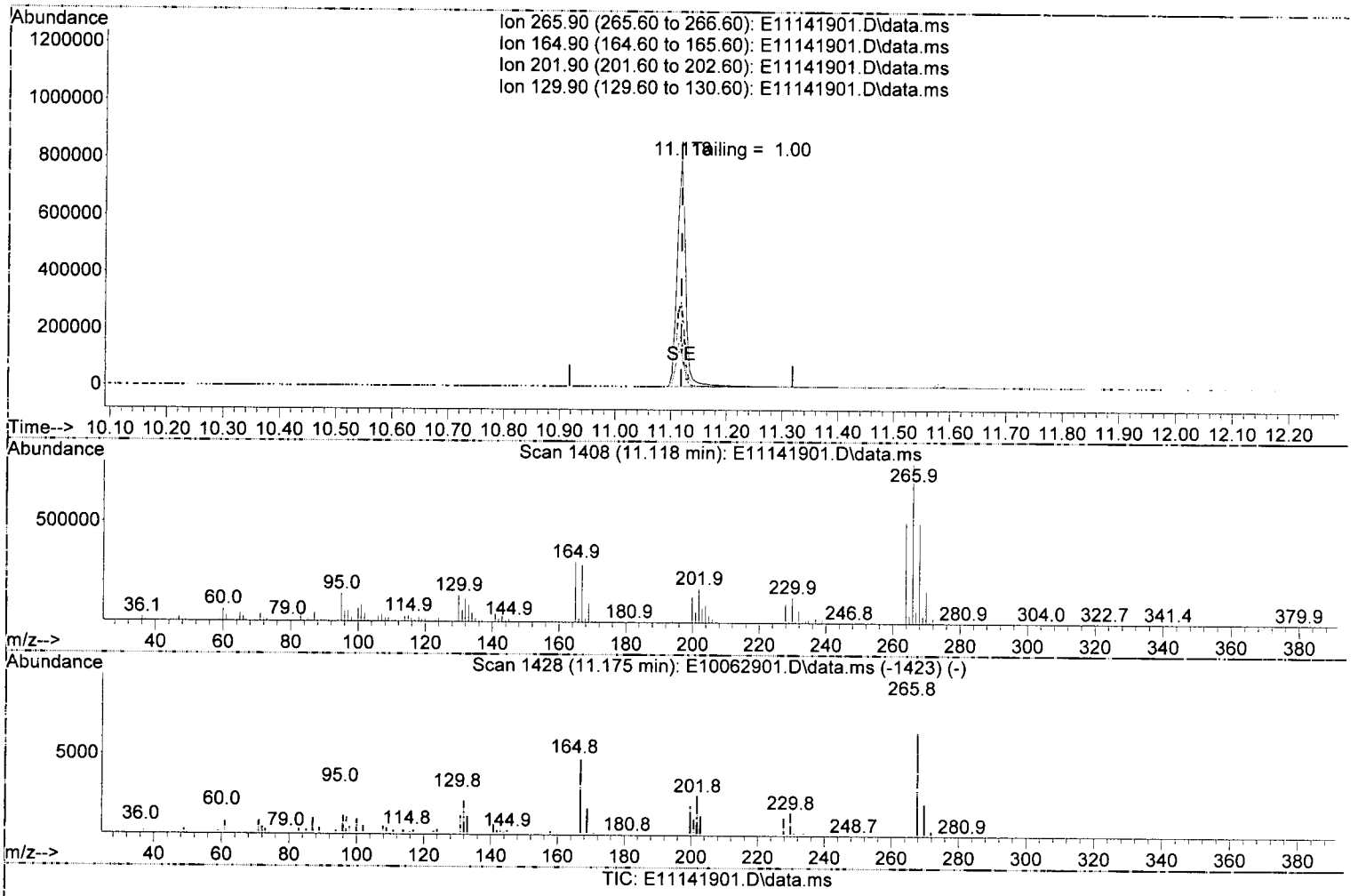
(#) = qualifier out of range (m) = manual integration (+) = signals summed

J

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141901.D
Acq On : 14 Nov 2019 8:13 am
Operator : JK/ AMS /DTH
Sample : 9K14015-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 14 08:33:07 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141901.D\data.ms

(4) Pentachlorophenol

11.118min (+ 0.000) 45.66 ug/mL

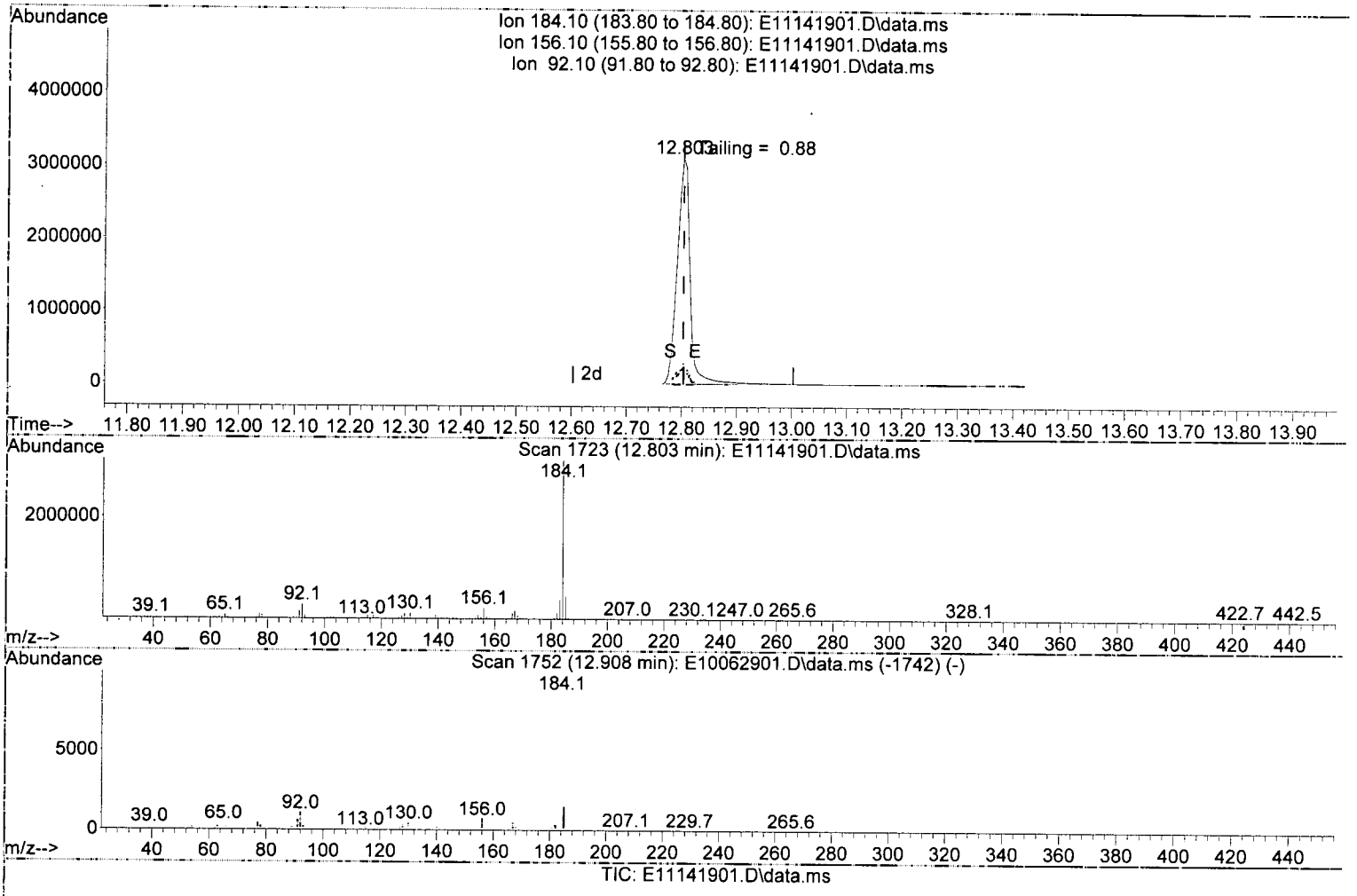
response 861446

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	37.86
201.90	23.20	21.42
129.90	27.10	16.71

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141901.D
Acq On : 14 Nov 2019 8:13 am
Operator : JK/ AMS /DTH
Sample : 9K14015-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 14 08:33:07 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141901.D\data.ms

(7) Benzidine

12.803min (+ 0.000) 43.17 ug/mL

response 5110958

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	6.79
92.10	8.20	8.96
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
9K14015-TUN1
SV-GCMS5

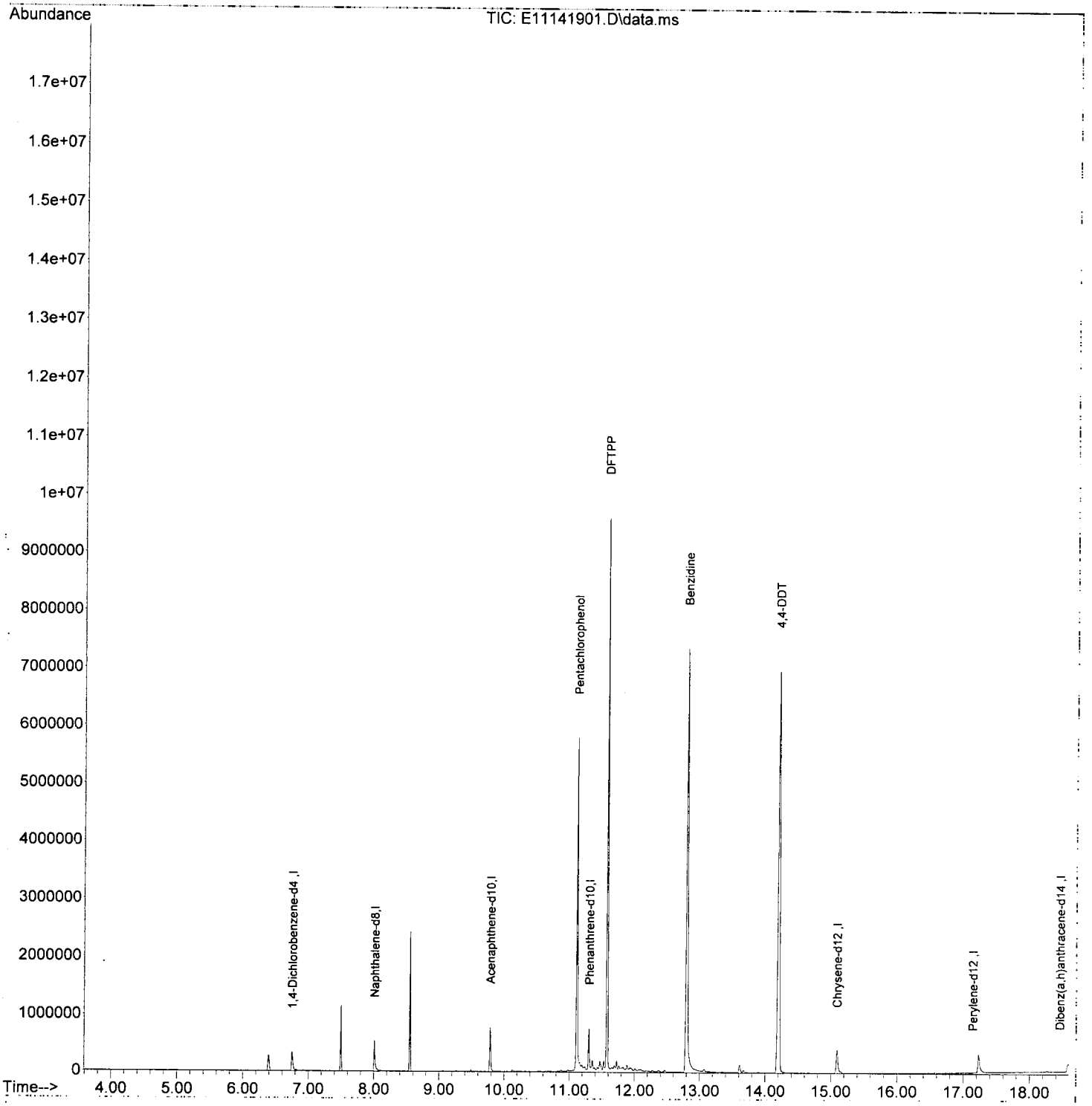
First Column Area Counts		Percent Breakdown	
DDE	73239		
DDD	208489		
DDT	1281366	21.5	PASS

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141901.D
Acq On : 14 Nov 2019 8:13 am
Operator : JK/ AMS /DTH
Sample : 9K14015-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 14 08:33:07 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Oct 10 09:06:57 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:22:27 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

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	89	0.00
2	T	N-Nitrosodimethylamine	1000.000	978.261	2.2	85	0.00
3	T	Pyridine	1000.000	961.492	3.9	84	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1048.335	-4.8	89	0.00
5	S	Phenol-d6(Surr)	1000.000	1016.175	-1.6	85	0.00
6	T	Phenol	1000.000	1091.843	-9.2	91	0.00
7	T	Aniline	1000.000	981.290	1.9	87	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1014.970	-1.5	88	0.00
9	T	2-Chlorophenol	1000.000	1074.080	-7.4	90	0.00
10	T	1,3-Dichlorobenzene	1000.000	994.494	0.6	89	0.00
11	T	1,4-Dichlorobenzene	1000.000	994.094	0.6	88	0.00
12	T	Benzyl alcohol	1000.000	1113.718	-11.4	93	0.00
13	T	1,2-Dichlorobenzene	1000.000	1022.674	-2.3	91	0.00
14	T	2-Methylphenol	1000.000	1064.638	-6.5	88	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	969.810	3.0	85	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1017.845	-1.8	83	0.00
17	T	3+4-Methylphenol	1000.000	1073.372	-7.3	85	0.00
18	T	Hexachloroethane	1000.000	1025.798	-2.6	90	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1050.458	-5.0	87	0.00
20	T	Nitrobenzene	1000.000	1022.386	-2.2	85	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	92	0.00
22	T	Isophorone	1000.000	985.016	1.5	85	0.00
23	T	2-Nitrophenol	1000.000	1144.977	-14.5	100	0.00
24	T	2,4-Dimethylphenol	1000.000	1011.635	-1.2	88	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	994.687	0.5	89	0.00
26	T	Benzoic acid	2000.000	1554.591	22.3#	62	0.00
27	T	2,4-Dichlorophenol	1000.000	1154.860	-15.5	100	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1025.560	-2.6	93	0.00
29	T	Naphthalene	1000.000	1006.266	-0.6	92	0.00
30	T	4-Chloroaniline	1000.000	876.372	12.4	83	0.00
31	T	Hexachlorobutadiene	1000.000	1038.139	-3.8	95	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1093.382	-9.3	102	0.00
33	T	2-Methylnaphthalene	1000.000	1018.430	-1.8	90	0.00
34	T	1-Methylnaphthalene	1000.000	1025.483	-2.5	91	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	92	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1019.720	-2.0	90	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1066.770	-6.7	92	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1092.176	-9.2	97	0.00
39	T	1,1'-Biphenyl	1000.000	1023.485	-2.3	91	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1023.945	-2.4	92	0.00
41	T	2-Chloronaphthalene	1000.000	1009.698	-1.0	91	0.00
42	T	2-Nitroaniline	1000.000	1141.344	-14.1	101	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1060.066	-6.0	93	0.00
44	T	1,4-Dinitrobenzene	1000.000	1194.888	-19.5	114	0.00
45	T	Dimethyl phthalate	1000.000	1049.927	-5.0	93	0.00
46	T	1,3-Dinitrobenzene	1000.000	1107.604	-10.8	103	0.00
47	T	2,6-Dinitrotoluene	1000.000	1114.944	-11.5	101	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:22:27 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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)
48	T	1,2-Dinitrobenzene	1000.000	1147.638	-14.8	104	0.00
49	T	Acenaphthylene	1000.000	1061.040	-6.1	92	0.00
50	T	3-Nitroaniline	1000.000	1010.214	-1.0	97	0.00
51	T	Acenaphthene	1000.000	1028.934	-2.9	93	0.00
52	T	2,4-Dinitrophenol	1000.000	1077.775	-7.8	112	0.00
53	T	4-Nitrophenol	1000.000	863.081	13.7	79	0.00
54	T	2,4-Dinitrotoluene	1000.000	1122.829	-12.3	106	0.00
55	T	Dibenzofuran	1000.000	1044.655	-4.5	95	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1075.280	-7.5	96	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1087.706	-8.8	96	0.00
58	T	Diethyl phthalate	1000.000	1060.683	-6.1	91	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1063.165	-6.3	93	0.00
60	T	Fluorene	1000.000	1071.067	-7.1	94	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1063.615	-6.4	96	0.00
62	T	4-Nitroaniline	1000.000	990.480	1.0	97	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1265.199	-26.5#	132	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	95	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1085.920	-8.6	97	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1019.276	-1.9	90	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1121.519	-12.2	104	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1054.671	-5.5	99	0.00
69	T	Hexachlorobenzene	1000.000	1021.343	-2.1	96	0.00
70	T	Pentachlorophenol (PCP)	1000.000	823.993	17.6	74	0.00
71	T	Phenanthrene	1000.000	995.200	0.5	93	0.00
72	T	Anthracene	1000.000	1064.904	-6.5	96	0.00
73	T	Carbazole	1000.000	1068.593	-6.9	96	0.00
74	T	Di-n-butyl phthalate	1000.000	1049.444	-4.9	92	0.00
75	T	Fluoranthene	1000.000	1057.112	-5.7	94	0.00
76	T	Benzidine	2000.000	1751.639	12.4	83	0.00
77	T	Pyrene	1000.000	1061.551	-6.2	95	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	97	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1070.672	-7.1	101	0.00
80	T	Butyl benzyl phthalate	1000.000	1056.079	-5.6	99	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1047.579	-4.8	105	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2501.210	-25.1#	132	0.00
83	T	Benz(a)anthracene	1000.000	1007.264	-0.7	95	0.00
84	T	Chrysene	1000.000	997.433	0.3	95	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	985.560	1.4	97	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	92	0.00
87	T	Di-n-octyl phthalate	1000.000	1101.611	-10.2	104	0.00
88	T	Benzo(b)fluoranthene	1000.000	1015.806	-1.6	89	0.00
89	T	Benzo(k)fluoranthene	1000.000	1022.552	-2.3	90	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2071.924	-3.6	92	0.00
91	T	Benzo(e)pyrene	1000.000	1014.557	-1.5	90	0.00
92	T	Benzo(a)pyrene	1000.000	1036.123	-3.6	88	0.00
93	T	Perylene	1000.000	1025.369	-2.5	91	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:22:27 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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)
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	91	0.00
95	T	Indeno(1,2,3-cd)pyrene	1000.000	877.251	12.3	81	0.00
96	T	Dibenz(a,h)anthracene	1000.000	1032.288	-3.2	93	0.00
97	T	Benzo(g,h,i)perylene	1000.000	911.629	8.8	78	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:21:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DAT 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	448986	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1811790	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	930990	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1751114	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1604620	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1415816	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1049038	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	275190	1048.34	ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	330947	1016.18	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	272655	1050.46	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	714105	1023.95	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.590	330	89068	1121.52	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	775422	1070.67	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.289	74	172136	978.26	ng/ml	96
3) Pyridine	4.316	79	277437	961.49	ng/ml	97
6) Phenol	6.423	94	369370	1091.84	ng/ml	99
7) Aniline	6.450	93	422634	981.29	ng/ml	98
8) Bis(2-chloroethyl) ether	6.498	93	305039	1014.97	ng/ml	97
9) 2-Chlorophenol	6.568	128	312719	1074.08	ng/ml	98
10) 1,3-Dichlorobenzene	6.712	146	348769	994.49	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	352605	994.09	ng/ml	99
12) Benzyl alcohol	6.889	108	172221	1113.72	ng/ml	97
13) 1,2-Dichlorobenzene	6.931	146	345234	1022.67	ng/ml	98
14) 2-Methylphenol	6.996	107	235441	1064.64	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	331739	969.81	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.140	70	196029	1017.84	ng/ml	95
17) 3+4-Methylphenol	7.145	107	292754	1073.37	ng/ml	98
18) Hexachloroethane	7.258	117	123852	1025.80	ng/ml	96
20) Nitrobenzene	7.311	77	271933	1022.39	ng/ml	99
22) Isophorone	7.541	82	528711	985.02	ng/ml	100
23) 2-Nitrophenol	7.632	139	162444	1144.98	ng/ml	97
24) 2,4-Dimethylphenol	7.664	122	246483	1011.64	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.750	93	357966	994.69	ng/ml	99
26) Benzoic acid	7.744	105	84418	1554.59	ng/ml	97
27) 2,4-Dichlorophenol	7.873	162	233174	1154.86	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.953	180	296853	1025.56	ng/ml	99
29) Naphthalene	8.033	128	969326	1006.27	ng/ml	100
30) 4-Chloroaniline	8.081	127	313826	876.37	ng/ml	97
31) Hexachlorobutadiene	8.156	225	153454	1038.14	ng/ml	99
32) 4-Chloro-3-methylphenol	8.568	107	228383	1093.38	ng/ml	97
33) 2-Methylnaphthalene	8.729	142	661124	1018.43	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	631791	1025.48	ng/ml	99
36) Hexachlorocyclopentadiene	8.894	237	140388	1019.72	ng/ml	98
37) 2,4,6-Trichlorophenol	9.012	196	162516	1066.77	ng/ml	98
38) 2,4,5-Trichlorophenol	9.055	196	170034	1092.18	ng/ml	99
39) 1,1'-Biphenyl	9.194	154	807118	1023.48	ng/ml	100
41) 2-Chloronaphthalene	9.221	162	600661	1009.70	ng/ml	99
42) 2-Nitroaniline	9.322	138	187707	1141.34	ng/ml	91

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:21:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

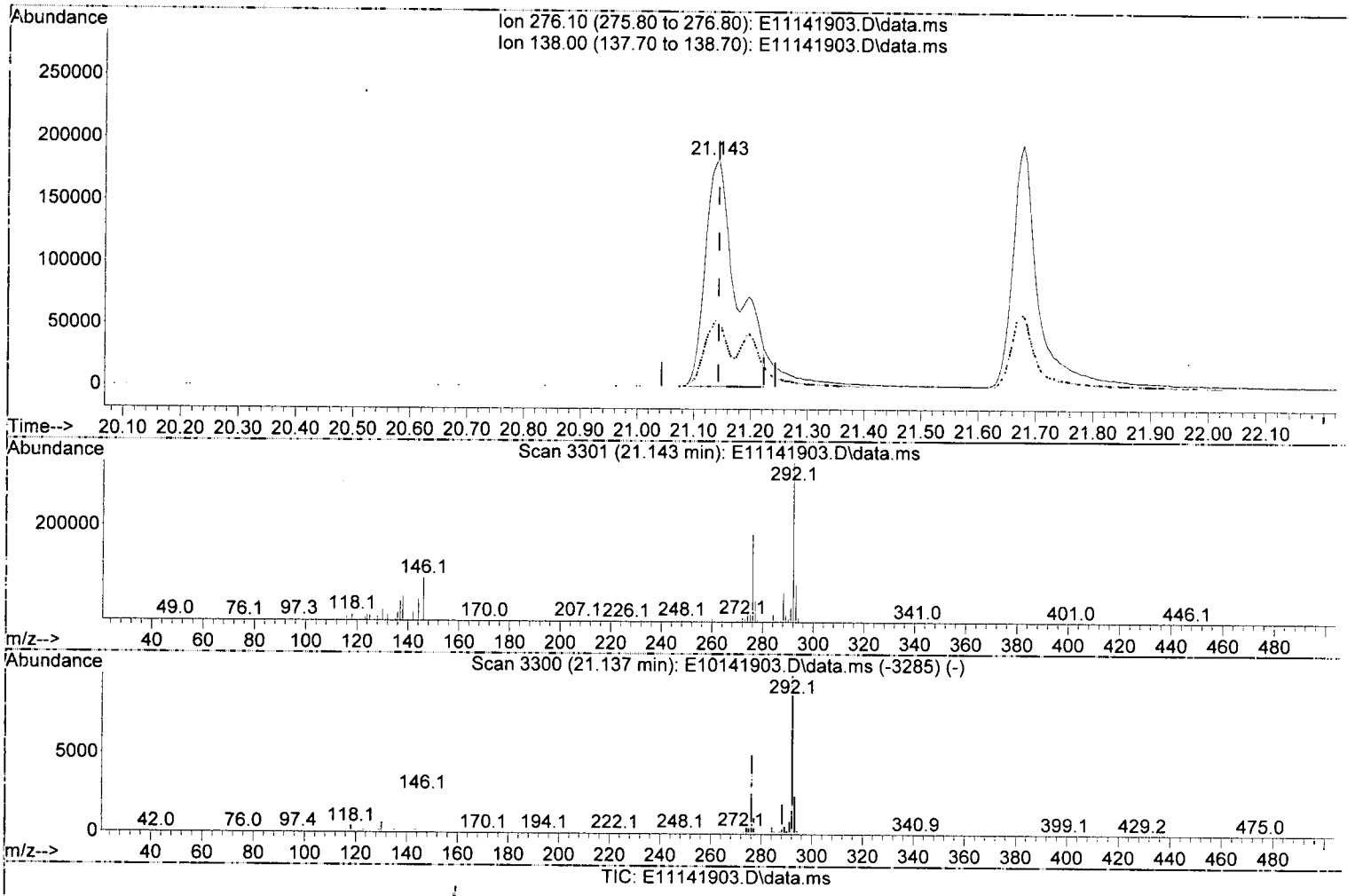
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
43)	2,6-Dimethylnaphthalene	9.360	156	604516	1060.07	ng/ml	98	
44)	1,4-Dinitrobenzene	9.445	168	85991	1194.89	ng/ml	99	
45)	Dimethyl phthalate	9.493	163	669091	1049.93	ng/ml	99	
46)	1,3-Dinitrobenzene	9.531	168	101029	1107.60	ng/ml	94	
47)	2,6-Dinitrotoluene	9.558	165	156621	1114.94	ng/ml	94	
48)	1,2-Dinitrobenzene	9.616	168	71557	1147.64	ng/ml	90	
49)	Acenaphthylene	9.643	152	954879	1061.04	ng/ml	100	
50)	3-Nitroaniline	9.734	138	149730	1010.21	ng/ml	98	
51)	Acenaphthene	9.820	153	636855	1028.93	ng/ml	99	
52)	2,4-Dinitrophenol	9.841	184	27812	1077.78	ng/ml	96	
53)	4-Nitrophenol	9.921	139	79667	863.08	ng/ml	92	
54)	2,4-Dinitrotoluene	9.970	165	194425	1122.83	ng/ml	96	
55)	Dibenzofuran	9.996	168	863330	1044.66	ng/ml	97	
56)	2,3,5,6-Tetrachlorophenol	10.082	232	129764	1075.28	ng/ml	98	
57)	2,3,4,6-Tetrachlorophenol	10.125	232	147200	1087.71	ng/ml	98	
58)	Diethyl phthalate	10.210	149	649874	1060.68	ng/ml	99	
59)	2,3,5-Trimethylnaphtha...	10.205	170	558190	1063.16	ng/ml	99	
60)	Fluorene	10.344	166	703183	1071.07	ng/ml	100	
61)	4-Chlorophenyl phenyl ...	10.333	204	332449	1063.61	ng/ml	99	
62)	4-Nitroaniline	10.360	138	148892	990.48	ng/ml	96	
63)	4,6-Dinitro-2-methylph...	10.387	198	69826	1265.20	ng/ml	94	
65)	N-Nitrosodiphenylamine	10.456	169	594628	1085.92	ng/ml	99	
66)	Azobenzene (1,2-DPH)	10.499	77	580610	1019.28	ng/ml	97	
68)	4-Bromophenyl phenyl e...	10.836	248	190538	1054.67	ng/ml	96	
69)	Hexachlorobenzene	10.916	284	207578	1021.34	ng/ml	99	
70)	Pentachlorophenol (PCP)	11.114	266	64288	823.99	ng/ml	99	
71)	Phenanthrene	11.328	178	991385	995.20	ng/ml	100	
72)	Anthracene	11.376	178	1013686	1064.90	ng/ml	99	
73)	Carbazole	11.542	167	838831	1068.59	ng/ml	100	
74)	Di-n-butyl phthalate	11.874	149	1034654	1049.44	ng/ml	99	
75)	Fluoranthene	12.628	202	1011634	1057.11	ng/ml	100	
76)	Benzidine	12.794	184	718099	1751.64	ng/ml	99	
77)	Pyrene	12.938	202	1045334	1061.55	ng/ml	99	
80)	Butyl benzyl phthalate	13.997	149	397928	1056.08	ng/ml	96	
81)	Bis(2-ethylhexyl) adipate	14.174	129	358791	1047.58	ng/ml	99	
82)	3,3-Dichlorobenzidine	15.174	252	517065	2501.21	ng/ml	99	
83)	Benz(a)anthracene	15.211	228	869440	1007.26	ng/ml	100	
84)	Chrysene	15.291	228	859919	997.43	ng/ml	98	
85)	Bis(2-ethylhexyl) phth...	15.361	149	568955	985.56	ng/ml	99	
87)	Di-n-octyl phthalate	17.035	149	812429	1101.61	ng/ml	98	
88)	Benzo(b)fluoranthene	17.821	252	774098	1015.81	ng/ml	100	
89)	Benzo(k)fluoranthene	17.885	252	789343	1022.55	ng/ml	100	
90)	Benzo(b+k)fluoranthene	17.885	252	1642703	2071.92	ng/ml	100	
91)	Benzo(e)pyrene	18.474	252	776307	1014.56	ng/ml	100	
92)	Benzo(a)pyrene	18.597	252	705478	1036.12	ng/ml	100	
93)	Perylene	18.800	252	692130	1025.37	ng/ml	99	
95)	Indeno(1,2,3-cd)pyrene	~~21.143~~	~~276~~	~~709769~~	~~1111.91~~	~~ng/ml~~	~~100~~ MI	
96)	Dibenz(a,h)anthracene	21.196	278	606914	1032.29	ng/ml	98	
97)	Benzo(g,h,i)perylene	21.678	276	558956	911.63	ng/ml	97	

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:21:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141903.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.143min (0.000) 1111.91 ng/ml

response 709769

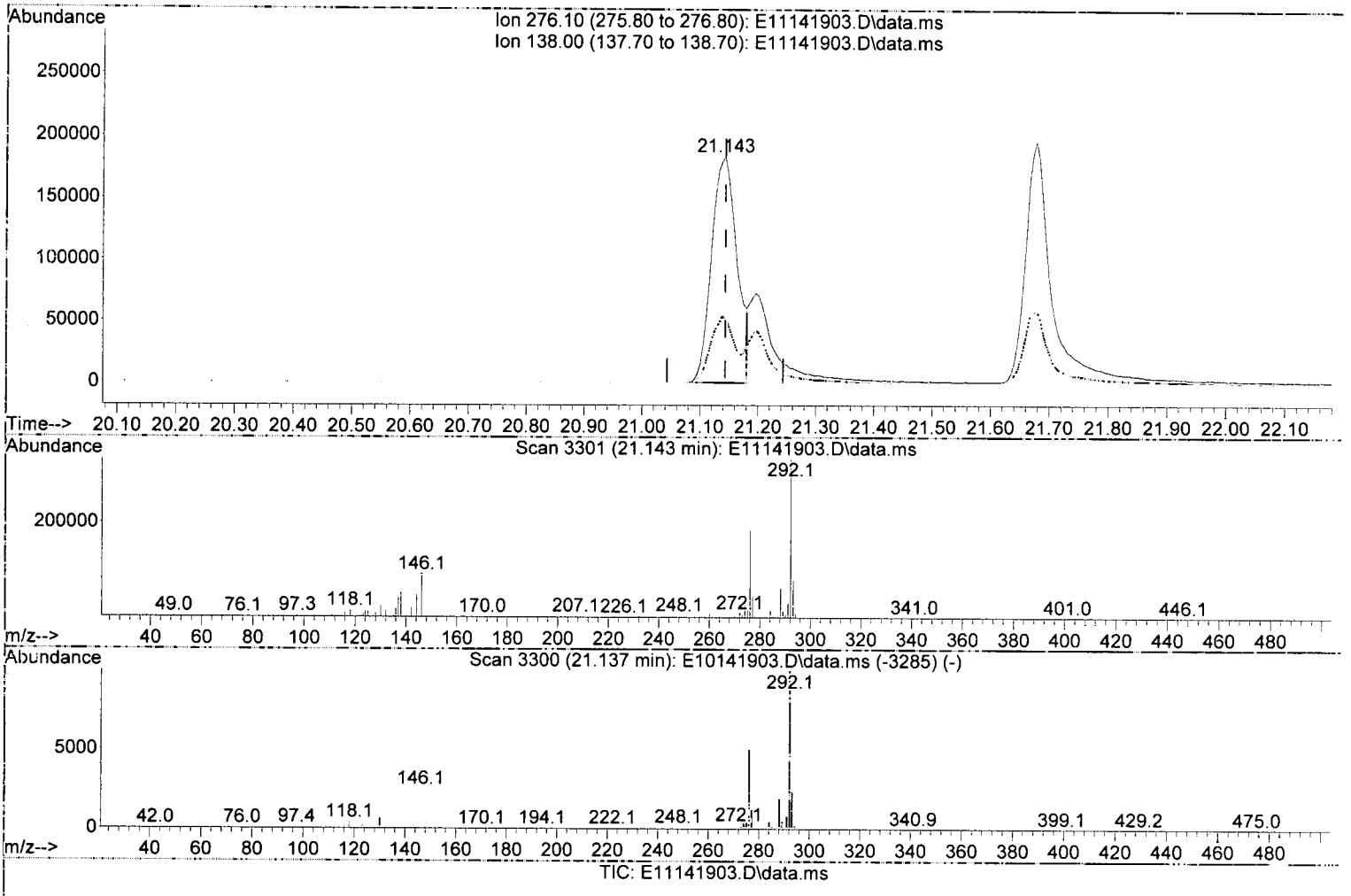
MI

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	28.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:21:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141903.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.143min (0.000) 877.25 ng/ml m

response 559978

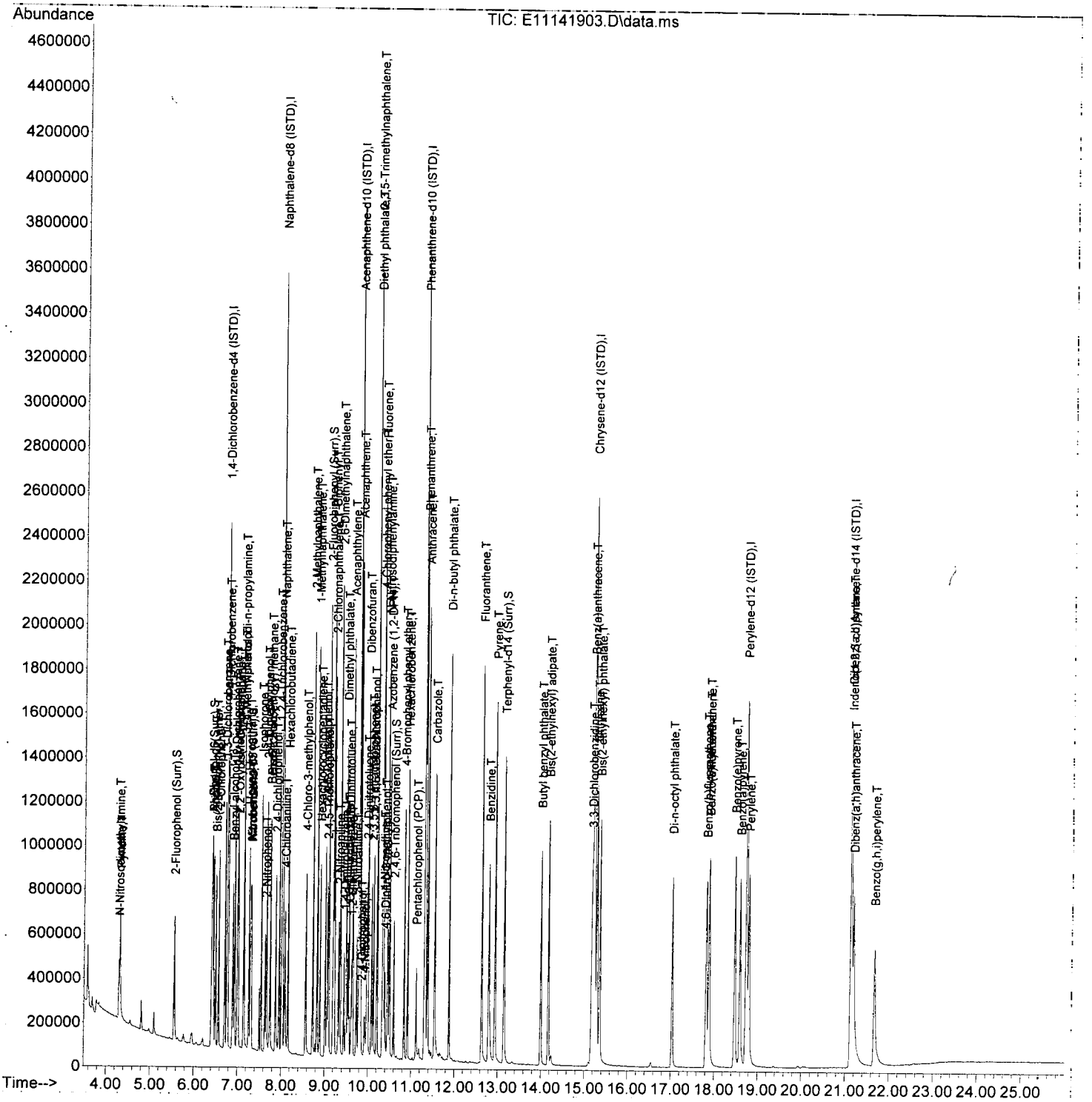
DTH 11/14/19

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	28.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141903.D
Acq On : 14 Nov 2019 9:16 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:21:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141904.D
Acq On : 14 Nov 2019 9:52 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	408321	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1635298	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	769204	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1487898	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1224816	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	1015696	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	685579	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)	7.274	82	74	0.31	ng/ml	-0.02
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	4.295	79	54	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	6.514	93	92	N.D.		
8) Bis(2-chloroethyl) ether	6.514	93	92	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	6.760	146	59	N.D.		
11) 1,4-Dichlorobenzene	6.760	146	59	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...	7.006	45	53	N.D.		
16) N-Nitrosodi-n-propylamine	7.156	70	63	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	7.247	117	56	N.D.		
20) Nitrobenzene	7.306	77	100	N.D.		
22) Isophorone	7.541	82	132	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	8.033	128	98	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	8.814	142	76	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.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141904.D
Acq On : 14 Nov 2019 9:52 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

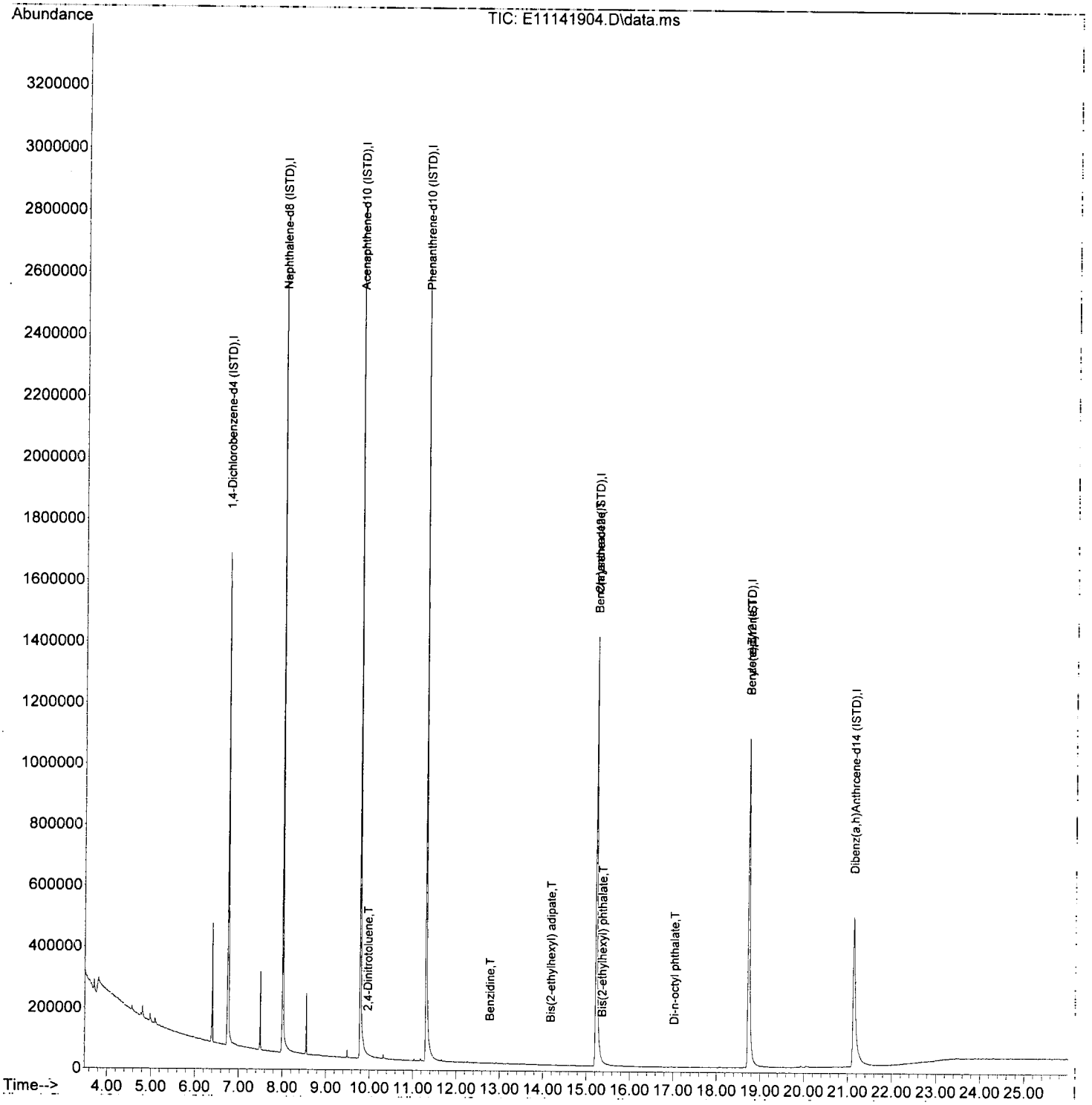
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.649	152	59	N.D.	
50) 3-Nitroaniline	9.782	138	138	N.D.	
51) Acenaphthene	9.798	153	190	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.953	165	232	62.26 ng/ml#	38
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...	10.339	170	140	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)	10.456	77	94	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	11.301	178	514	N.D.	
72) Anthracene	11.301	178	514	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	12.772	184	82	152.55 ng/ml	68
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.174	129	522	55.13 ng/ml	82
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	2720	4.13 ng/ml	71
84) Chrysene	15.324	228	57	N.D.	
85) Bis(2-ethylhexyl) phth...	15.361	149	1472	61.68 ng/ml	88
87) Di-n-octyl phthalate	17.024	149	61	74.24 ng/ml#	2
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	18.736	252	3073	14.00 ng/ml#	39
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.736	252	3073	6.35 ng/ml	76
95) Indeno(1,2,3-cd)pyrene	21.132	276	129	N.D.	
96) Dibenz(a,h)anthracene	21.143	278	178	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 : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141904.D
Acq On : 14 Nov 2019 9:52 am
Operator : JK/ AMS /DTH
Sample : 9K14015-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141905.D
Acq On : 14 Nov 2019 10:27 am
Operator : JK/ AMS /DTH
Sample : 9110781-BLK1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:05 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

4.01
Bad injection
Reanalyze
Q-06

DTA 11/14/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	183720	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1002056	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	715327	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1617575	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	1543028	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1376746	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1019391	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.552	112	247708	2306.13 ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	336046	2521.65 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	306244	2883.43 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1171269	2185.81 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.590	330	157343	2058.73 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	1909146	2741.30 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.295	74	216	3.00 ng/ml#	1
3) Pyridine	4.391	79	84	N.D.	
6) Phenol	6.423	94	361	2.61 ng/ml#	1
7) Aniline	6.434	93	252	N.D.	
8) Bis(2-chloroethyl) ether	6.488	93	487	3.96 ng/ml#	38
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	6.782	146	75	N.D.	
11) 1,4-Dichlorobenzene	6.782	146	75	N.D.	
12) Benzyl alcohol	6.921	108	176	37.56 ng/ml#	61
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.006	107	101	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	156	N.D.	
16) N-Nitrosodi-n-propylamine	7.151	70	533	6.76 ng/ml	54
17) 3+4-Methylphenol	7.108	107	62	N.D.	
18) Hexachloroethane	7.295	117	196	3.97 ng/ml#	12
20) Nitrobenzene	7.295	77	1058	9.72 ng/ml#	29
22) Isophorone	7.547	82	415	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	7.777	105	90	820.92 ng/ml#	10
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	2566	4.82 ng/ml	94
30) 4-Chloroaniline	8.033	127	353	12.45 ng/ml#	52
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.600	107	102	65.71 ng/ml#	1
33) 2-Methylnaphthalene	8.739	142	578	N.D.	
34) 1-Methylnaphthalene	8.841	142	535	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	9.199	154	1942	3.21 ng/ml	80
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.253	138	92	30.60 ng/ml#	17

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141905.D
Acq On : 14 Nov 2019 10:27 am
Operator : JK/ AMS /DTH
Sample : 9110781-BLK1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:05 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

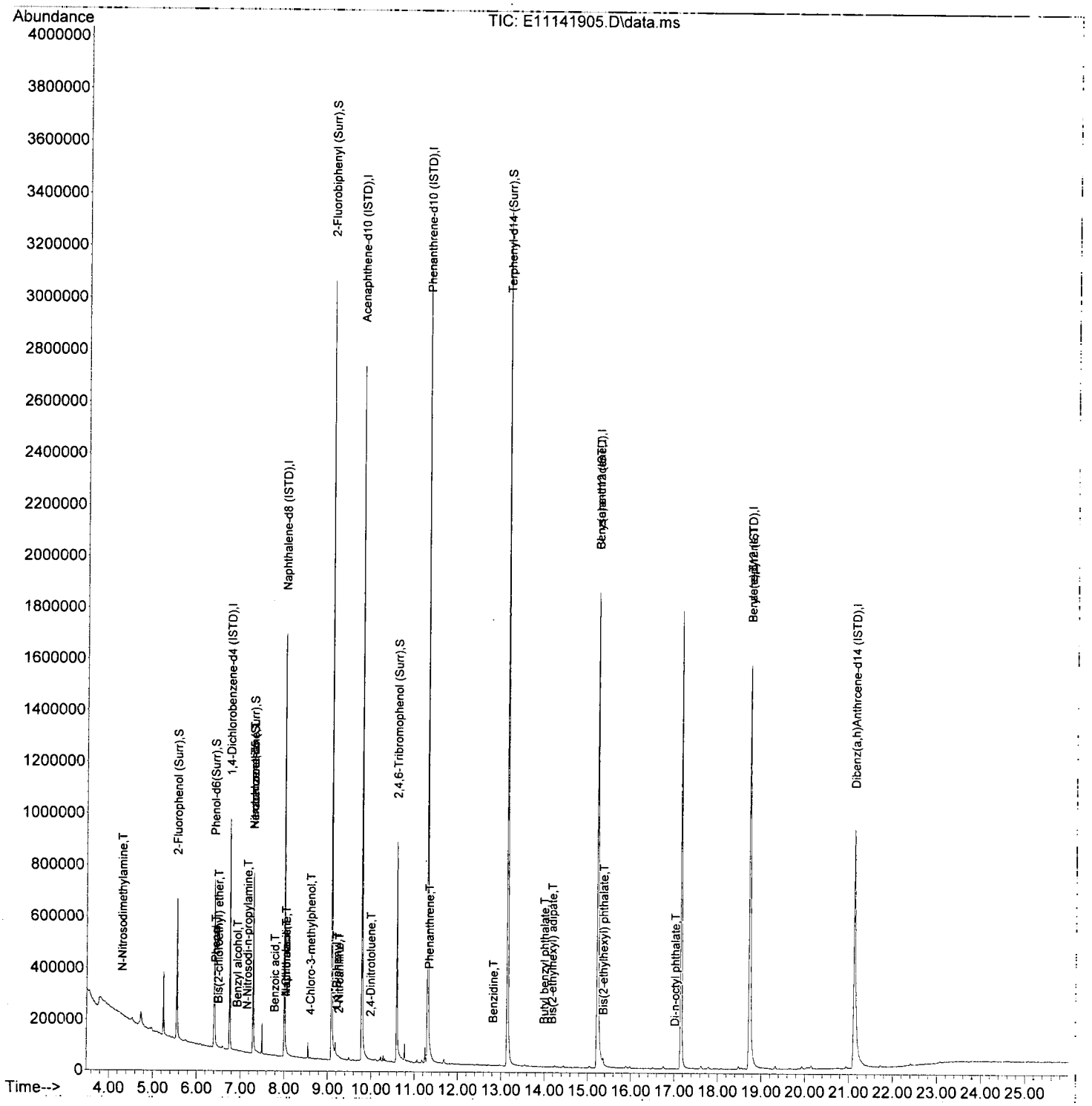
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	399	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.499	163	93	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	587	N.D.	
50) 3-Nitroaniline	9.782	138	86	N.D.	
51) Acenaphthene	9.820	153	295	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.980	165	114	61.52 ng/ml#	28
55) Dibenzofuran	10.007	168	124	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	10.205	149	926	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	288	N.D.	
60) Fluorene	10.355	166	252	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.307	138	59	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.462	169	173	N.D.	
66) Azobenzene (1,2-DPH)	10.510	77	141	N.D.	
68) 4-Bromophenyl phenyl e...	10.772	248	74	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.328	178	2346	2.55 ng/ml	91
72) Anthracene	11.376	178	395	N.D.	
73) Carbazole	11.547	167	50	N.D.	
74) Di-n-butyl phthalate	11.874	149	1559	N.D.	
75) Fluoranthene	12.639	202	472	N.D.	
76) Benzidine	12.815	184	113	152.61 ng/ml	48
77) Pyrene	12.938	202	683	N.D.	
80) Butyl benzyl phthalate	13.992	149	403	33.68 ng/ml	86
81) Bis(2-ethylhexyl) adipate	14.174	129	812	55.58 ng/ml	86
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	3808	4.59 ng/ml	75
84) Chrysene	15.281	228	372	N.D.	
85) Bis(2-ethylhexyl) phth...	15.356	149	11852	78.79 ng/ml	98
87) Di-n-octyl phthalate	17.014	149	104	74.27 ng/ml#	1
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	18.741	252	4408	14.33 ng/ml#	26
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.741	252	4408	6.72 ng/ml	74
95) Indeno(1,2,3-cd)pyrene	21.132	276	362	N.D.	
96) Dibenz(a,h)anthracene	21.127	278	255	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 : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141905.D
Acq On : 14 Nov 2019 10:27 am
Operator : JK/ AMS /DTH
Sample : 9110781-BLK1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:05 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141906.D
Acq On : 14 Nov 2019 11:03 am
Operator : JK/ AMS /DTH
Sample : 9110781-BS1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:09 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	259176	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1396649	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	875653	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.306	188	1689200	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.248	240	1661085	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.757	264	1590052	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.159	292	1265493	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	402878	2658.76	ng/ml	0.00
5) Phenol-d6(Surr)	6.412	99	622365	3310.50	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	539045	3597.73	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1619410	2468.79	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	248965	3016.99	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	2143352	2858.86	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.284	74	352862	3473.97	ng/ml	95
3) Pyridine	4.300	79	407961	2449.28	ng/ml	97
6) Phenol	6.428	94	1106470	5666.00	ng/ml	99
7) Aniline	6.450	93	1251016	5031.92	ng/ml	99
8) Bis(2-chloroethyl) ether	6.498	93	786980	4536.28	ng/ml	98
9) 2-Chlorophenol	6.568	128	839742	4996.50	ng/ml	98
10) 1,3-Dichlorobenzene	6.712	146	746508	3687.54	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	776960	3794.68	ng/ml	99
12) Benzyl alcohol	6.888	108	612612	5801.56	ng/ml	98
13) 1,2-Dichlorobenzene	6.926	146	791323	4060.83	ng/ml	99
14) 2-Methylphenol	6.995	107	742913	5819.64	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.011	45	819251	4149.02	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.145	70	627250	5642.09	ng/ml	92
17) 3+4-Methylphenol	7.145	107	979468	6221.22	ng/ml	99
18) Hexachloroethane	7.258	117	272758	3913.58	ng/ml	93
20) Nitrobenzene	7.316	77	828463	5395.90	ng/ml	95
22) Isophorone	7.546	82	1868752	4516.45	ng/ml	99
23) 2-Nitrophenol	7.632	139	544242	4415.66	ng/ml	97
24) 2,4-Dimethylphenol	7.669	122	895591	4703.39	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.750	93	1182992	4264.29	ng/ml	100
26) Benzoic acid	7.814	105	894761	8266.22	ng/ml	97
27) 2,4-Dichlorophenol	7.873	162	850328	4693.78	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.953	180	833373	3734.91	ng/ml	99
29) Naphthalene	8.033	128	2855399	3845.30	ng/ml	99
30) 4-Chloroaniline	8.081	127	807872	2872.63	ng/ml	98
31) Hexachlorobutadiene	8.161	225	416105	3651.75	ng/ml	99
32) 4-Chloro-3-methylphenol	8.568	107	934333	5225.86	ng/ml	97
33) 2-Methylnaphthalene	8.728	142	2212117	4420.55	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	2091080	4402.98	ng/ml	99
36) Hexachlorocyclopentadiene	8.894	237	475018	3668.38	ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	687042	4281.22	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	753690	4634.81	ng/ml	99
39) 1,1'-Biphenyl	9.199	154	2812058	3791.24	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	2109894	3770.82	ng/ml	99
42) 2-Nitroaniline	9.327	138	798101	4491.52	ng/ml	90

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141906.D
Acq On : 14 Nov 2019 11:03 am
Operator : JK/ AMS /DTH
Sample : 9110781-BS1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:09 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

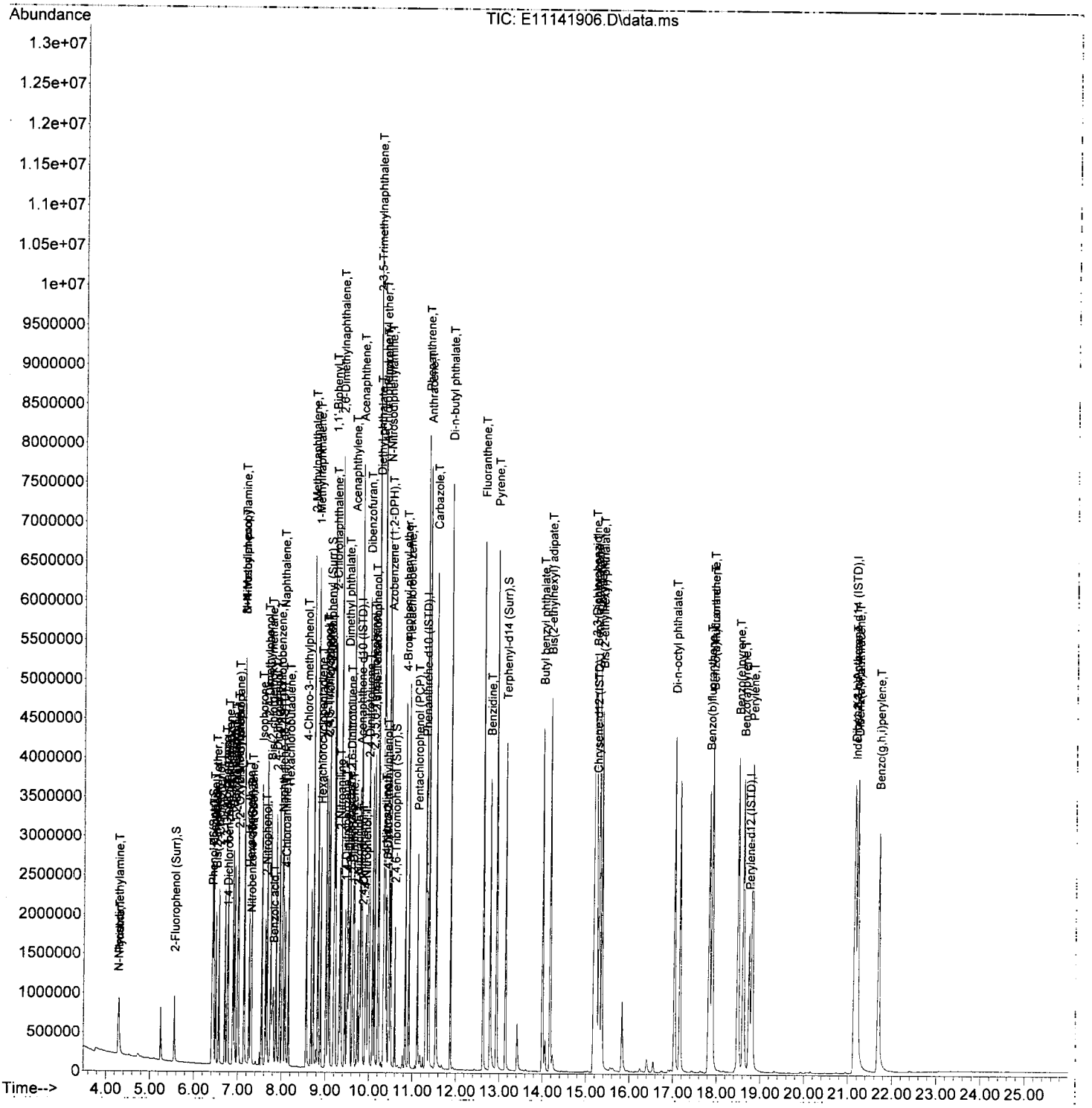
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	2092121	3900.54	ng/ml	98
44) 1,4-Dinitrobenzene	9.456	168	406069	4756.83	ng/ml	86
45) Dimethyl phthalate	9.509	163	2590062	4321.13	ng/ml	100
46) 1,3-Dinitrobenzene	9.541	168	454839	4566.52	ng/ml	92
47) 2,6-Dinitrotoluene	9.568	165	625690	4383.11	ng/ml	92
48) 1,2-Dinitrobenzene	9.627	168	296932	4538.27	ng/ml	89
49) Acenaphthylene	9.648	152	3478181	4109.12	ng/ml	99
50) 3-Nitroaniline	9.739	138	441494	3166.96	ng/ml	98
51) Acenaphthene	9.825	153	2260418	3882.83	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	296778	4921.29	ng/ml	93
53) 4-Nitrophenol	9.921	139	492967	4487.30	ng/ml	95
54) 2,4-Dinitrotoluene	9.980	165	822644	4584.82	ng/ml	94
55) Dibenzofuran	10.001	168	3133626	4031.40	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	10.087	232	627442	4620.76	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.130	232	634458	4454.28	ng/ml	97
58) Diethyl phthalate	10.221	149	2370014	4112.64	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.210	170	1971199	3991.74	ng/ml	100
60) Fluorene	10.349	166	2528832	4095.26	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.338	204	1236874	4207.24	ng/ml	99
62) 4-Nitroaniline	10.370	138	674773	4772.49	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.403	198	462144	5111.82	ng/ml	88
65) N-Nitrosodiphenylamine	10.461	169	2283688	4323.37	ng/ml	99
66) Azobenzene (1,2-DPH)	10.504	77	2128328	3873.28	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.841	248	763892	4383.29	ng/ml	95
69) Hexachlorobenzene	10.921	284	808803	4125.40	ng/ml	97
70) Pentachlorophenol (PCP)	11.119	266	434436	4190.07	ng/ml	98
71) Phenanthrene	11.333	178	3710924	3861.74	ng/ml	99
72) Anthracene	11.387	178	3904208	4251.80	ng/ml	100
73) Carbazole	11.542	167	3504133	4627.56	ng/ml	99
74) Di-n-butyl phthalate	11.879	149	4199845	4416.02	ng/ml	100
75) Fluoranthene	12.638	202	4169155	4516.26	ng/ml	98
76) Benzidine	12.793	184	2400897	5394.08	ng/ml	99
77) Pyrene	12.943	202	4260230	4484.89	ng/ml	99
80) Butyl benzyl phthalate	14.002	149	1874228	4213.35	ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.179	129	1746135	4409.71	ng/ml	99
82) 3,3-Dichlorobenzidine	15.190	252	2243744	8419.55	ng/ml	99
83) Benz(a)anthracene	15.227	228	3990349	4465.75	ng/ml	99
84) Chrysene	15.313	228	3781230	4236.81	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.371	149	2803190	4318.66	ng/ml	97
87) Di-n-octyl phthalate	17.046	149	4576516	4472.02	ng/ml	98
88) Benzo(b)fluoranthene	17.848	252	3830644	4099.89	ng/ml	99
89) Benzo(k)fluoranthene	17.917	252	3774372	4278.83	ng/ml	98
90) Benzo(b+k)fluoranthene	17.917	252	7824302	8367.56	ng/ml	98
91) Benzo(e)pyrene	18.506	252	3684973	4121.31	ng/ml	99
92) Benzo(a)pyrene	18.629	252	3345717	4016.35	ng/ml	99
93) Perylene	18.827	252	3524606	4649.42	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.169	276	3173505	4121.20	ng/ml	99
96) Dibenz(a,h)anthracene	21.228	278	3189552	4497.12	ng/ml	99
97) Benzo(g,h,i)perylene	21.710	276	3043485	4114.75	ng/ml	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141906.D
Acq On : 14 Nov 2019 11:03 am
Operator : JK/ AMS /DTH
Sample : 9110781-BS1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:09 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141907.D
Acq On : 14 Nov 2019 11:39 am
Operator : JK/ AMS /DTH
Sample : 9110781-BSD1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	269349	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1458972	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	886264	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.306	188	1661417	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.248	240	1595356	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.762	264	1455547	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.159	292	1136386	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	391612	2486.80	ng/ml	0.00
5) Phenol-d6(Surr)	6.412	99	608386	3113.92	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	527913	3390.35	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.097	172	1575335	2372.85	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	237088	2929.56	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	1987105	2759.65	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.278	74	360309	3413.31	ng/ml	95
3) Pyridine	4.294	79	442875	2558.47	ng/ml	97
6) Phenol	6.423	94	1092060	5380.99	ng/ml	99
7) Aniline	6.450	93	1236724	4786.56	ng/ml	98
8) Bis(2-chloroethyl) ether	6.498	93	785888	4358.89	ng/ml	98
9) 2-Chlorophenol	6.568	128	830638	4755.67	ng/ml	98
10) 1,3-Dichlorobenzene	6.707	146	764515	3633.85	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	791259	3718.56	ng/ml	99
12) Benzyl alcohol	6.888	108	613695	5621.96	ng/ml	98
13) 1,2-Dichlorobenzene	6.926	146	799396	3947.32	ng/ml	98
14) 2-Methylphenol	6.995	107	731668	5515.07	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.017	45	817860	3985.54	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.145	70	618599	5354.12	ng/ml	93
17) 3+4-Methylphenol	7.145	107	976510	5968.18	ng/ml	99
18) Hexachloroethane	7.258	117	278615	3846.63	ng/ml	94
20) Nitrobenzene	7.316	77	834746	5231.48	ng/ml	95
22) Isophorone	7.546	82	1846749	4272.62	ng/ml	99
23) 2-Nitrophenol	7.632	139	549888	4287.84	ng/ml	97
24) 2,4-Dimethylphenol	7.669	122	891713	4484.95	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.750	93	1176782	4060.71	ng/ml	100
26) Benzoic acid	7.798	105	628417	6254.97	ng/ml	97
27) 2,4-Dichlorophenol	7.873	162	846032	4503.92	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.953	180	852149	3655.92	ng/ml	99
29) Naphthalene	8.033	128	2880455	3713.34	ng/ml	99
30) 4-Chloroaniline	8.081	127	764163	2605.63	ng/ml	99
31) Hexachlorobutadiene	8.161	225	421569	3541.66	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	915568	4925.43	ng/ml	97
33) 2-Methylnaphthalene	8.728	142	2216371	4239.86	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	2100994	4234.88	ng/ml	100
36) Hexachlorocyclopentadiene	8.894	237	463754	3538.51	ng/ml	100
37) 2,4,6-Trichlorophenol	9.017	196	686894	4235.22	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	727358	4440.28	ng/ml	99
39) 1,1'-Biphenyl	9.199	154	2782457	3706.42	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	2087053	3685.34	ng/ml	99
42) 2-Nitroaniline	9.327	138	764147	4280.55	ng/ml	90

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141907.D
Acq On : 14 Nov 2019 11:39 am
Operator : JK/ AMS /DTH
Sample : 9110781-BSD1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

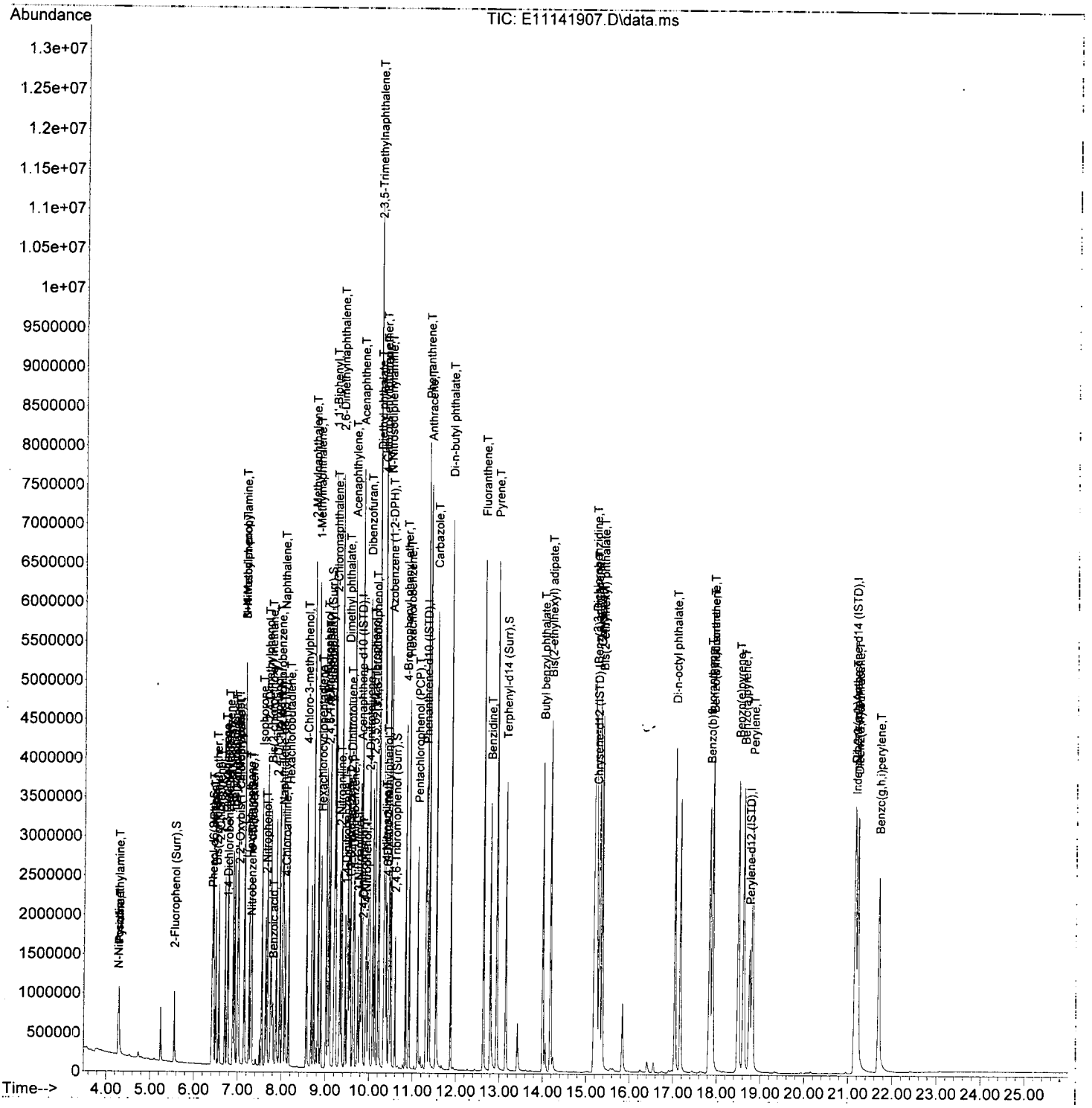
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	2061485	3797.41	ng/ml	98
44) 1,4-Dinitrobenzene	9.456	168	394419	4601.87	ng/ml	88
45) Dimethyl phthalate	9.509	163	2545481	4195.91	ng/ml	100
46) 1,3-Dinitrobenzene	9.541	168	446939	4450.23	ng/ml	92
47) 2,6-Dinitrotoluene	9.568	165	621520	4307.77	ng/ml	91
48) 1,2-Dinitrobenzene	9.632	168	290664	4404.81	ng/ml	81
49) Acenaphthylene	9.648	152	3424667	3997.46	ng/ml	100
50) 3-Nitroaniline	9.745	138	443933	3146.33	ng/ml	93
51) Acenaphthene	9.825	153	2230295	3785.22	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	268940	4614.64	ng/ml	92
53) 4-Nitrophenol	9.921	139	471151	4276.51	ng/ml	94
54) 2,4-Dinitrotoluene	9.980	165	796243	4399.54	ng/ml	95
55) Dibenzofuran	10.001	168	3086672	3923.45	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	10.087	232	613391	4487.85	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.130	232	618309	4306.58	ng/ml	96
58) Diethyl phthalate	10.221	149	2309169	3959.08	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.210	170	1943279	3888.08	ng/ml	100
60) Fluorene	10.349	166	2460096	3936.24	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.338	204	1211120	4070.32	ng/ml	99
62) 4-Nitroaniline	10.370	138	642764	4491.67	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.403	198	429987	4834.71	ng/ml	87
65) N-Nitrosodiphenylamine	10.461	169	2225725	4284.10	ng/ml	100
66) Azobenzene (1,2-DPH)	10.504	77	2078533	3845.92	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.841	248	744652	4344.35	ng/ml	96
69) Hexachlorobenzene	10.921	284	791813	4106.28	ng/ml	98
70) Pentachlorophenol (PCP)	11.119	266	420321	4137.27	ng/ml	99
71) Phenanthrene	11.333	178	3609466	3818.98	ng/ml	99
72) Anthracene	11.387	178	3773534	4178.22	ng/ml	99
73) Carbazole	11.542	167	3336274	4479.56	ng/ml	99
74) Di-n-butyl phthalate	11.879	149	4044660	4323.96	ng/ml	100
75) Fluoranthene	12.638	202	3928161	4326.36	ng/ml	98
76) Benzidine	12.793	184	2216502	5094.52	ng/ml	99
77) Pyrene	12.943	202	4063837	4349.69	ng/ml	99
80) Butyl benzyl phthalate	14.008	149	1778941	4170.09	ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.184	129	1636392	4312.50	ng/ml	99
82) 3,3-Dichlorobenzidine	15.195	252	2061346	8130.60	ng/ml	99
83) Benz(a)anthracene	15.227	228	3708706	4321.56	ng/ml	99
84) Chrysene	15.313	228	3541129	4131.26	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.371	149	2609691	4193.35	ng/ml	97
87) Di-n-octyl phthalate	17.051	149	4213604	4493.34	ng/ml	98
88) Benzo(b)fluoranthene	17.848	252	3460616	4051.17	ng/ml	100
89) Benzo(k)fluoranthene	17.912	252	3441991	4262.84	ng/ml	99
90) Benzo(b+k)fluoranthene	17.912	252	7114290	8314.33	ng/ml	99
91) Benzo(e)pyrene	18.506	252	3361262	4107.29	ng/ml	100
92) Benzo(a)pyrene	18.629	252	3033944	3982.11	ng/ml	99
93) Perylene	18.832	252	3190691	4597.88	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.169	276	2745265	3970.11	ng/ml	98
96) Dibenz(a,h)anthracene	21.223	278	2777468	4361.02	ng/ml	99
97) Benzo(g,h,i)perylene	21.704	276	2608044	3926.64	ng/ml	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141907.D
Acq On : 14 Nov 2019 11:39 am
Operator : JK/ AMS /DTH
Sample : 9110781-BSD1
Misc : 1x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	408984	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1672124	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	827114	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1568866	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1401926	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1248728	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	933413	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.568	112	105	0.44 ng/ml	0.01
5) Phenol-d6(Surr)	0.000	99	0	0.00 ng/ml	
19) Nitrobenzene-d5 (Surr)	7.301	82	185	0.78 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1026	1.66 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00 ng/ml	
79) Terphenyl-d14 (Surr)	13.147	244	1436	2.27 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.295	74	94	N.D.	
3) Pyridine	4.343	79	74	N.D.	
6) Phenol	6.466	94	62	N.D.	
7) Aniline	6.466	93	62	N.D.	
8) Bis(2-chloroethyl) ether	6.525	93	96	N.D.	
9) 2-Chlorophenol	6.498	128	50	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.942	108	212	36.27 ng/ml#	1
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	7.151	70	128	N.D.	
17) 3+4-Methylphenol	7.161	107	58	N.D.	
18) Hexachloroethane	7.242	117	187	N.D.	
20) Nitrobenzene	7.322	77	65	N.D.	
22) Isophorone	7.531	82	224	N.D.	
23) 2-Nitrophenol	7.696	139	176	28.98 ng/ml	59
24) 2,4-Dimethylphenol	7.696	122	59	10.58 ng/ml#	50
25) Bis(2-chloroethoxy) me...	7.755	93	113	N.D.	
26) Benzoic acid	7.728	105	356	822.94 ng/ml#	18
27) 2,4-Dichlorophenol	7.857	162	524	10.11 ng/ml#	27
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	2423130	2725.58 ng/ml	99
30) 4-Chloroaniline	8.108	127	1161	14.17 ng/ml#	46
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.590	107	125	65.48 ng/ml#	1
33) 2-Methylnaphthalene	8.729	142	241450	403.01 ng/ml	100
34) 1-Methylnaphthalene	8.825	142	139406	245.17 ng/ml	99
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	9.194	154	104120	148.61 ng/ml	99
41) 2-Chloronaphthalene	9.199	162	308	N.D.	
42) 2-Nitroaniline	9.301	138	99	30.55 ng/ml#	48

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.365	156	58728	115.92	ng/ml	96
44) 1,4-Dinitrobenzene	9.424	168	228	67.52	ng/ml#	1
45) Dimethyl phthalate	9.493	163	643	N.D.		
46) 1,3-Dinitrobenzene	9.526	168	82	60.36	ng/ml#	1
47) 2,6-Dinitrotoluene	9.558	165	131	31.56	ng/ml#	1
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	9.643	152	132945	166.28	ng/ml	97
50) 3-Nitroaniline	9.713	138	96	N.D.		
51) Acenaphthene	9.820	153	262908	478.11	ng/ml	98
52) 2,4-Dinitrophenol	9.820	184	58	178.00	ng/ml#	1
53) 4-Nitrophenol	9.932	139	469	88.74	ng/ml#	1
54) 2,4-Dinitrotoluene	9.948	165	1192	68.16	ng/ml#	62
55) Dibenzofuran	9.996	168	33531	45.67	ng/ml#	80
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	10.216	149	283	N.D.		
59) 2,3,5-Trimethylnaphtha...	10.205	170	24851	53.28	ng/ml	100
60) Fluorene	10.344	166	197106	337.93	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.376	204	58	N.D.		
62) 4-Nitroaniline	10.344	138	2055	15.39	ng/ml#	44
63) 4,6-Dinitro-2-methylph...	10.381	198	102	159.37	ng/ml#	1
65) N-Nitrosodiphenylamine	10.462	169	5340	10.88	ng/ml#	44
66) Azobenzene (1,2-DPH)	10.499	77	610	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	11.328	178	1821520	2040.94	ng/ml	100
72) Anthracene	11.376	178	379646	445.16	ng/ml	99
73) Carbazole	11.542	167	47968	68.21	ng/ml	98
74) Di-n-butyl phthalate	11.879	149	395	N.D.		
75) Fluoranthene	12.628	202	1416944	1652.64	ng/ml	99
76) Benzidine	12.788	184	179	152.78	ng/ml	64
77) Pyrene	12.938	202	1783531	2021.60	ng/ml	99
80) Butyl benzyl phthalate	14.002	149	165	33.06	ng/ml#	66
81) Bis(2-ethylhexyl) adipate	14.179	129	1113	56.80	ng/ml	87
82) 3,3-Dichlorobenzidine	15.179	252	356	26.83	ng/ml#	32
83) Benz(a)anthracene	15.206	228	338926	449.42	ng/ml	71
84) Chrysene	15.286	228	425794	565.29	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.350	149	132	58.75	ng/ml	82
87) Di-n-octyl phthalate	17.040	149	251	74.50	ng/ml#	1
88) Benzo(b)fluoranthene	17.821	252	364135	553.28	ng/ml	100
89) Benzo(k)fluoranthene	~~17.821~~	~~252~~	~~467019~~	~~690.12~~	~~ng/ml~~	~~97~~
90) Benzo(b+k)fluoranthene	17.821	252	531315	778.60	ng/ml	97
91) Benzo(e)pyrene	18.474	252	249356	377.39	ng/ml	100
92) Benzo(a)pyrene	18.597	252	370124	628.33	ng/ml	99
93) Perylene	18.795	252	111396	187.11	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.137	276	233339	410.83	ng/ml	98
96) Dibenz(a,h)anthracene	21.191	278	25933	49.57	ng/ml	80
97) Benzo(g,h,i)perylene	21.672	276	271561	497.77	ng/ml	98

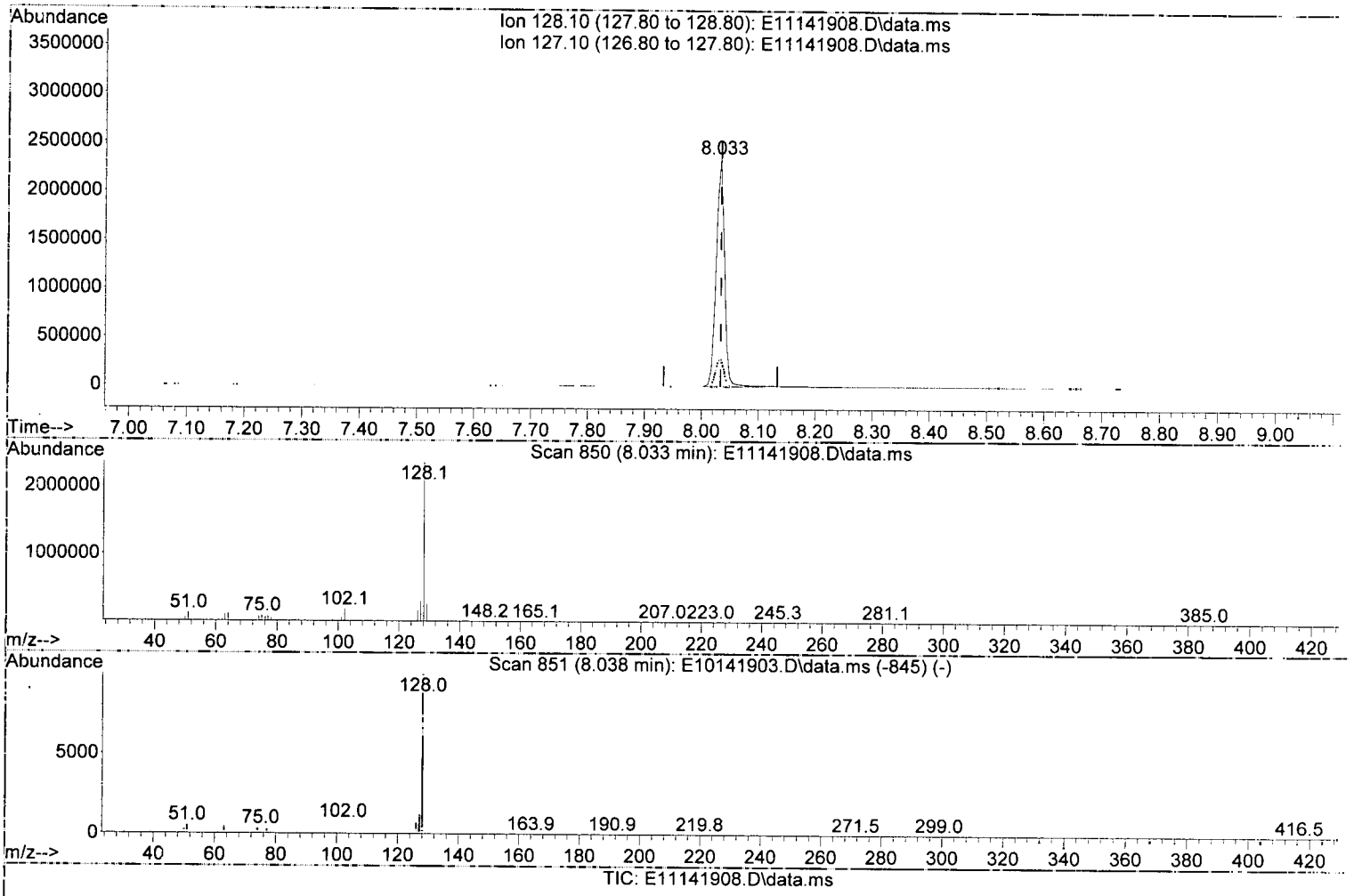
mI Hit mos

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(29) Naphthalene (T)

8.033min (-0.000) 2725.58 ng/ml

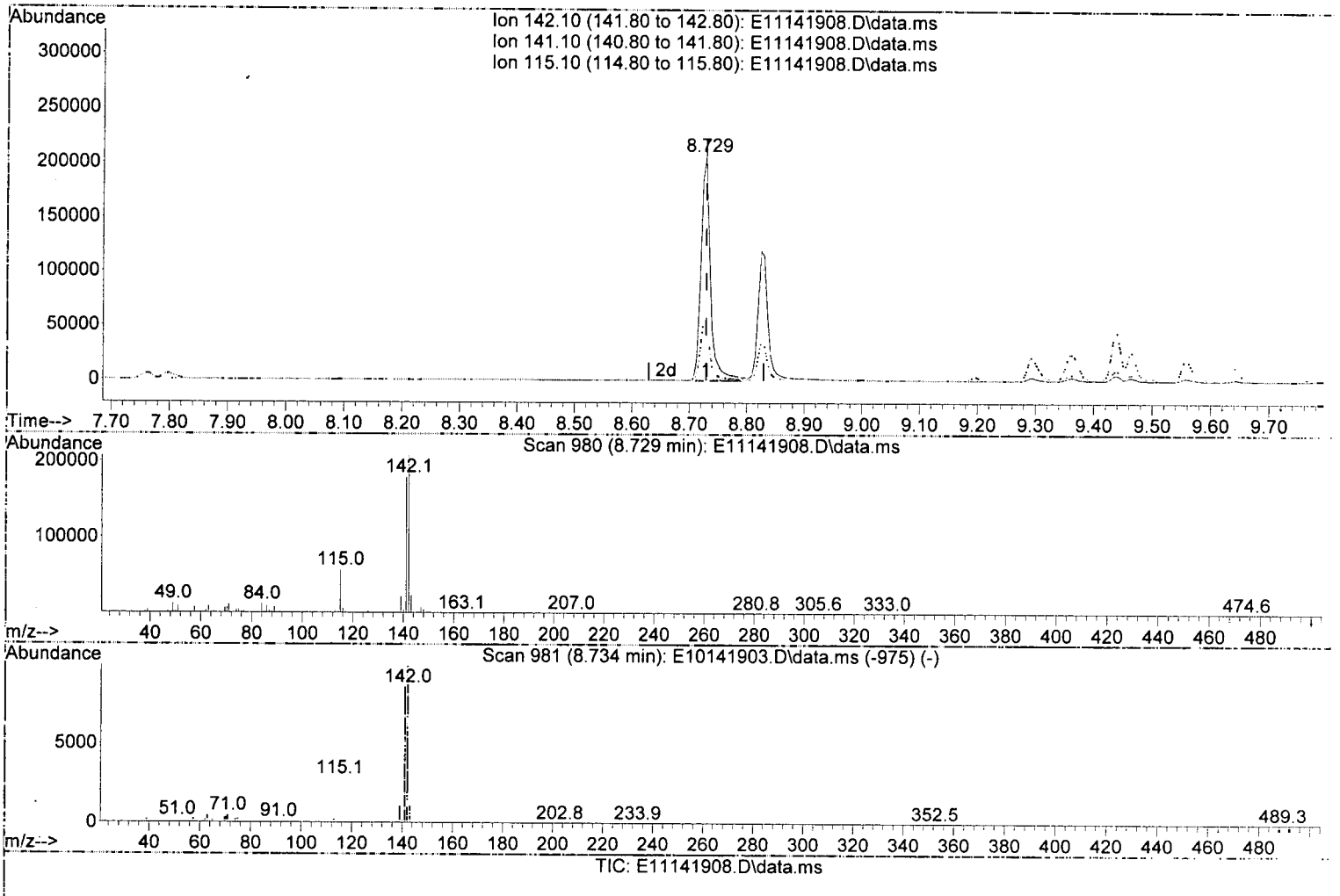
response 2423130

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	12.82
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(33) 2-Methylnaphthalene (T)

8.729min (-0.000) 403.01 ng/ml

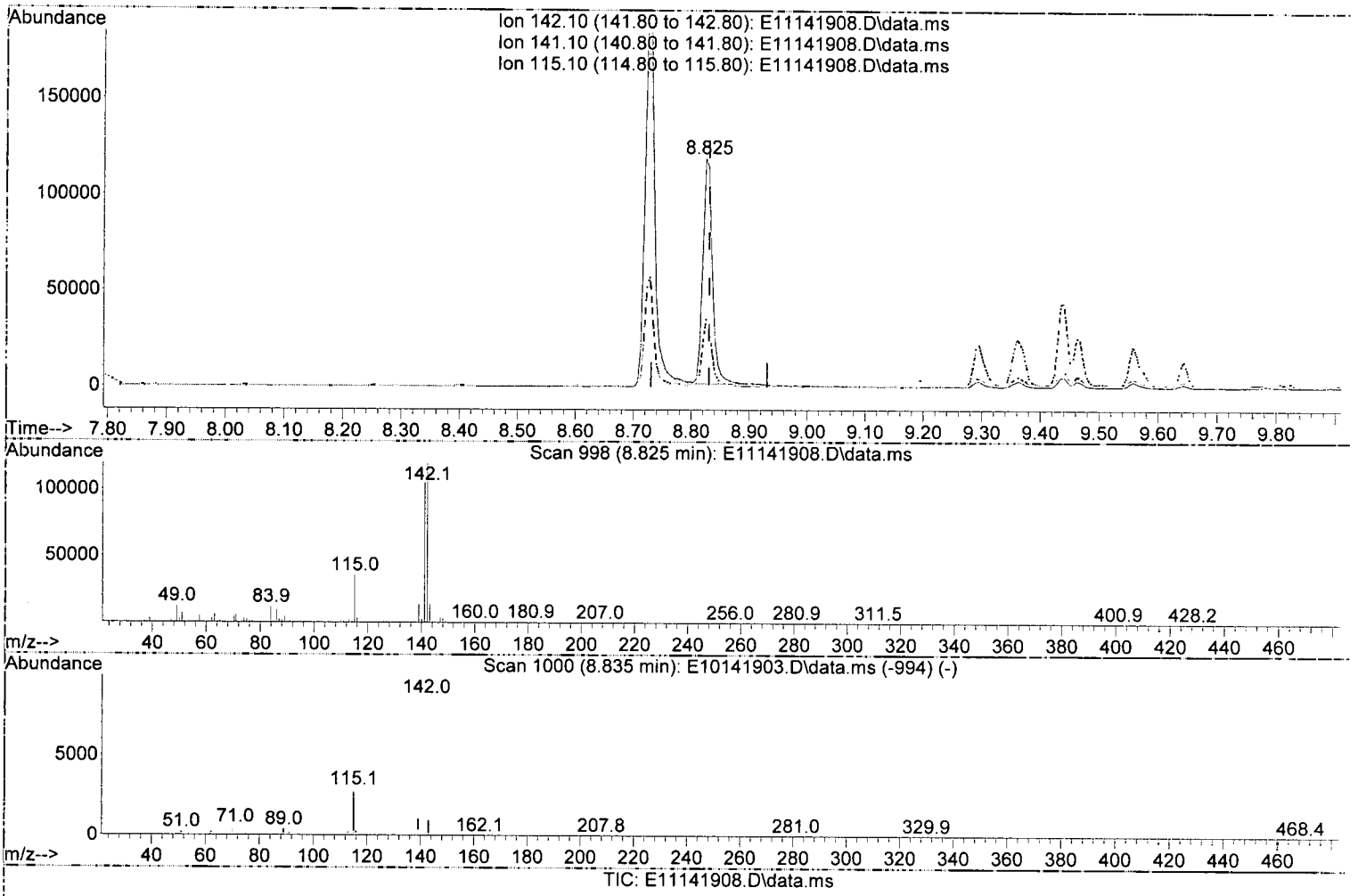
response 241450

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	86.50	86.31
115.10	28.30	27.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(34) 1-Methylnaphthalene (T)

8.825min (-0.005) 245.17 ng/ml

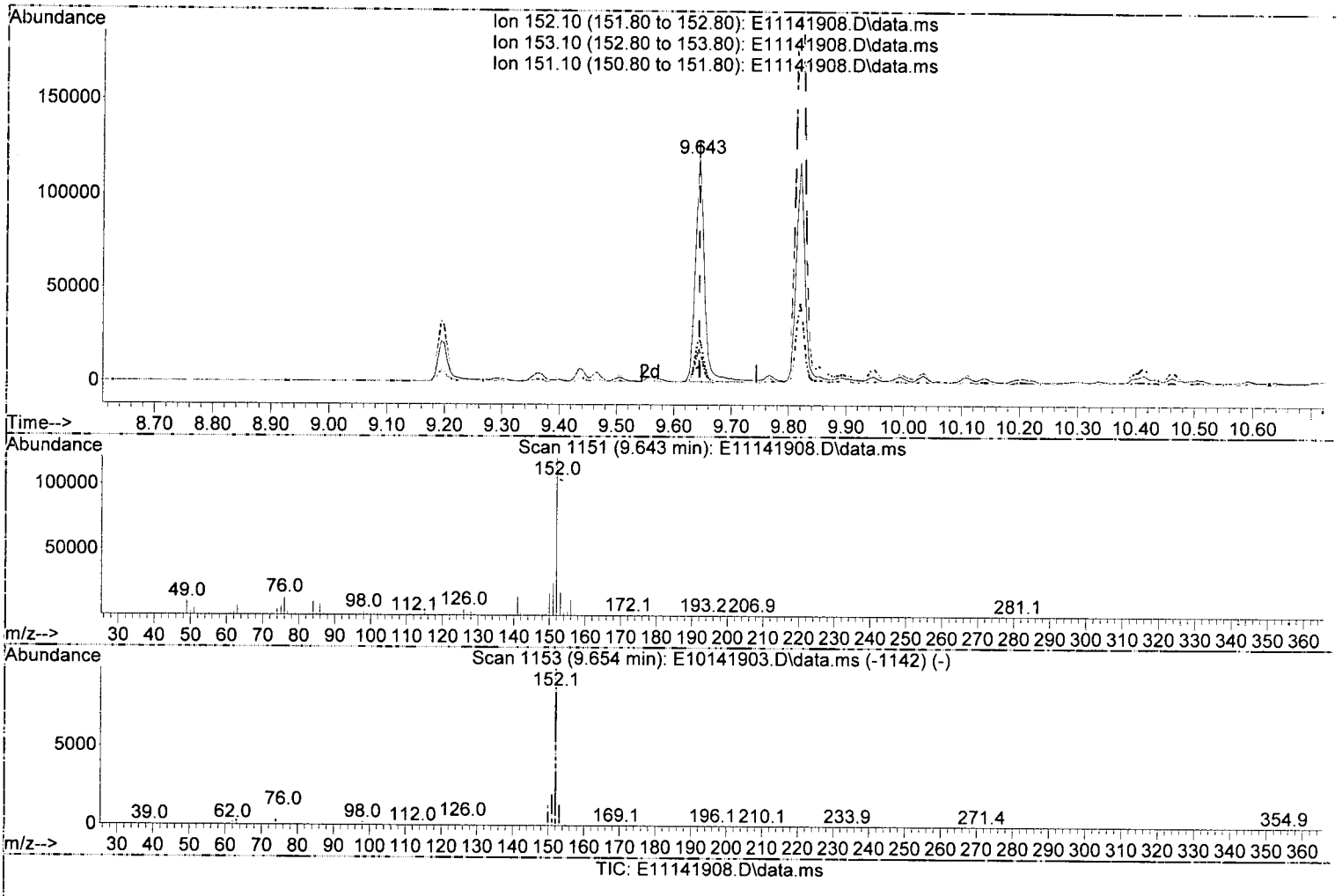
response 139406

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	89.60	88.20
115.10	30.30	29.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(49) Acenaphthylene (T)

9.643min (-0.000) 166.28 ng/ml

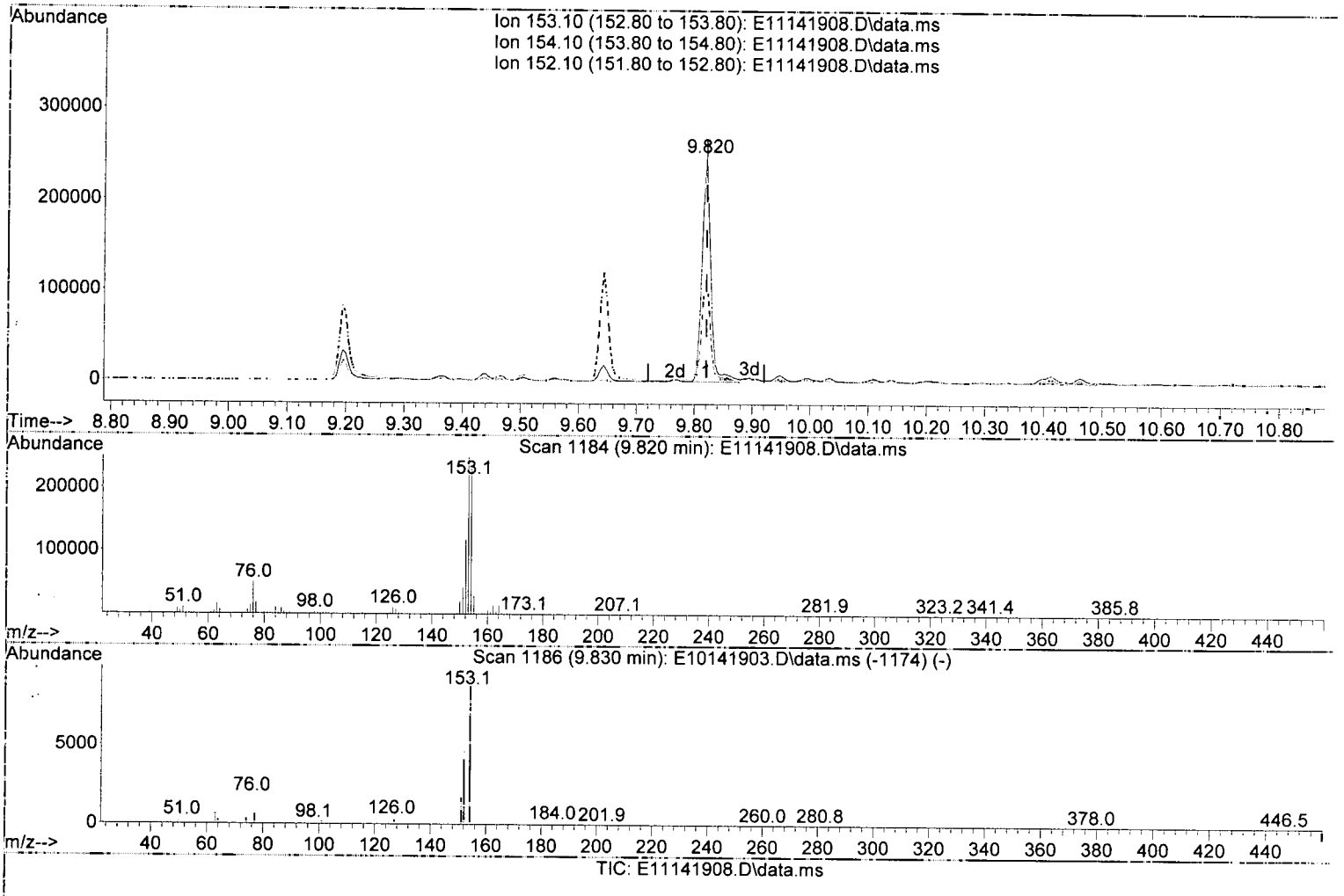
response 132945

Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.10	14.70
151.10	19.80	20.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(51) Acenaphthene (T)

9.820min (-0.000) 478.11 ng/ml

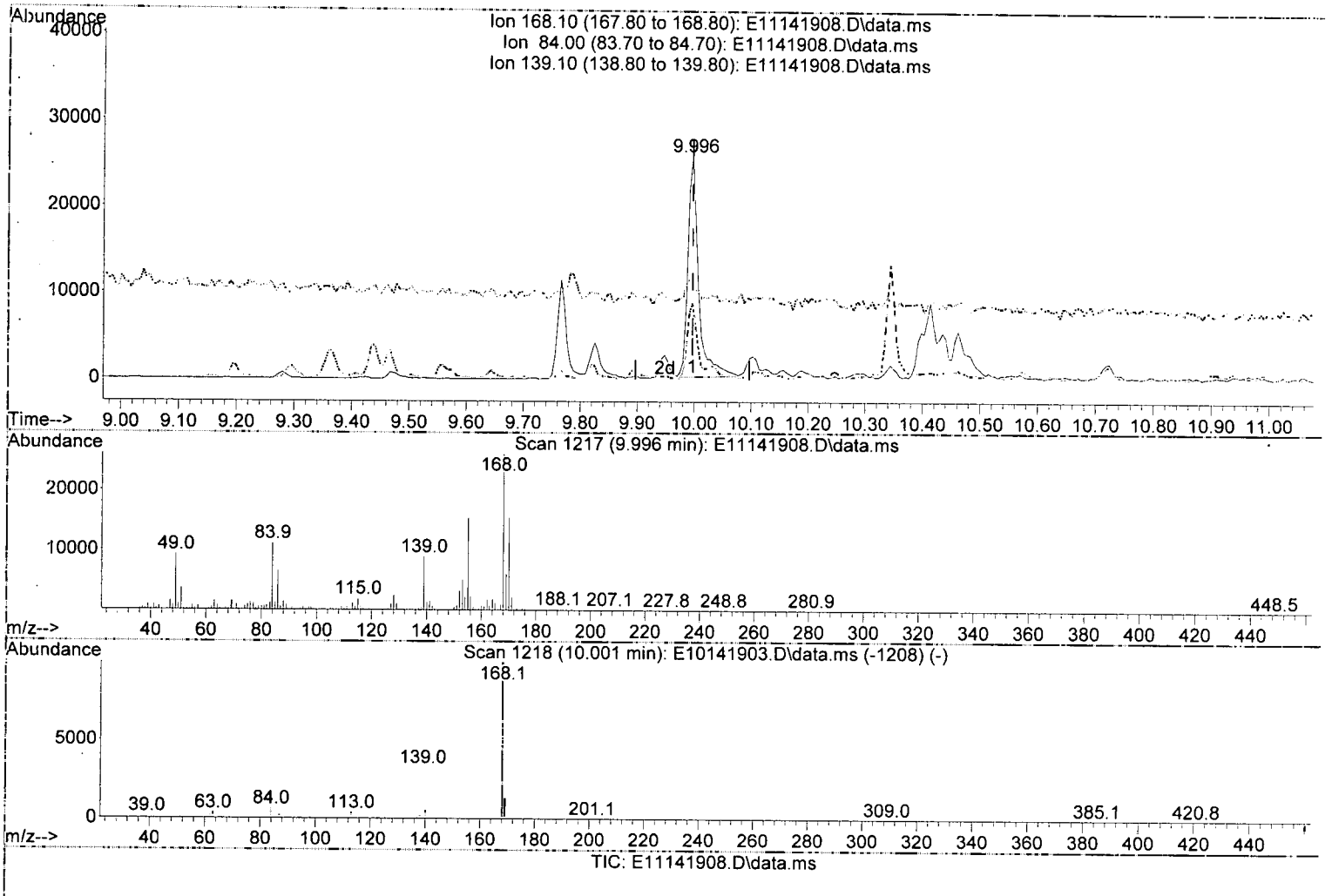
response 262908

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	91.00	92.66
152.10	46.40	47.43
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(55) Dibenzofuran (T)

9.996min (-0.000) 45.67 ng/ml

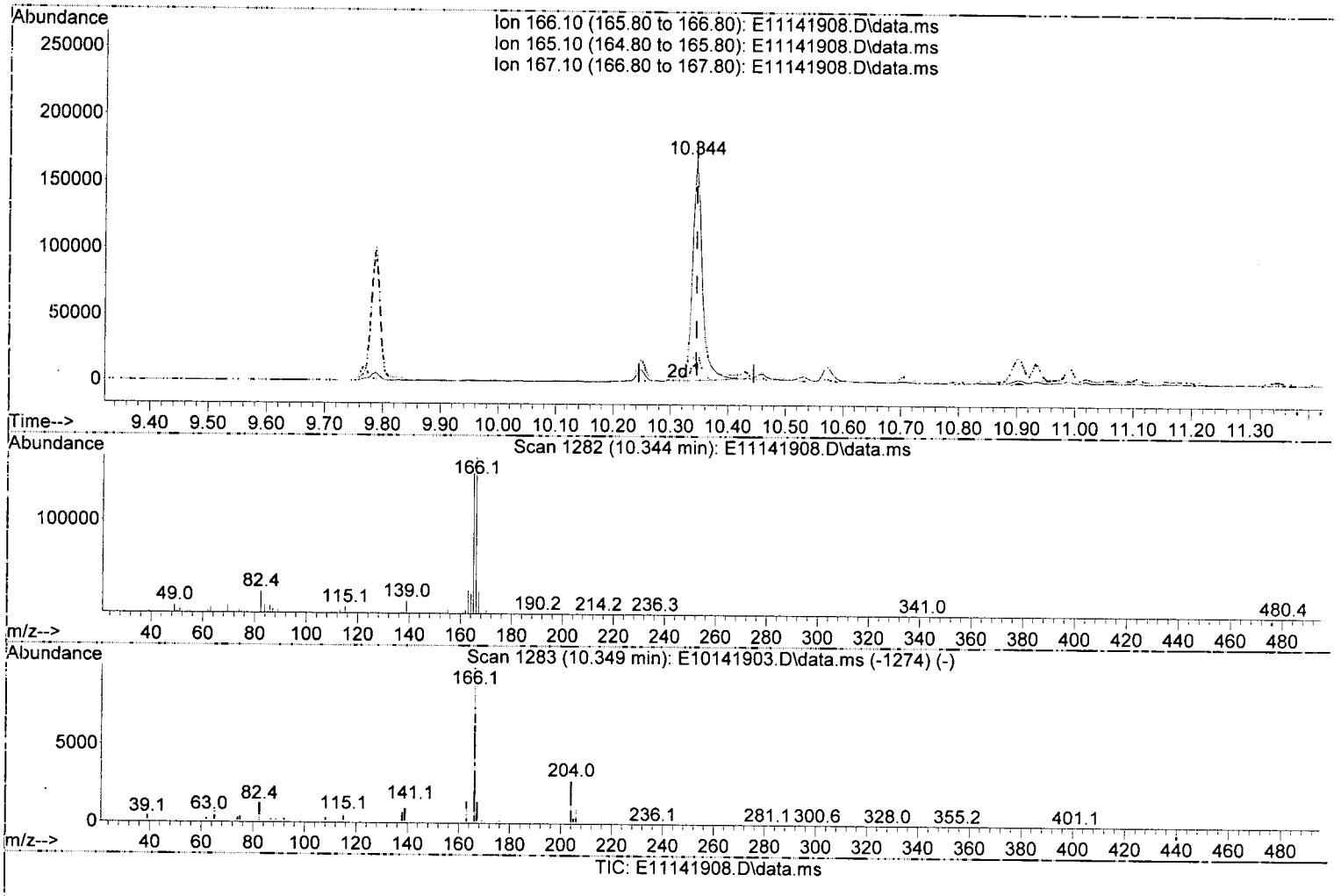
response 33531

Ion	Exp%	Act%
168.10	100.00	100.00
84.00	8.70	42.73#
139.10	34.60	34.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(60) Fluorene (T)

10.344min (-0.000) 337.93 ng/ml

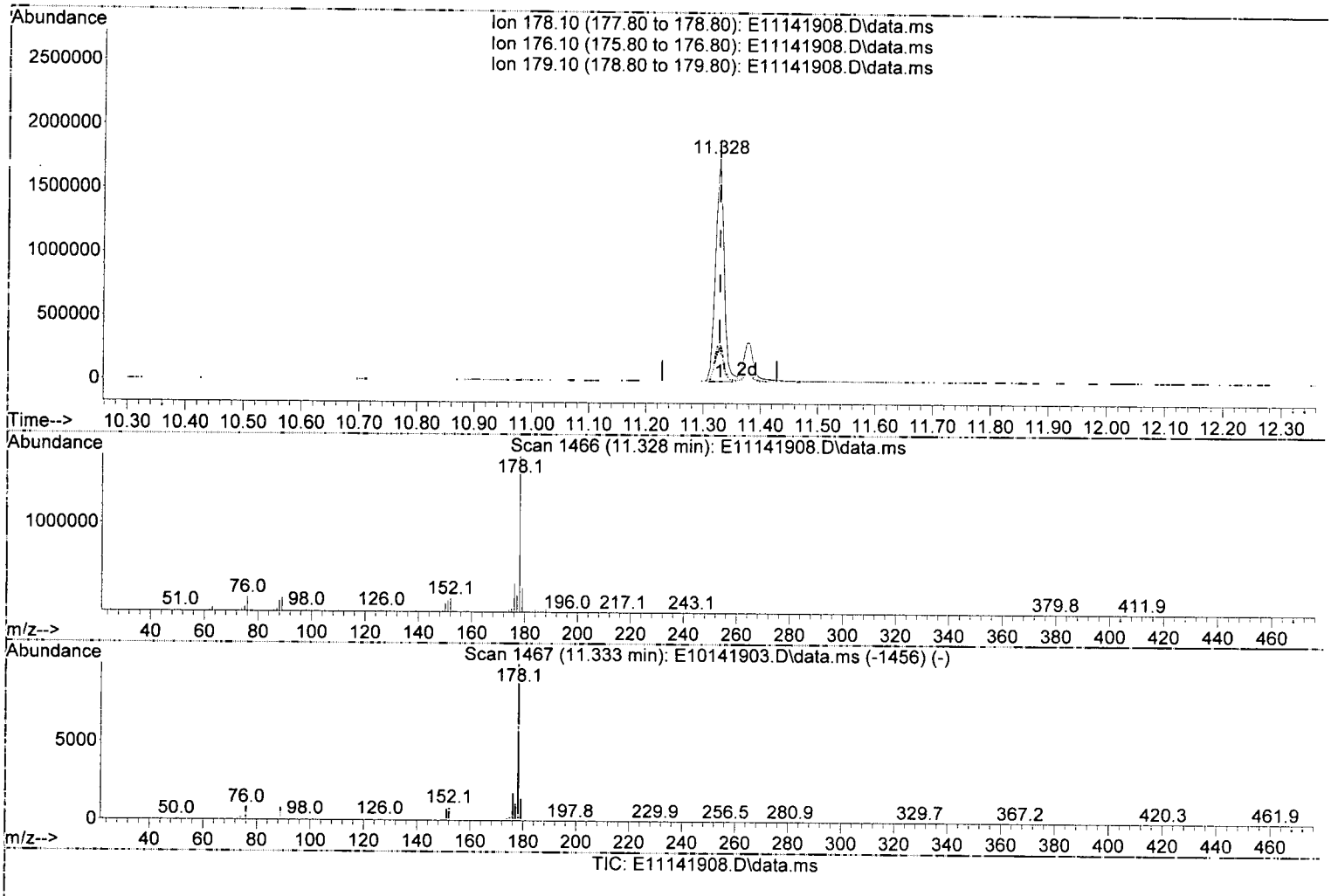
response 197106

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.30	95.38
167.10	13.30	14.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.000) 2040.94 ng/ml

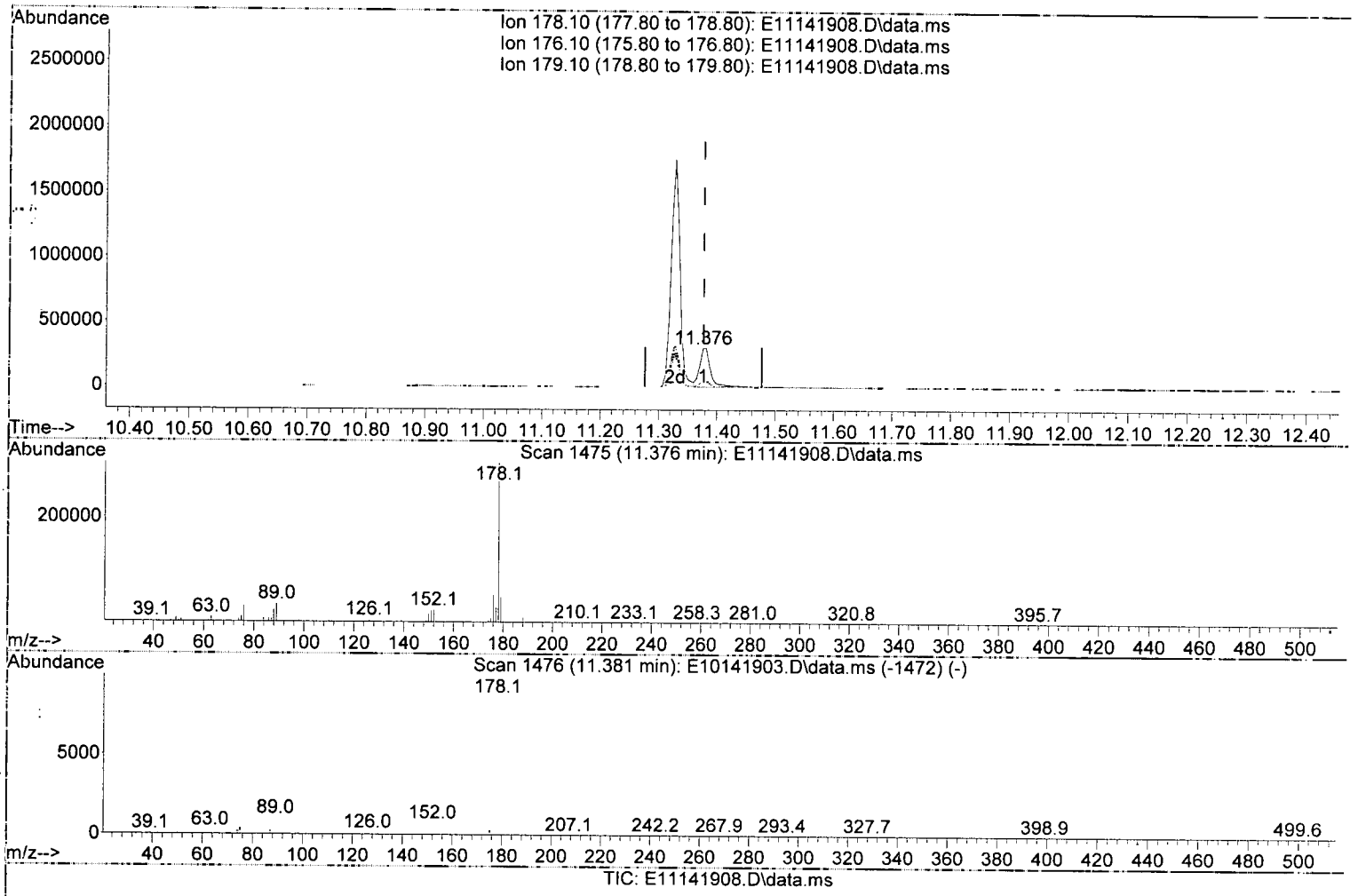
response 1821520

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	18.65
179.10	15.20	15.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(72) Anthracene (T)

11.376min (-0.000) 445.16 ng/ml

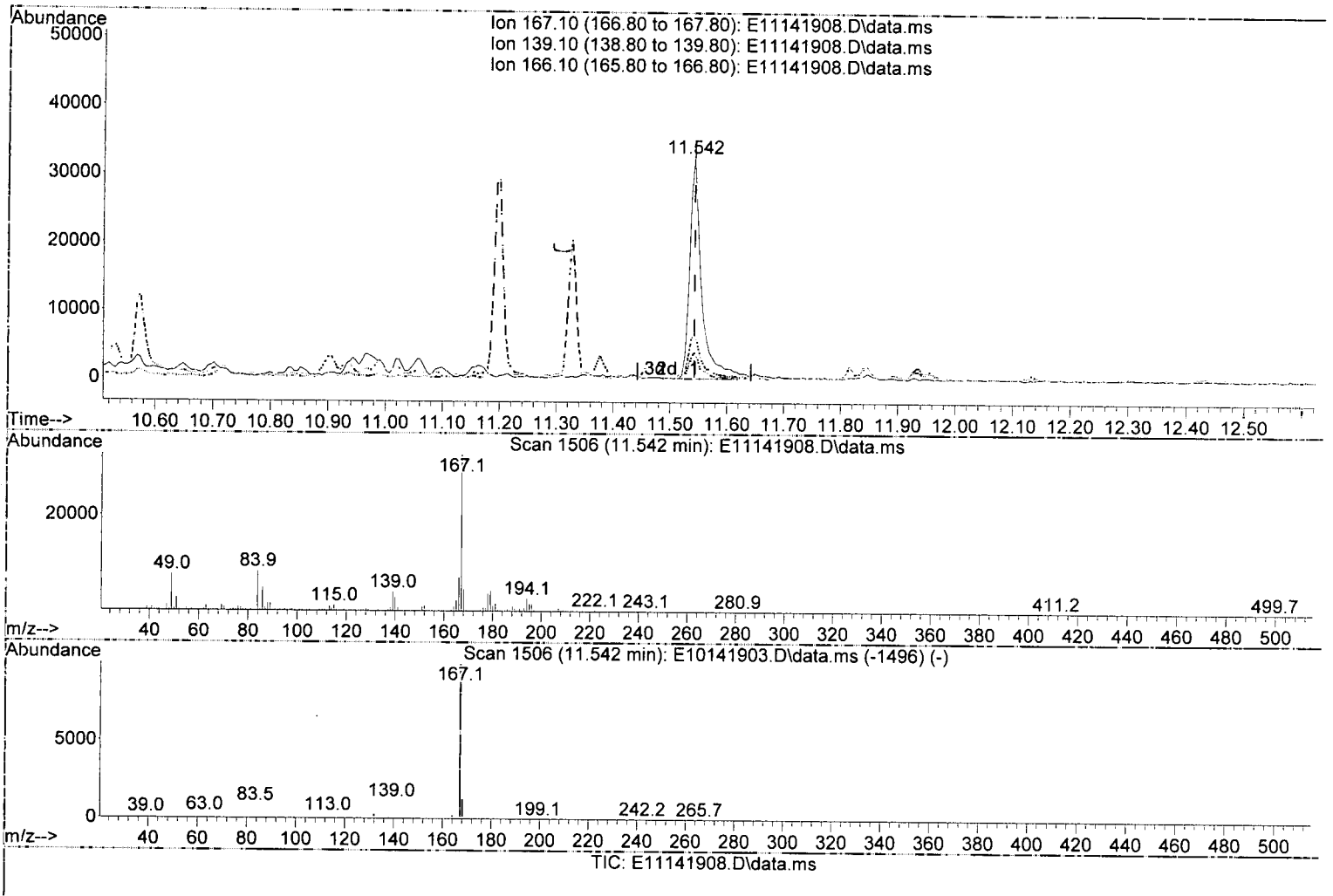
response 379646

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.10	17.33
179.10	15.50	15.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(73) Carbazole (T)

11.542min (-0.000) 68.21 ng/ml

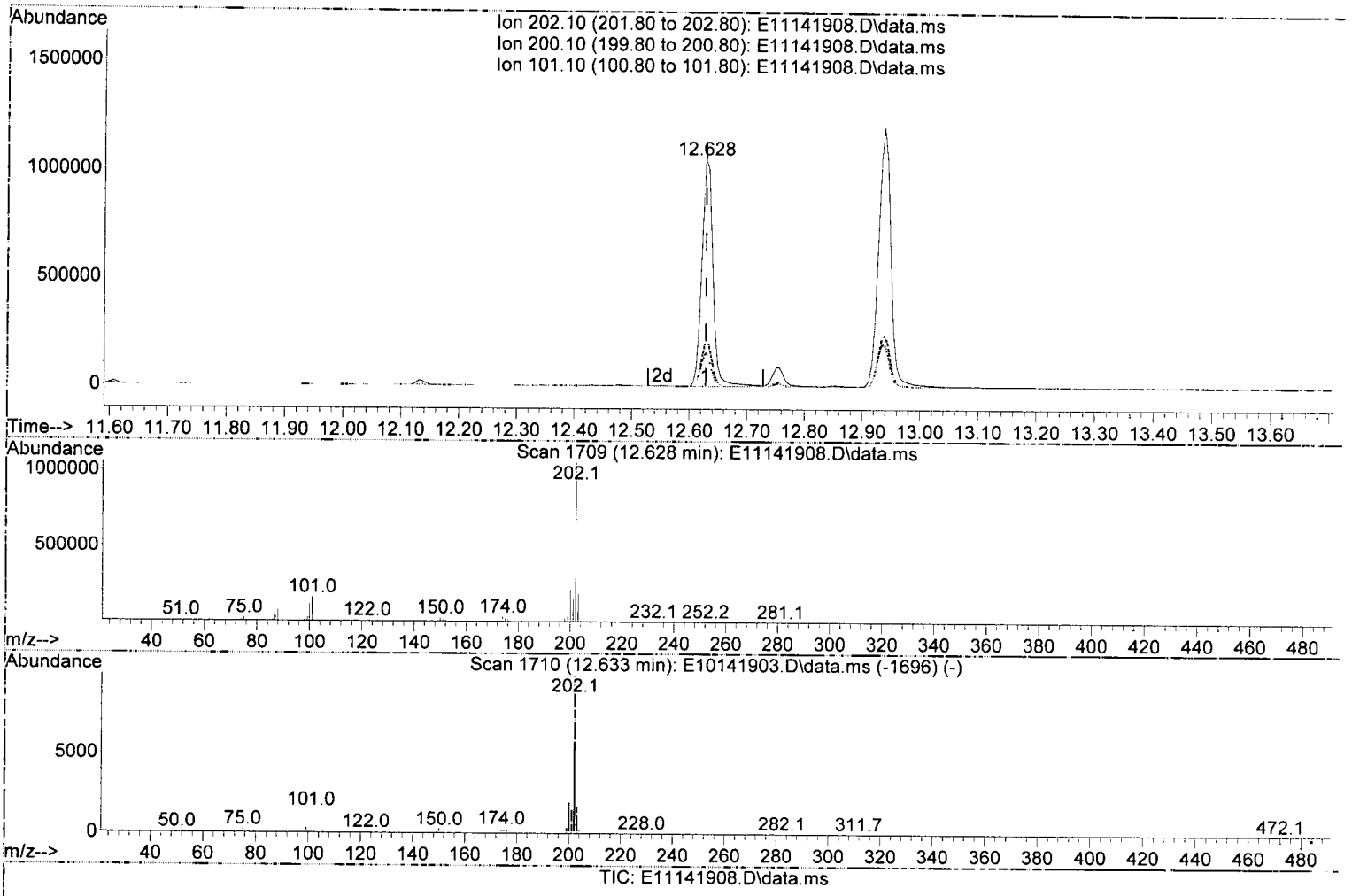
response 47968

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	11.80	12.37
166.10	20.90	21.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(75) Fluoranthene (T)

12.628min (-0.000) 1652.64 ng/ml

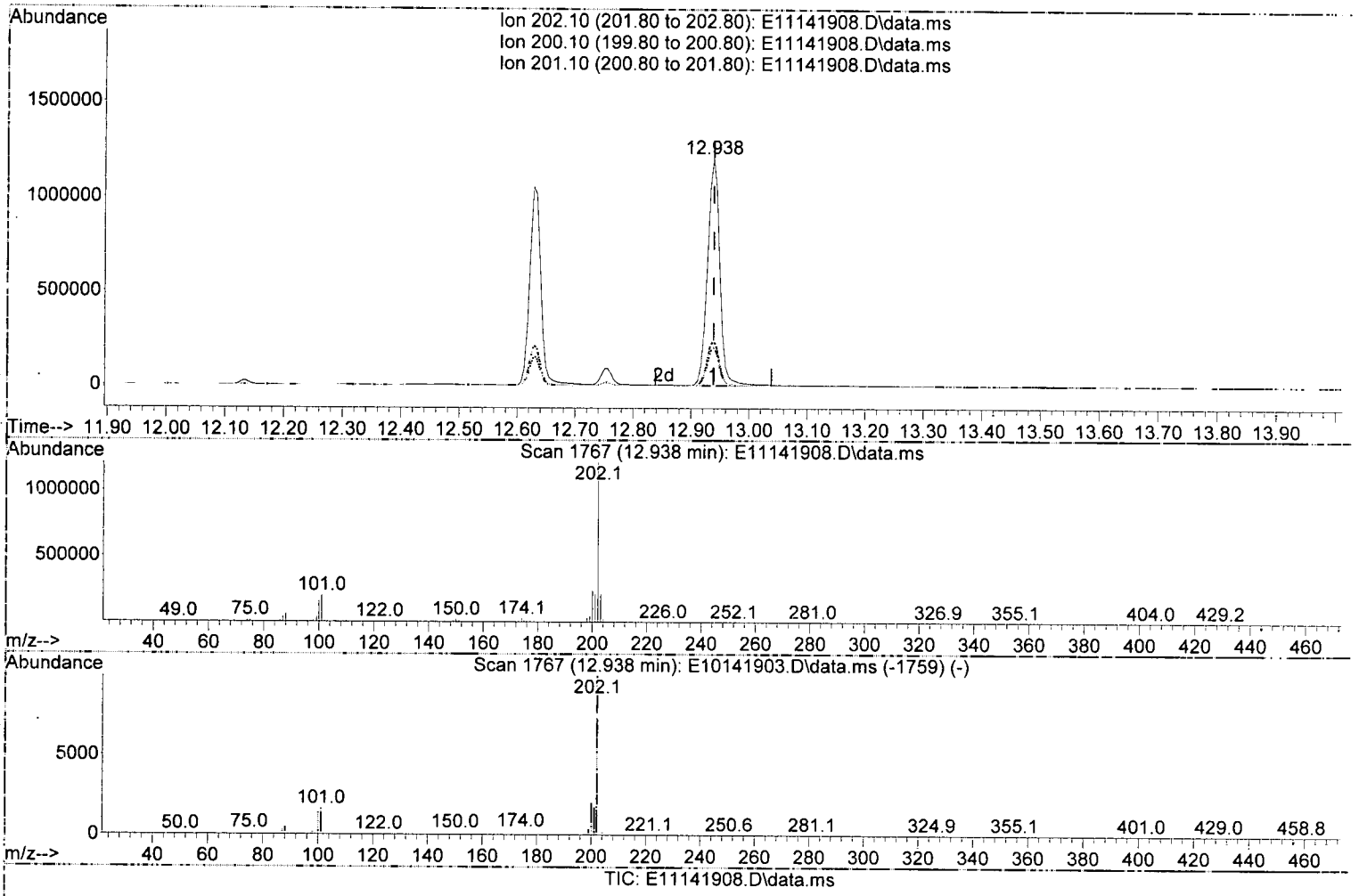
response 1416944

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	19.98
101.10	14.50	14.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(77) Pyrene (T)

12.938min (-0.000) 2021.60 ng/ml

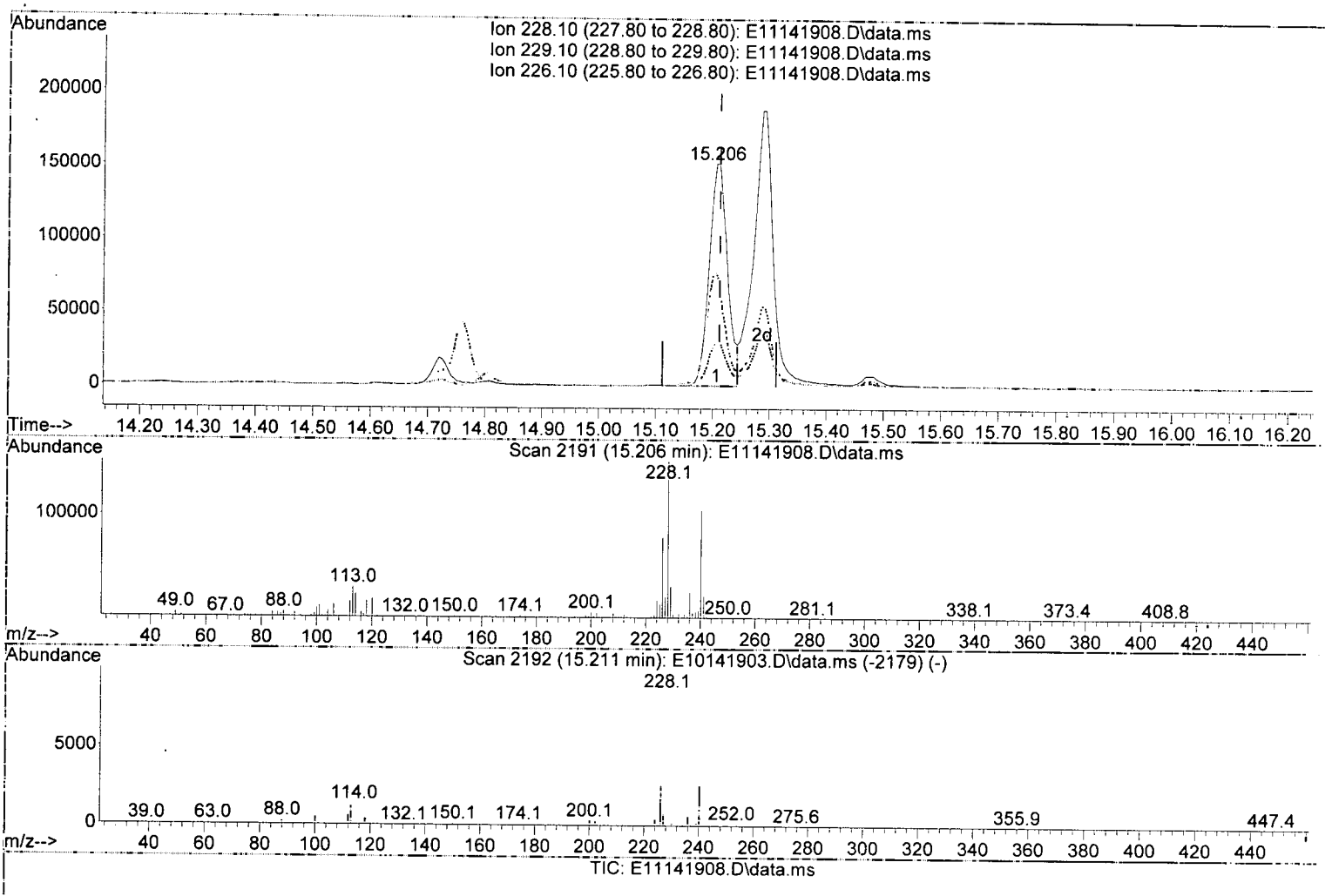
response 1783531

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	19.84
201.10	16.80	17.43
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(83) Benz(a)anthracene (T)

15.206min (-0.005) 449.42 ng/ml

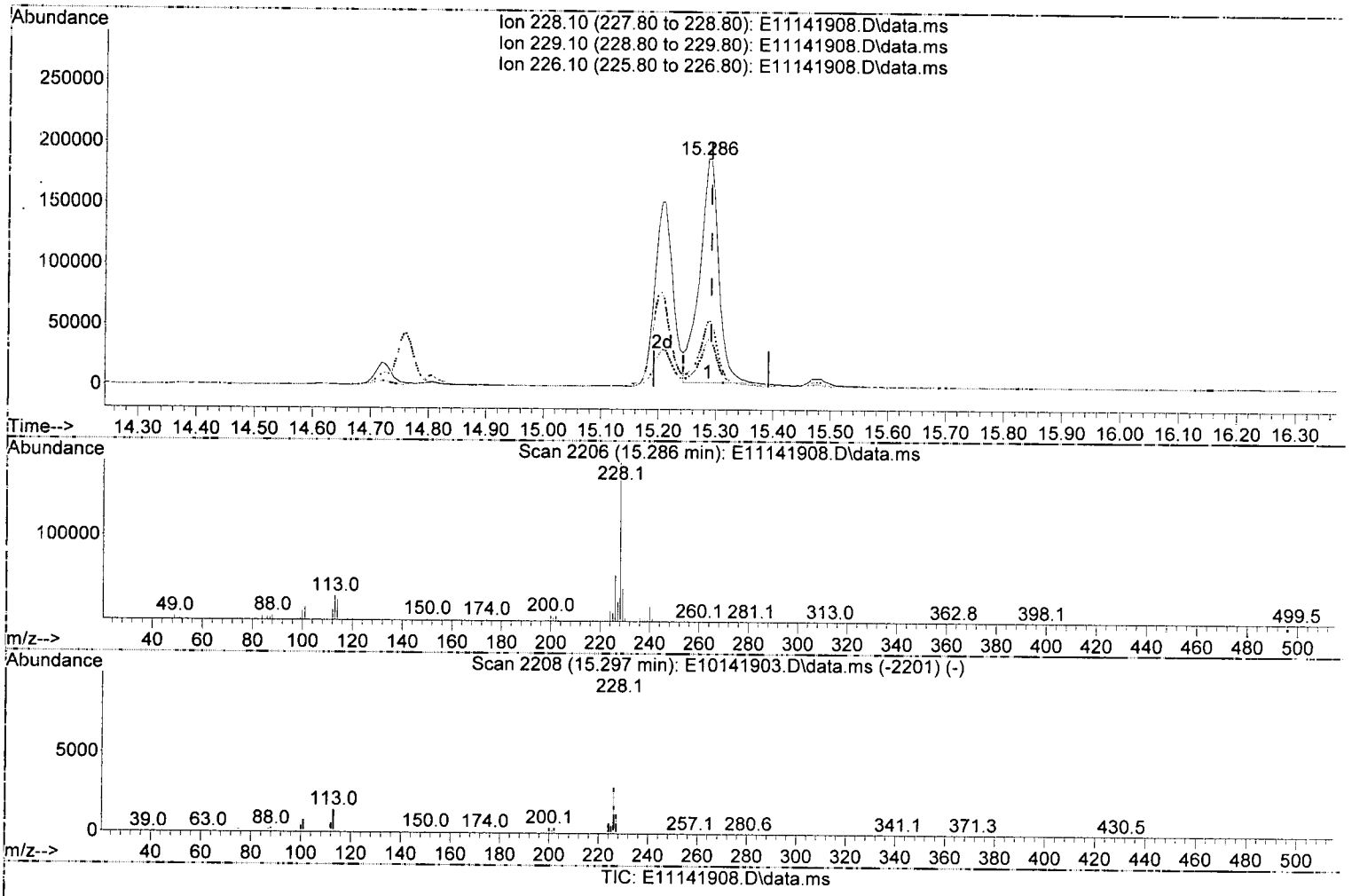
response 338926

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	20.02
226.10	25.90	51.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(84) Chrysene (T)

15.286min (-0.005) 565.29 ng/ml

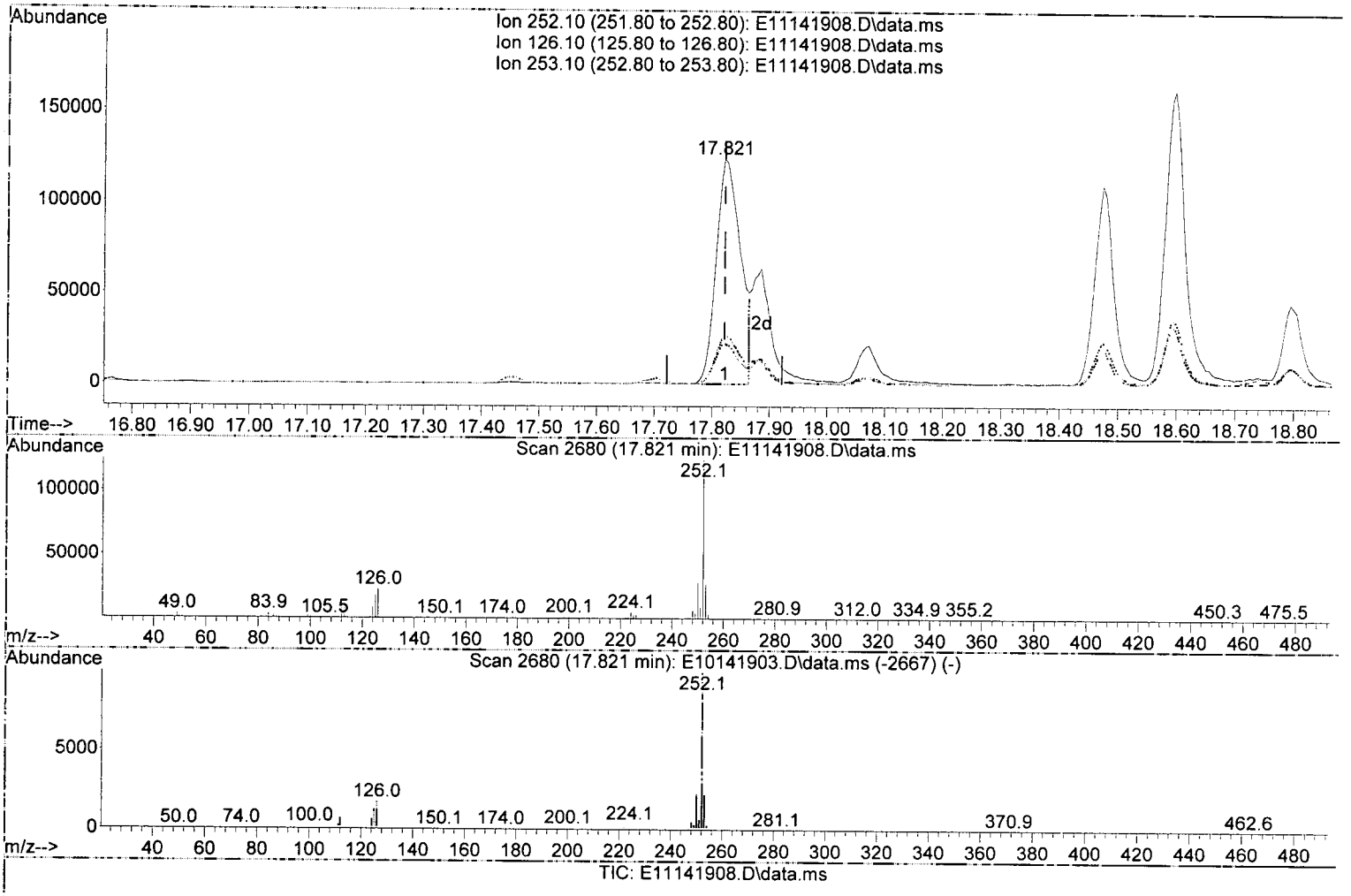
response 425794

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	20.90
226.10	29.30	29.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.821min (-0.000) 553.28 ng/ml

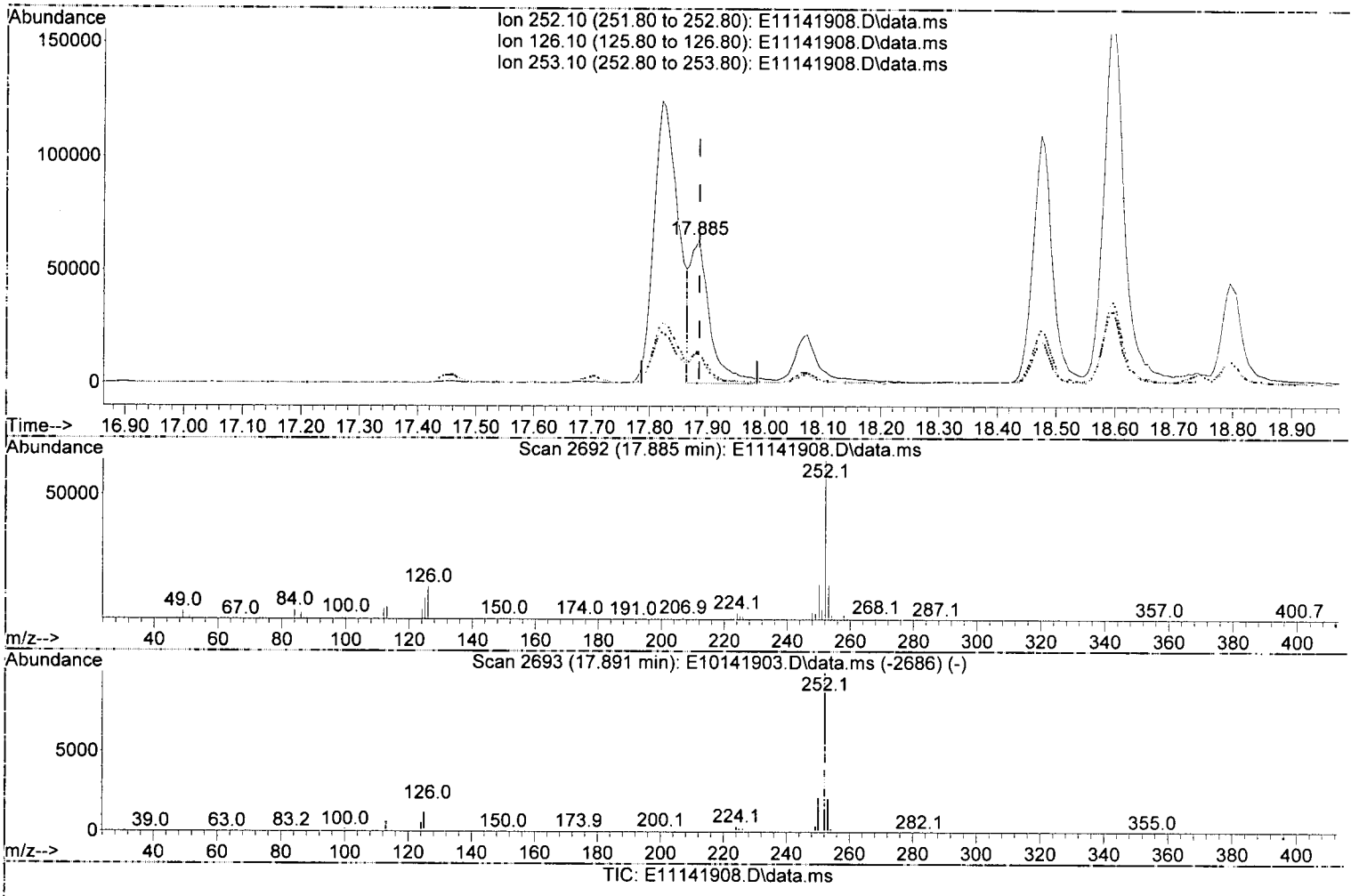
response 364135

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	18.24
253.10	21.80	21.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(89) Benzo(k)fluoranthene (T)

17.885min (-0.000) 228.43 ng/ml m

DTH 11/15/19

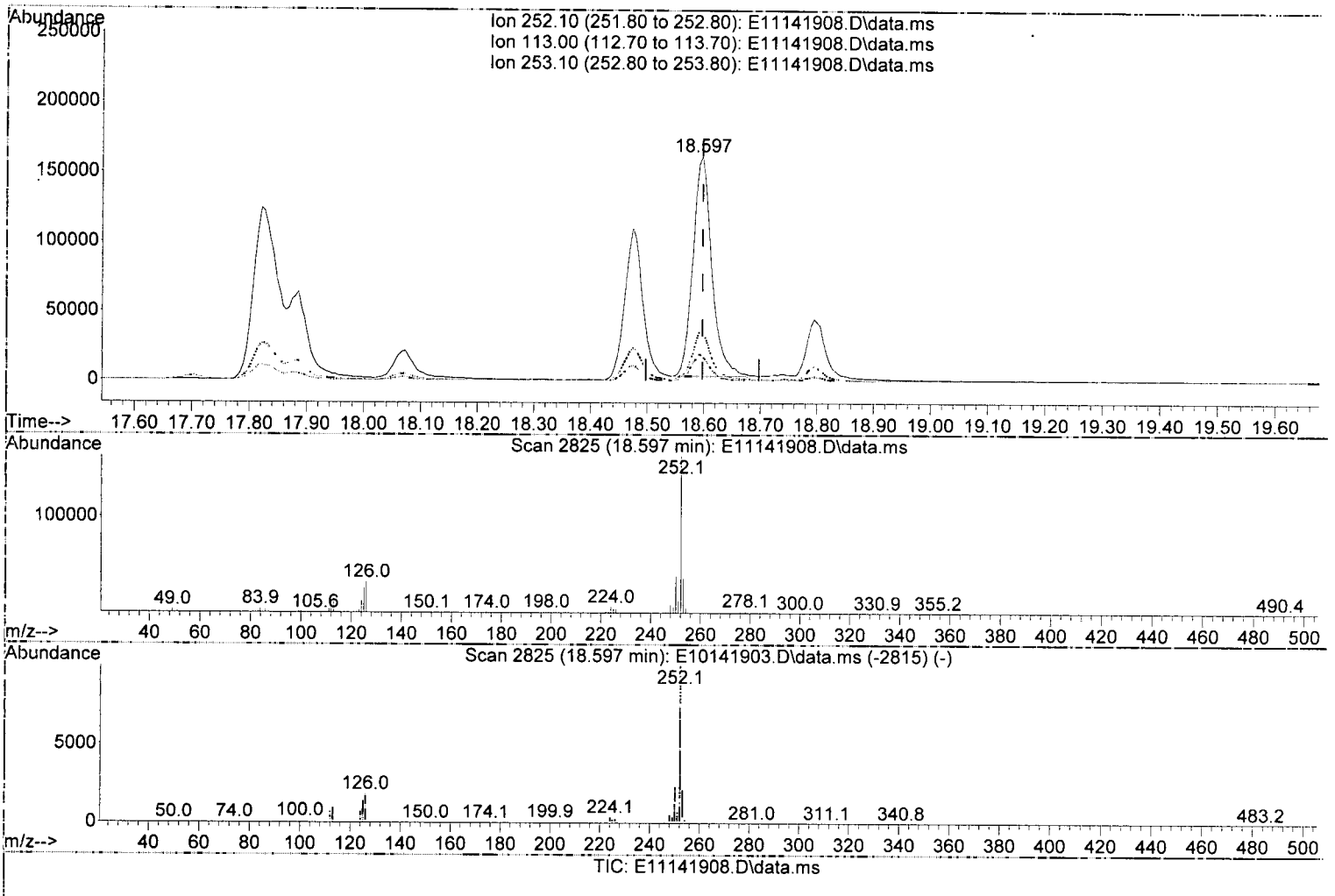
response 149473

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	20.36
253.10	22.00	21.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(92) Benzo(a)pyrene (T)

18.597min (-0.000) 628.33 ng/ml

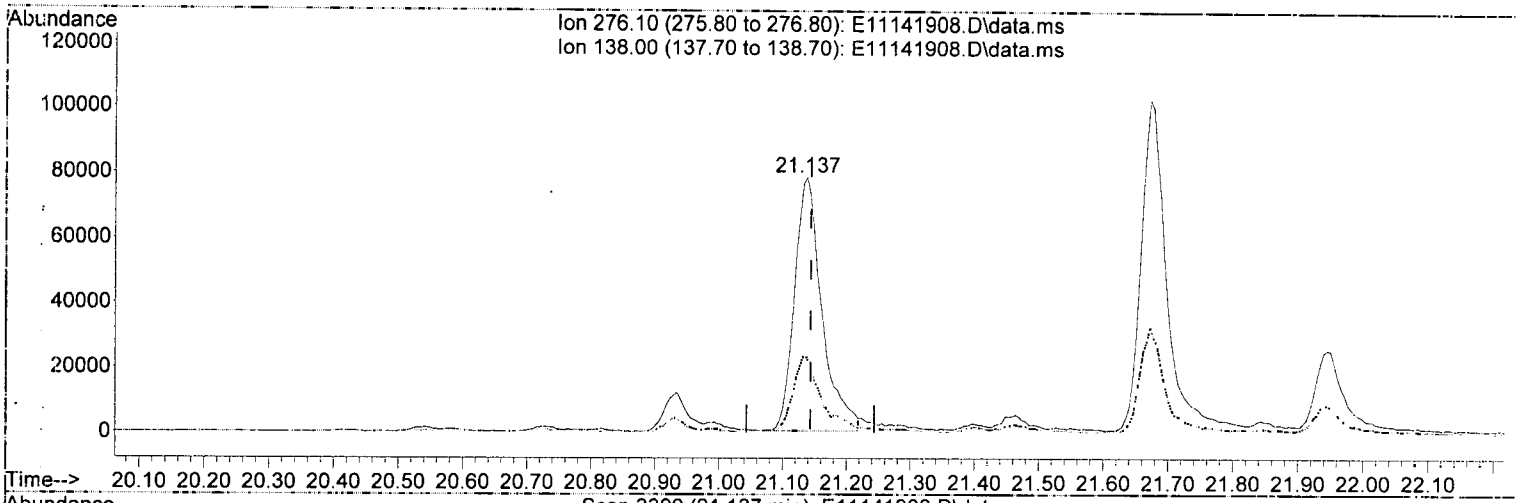
response 370124

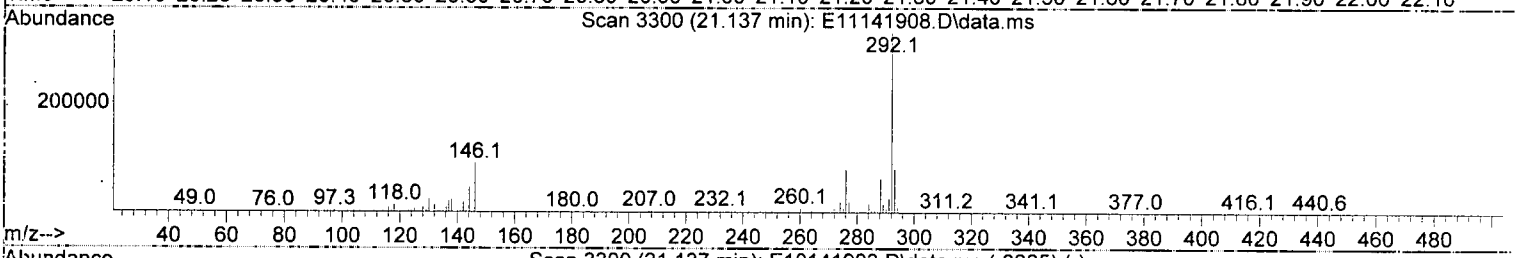
Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	11.64
253.10	21.70	22.30
0.00	0.00	0.00

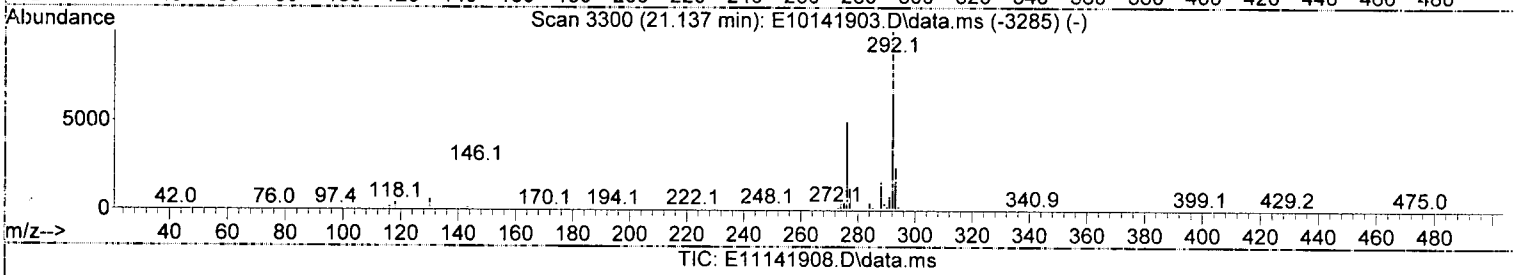
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5







(95) Indeno(1,2,3-cd)pyrene (T)

21.137min (-0.005) 410.83 ng/ml

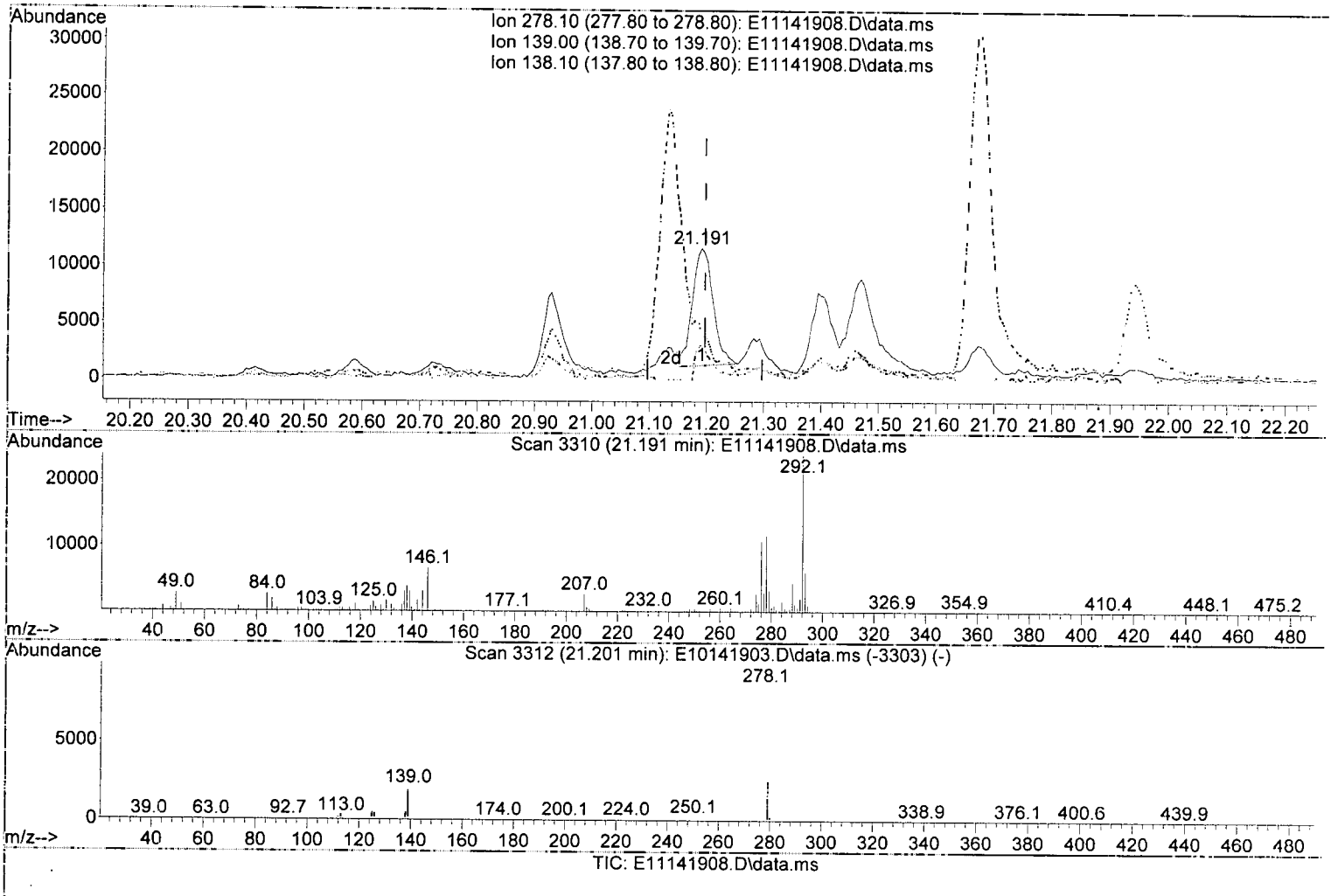
response 233339

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	29.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(96) Dibenz(a,h)anthracene (T)

21.191min (-0.005) 49.57 ng/ml

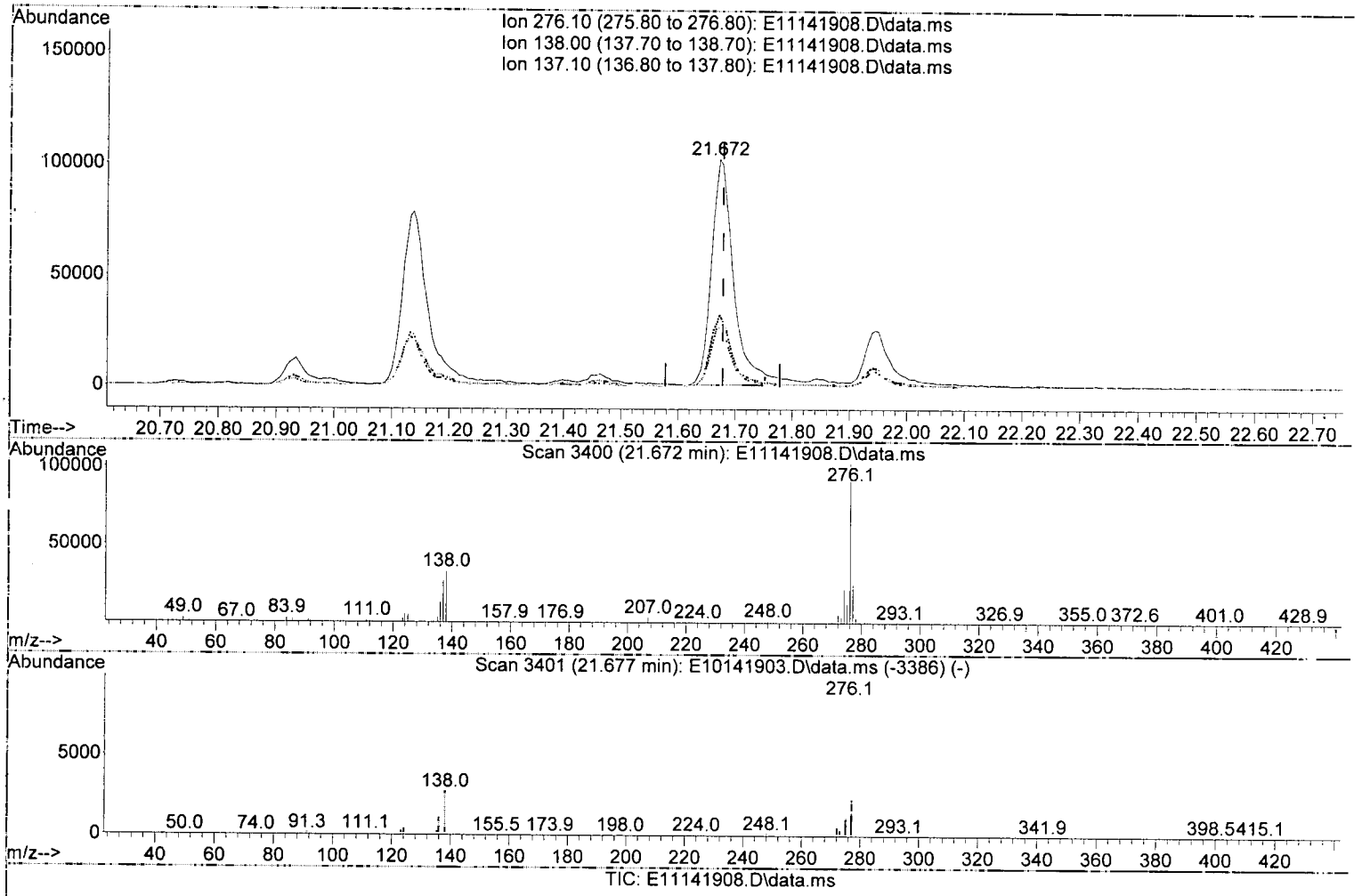
response 25933

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	23.10	26.43
138.10	17.40	33.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141908.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.672min (-0.005) 497.77 ng/ml

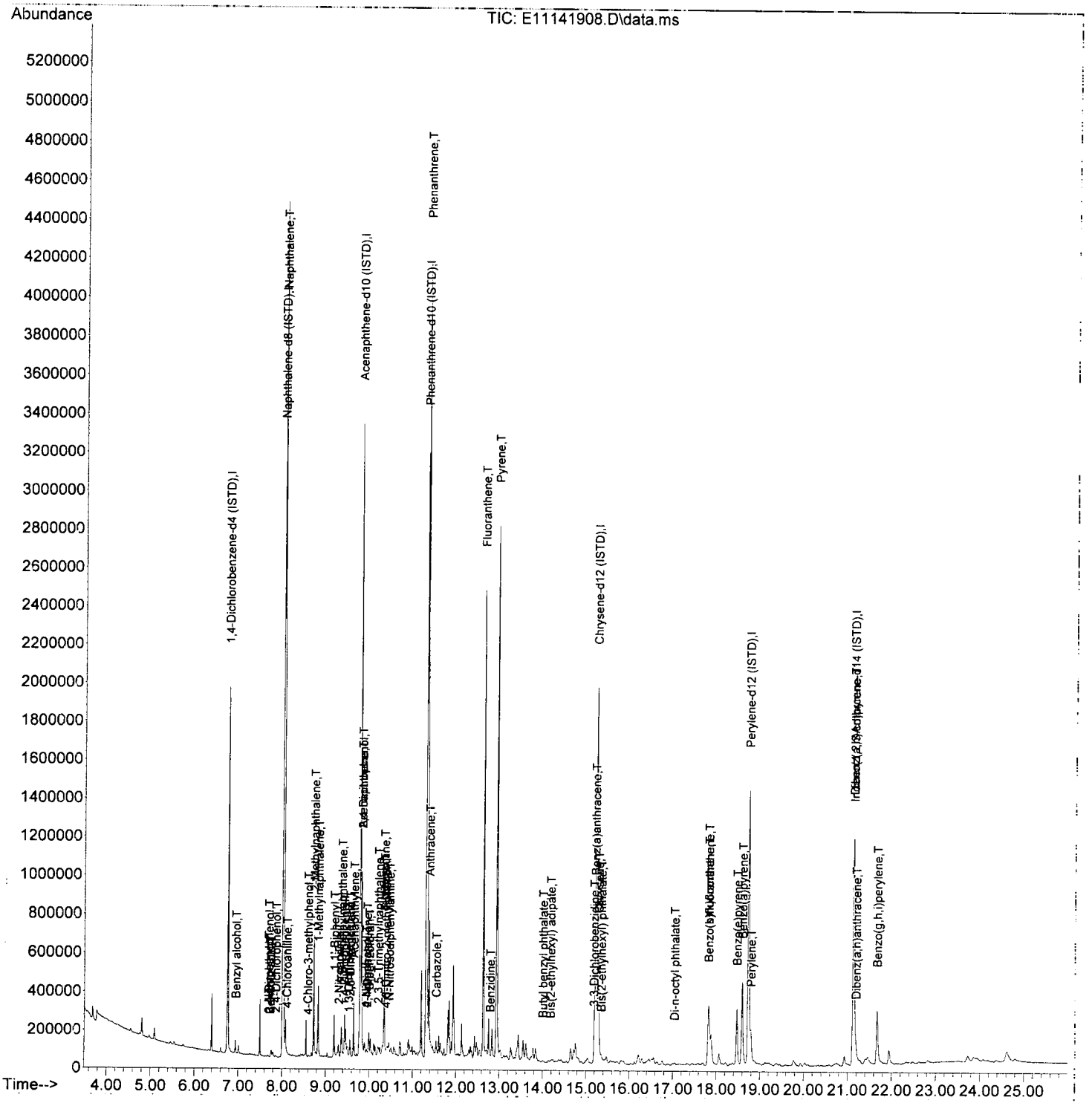
response 271561

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	32.50	31.99
137.10	27.70	25.93
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141908.D
Acq On : 14 Nov 2019 12:14 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-07@1000
Misc : 1000x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:17 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	406398	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1645220	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	803039	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1622202	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1449045	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1316598	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1017776	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	8801	37.04 ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	7910	26.83 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.311	82	6772	28.82 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.098	172	24303	40.40 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.606	330	1316	46.58 ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.152	244	34299	52.44 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.295	74	115	N.D.	
3) Pyridine	4.327	79	95	N.D.	
6) Phenol	6.434	94	102	N.D.	
7) Aniline	6.423	93	54	N.D.	
8) Bis(2-chloroethyl) ether	6.423	93	54	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	6.931	108	125	35.66 ng/ml#	5
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.942	107	57	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.985	45	53	N.D.	
16) N-Nitrosodi-n-propylamine	7.129	70	69	N.D.	
17) 3+4-Methylphenol	7.167	107	53	N.D.	
18) Hexachloroethane	7.247	117	60	N.D.	
20) Nitrobenzene	7.306	77	66	N.D.	
22) Isophorone	7.536	82	79	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	7.653	105	55	819.99 ng/ml#	34
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.028	128	10426	11.92 ng/ml	97
30) 4-Chloroaniline	8.033	127	1221	14.41 ng/ml#	35
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.509	107	81	65.27 ng/ml#	1
33) 2-Methylnaphthalene	8.739	142	1697	2.88 ng/ml	88
34) 1-Methylnaphthalene	8.836	142	683	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	9.199	154	766	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.370	156	538	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.493	163	50	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	9.643	152	7094	9.14 ng/ml	97
50) 3-Nitroaniline	9.788	138	125	N.D.	
51) Acenaphthene	9.820	153	4349	8.15 ng/ml	91
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.975	165	211	62.06 ng/ml#	28
55) Dibenzofuran	10.002	168	700	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	10.226	149	142	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.210	170	370	N.D.	
60) Fluorene	10.355	166	1822	3.22 ng/ml	96
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	10.461	169	135	N.D.	
66) Azobenzene (1,2-DPH)	10.494	77	144	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	11.328	178	49466	53.60 ng/ml	98
72) Anthracene	11.381	178	9311	10.56 ng/ml	98
73) Carbazole	11.553	167	2775	3.82 ng/ml	87
74) Di-n-butyl phthalate	11.879	149	899	N.D.	
75) Fluoranthene	12.628	202	82708	93.29 ng/ml	99
76) Benzidine	12.788	184	82	152.53 ng/ml#	42
77) Pyrene	12.938	202	120524	132.12 ng/ml	99
80) Butyl benzyl phthalate	13.997	149	1421	36.76 ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.173	129	763	55.59 ng/ml	66
82) 3,3-Dichlorobenzidine	15.179	252	161	25.61 ng/ml#	41
83) Benz(a)anthracene	15.206	228	44493	57.08 ng/ml	89
84) Chrysene	15.286	228	57119	73.37 ng/ml	94
85) Bis(2-ethylhexyl) phth...	15.361	149	1290	60.86 ng/ml	96
87) Di-n-octyl phthalate	17.024	149	272	74.51 ng/ml#	1
88) Benzo(b)fluoranthene	17.827	252	68842	108.67 ng/ml	97
89) Benzo(k)fluoranthene	~~17.827~~	~~252~~	~~84829~~	~~127.93 ng/ml~~	~~95~~
90) Benzo(b+k)fluoranthene	17.827	252	102331	158.44 ng/ml	95
91) Benzo(e)pyrene	18.474	252	53408	83.59 ng/ml	96
92) Benzo(a)pyrene	18.591	252	56953	104.26 ng/ml	96
93) Perylene	18.795	252	20056	31.95 ng/ml	96
95) Indeno(1,2,3-cd)pyrene	21.137	276	58584	94.60 ng/ml	94
96) Dibenz(a,h)anthracene	21.202	278	6839	11.99 ng/ml	78
97) Benzo(g,h,i)perylene	21.678	276	69093	116.15 ng/ml	95

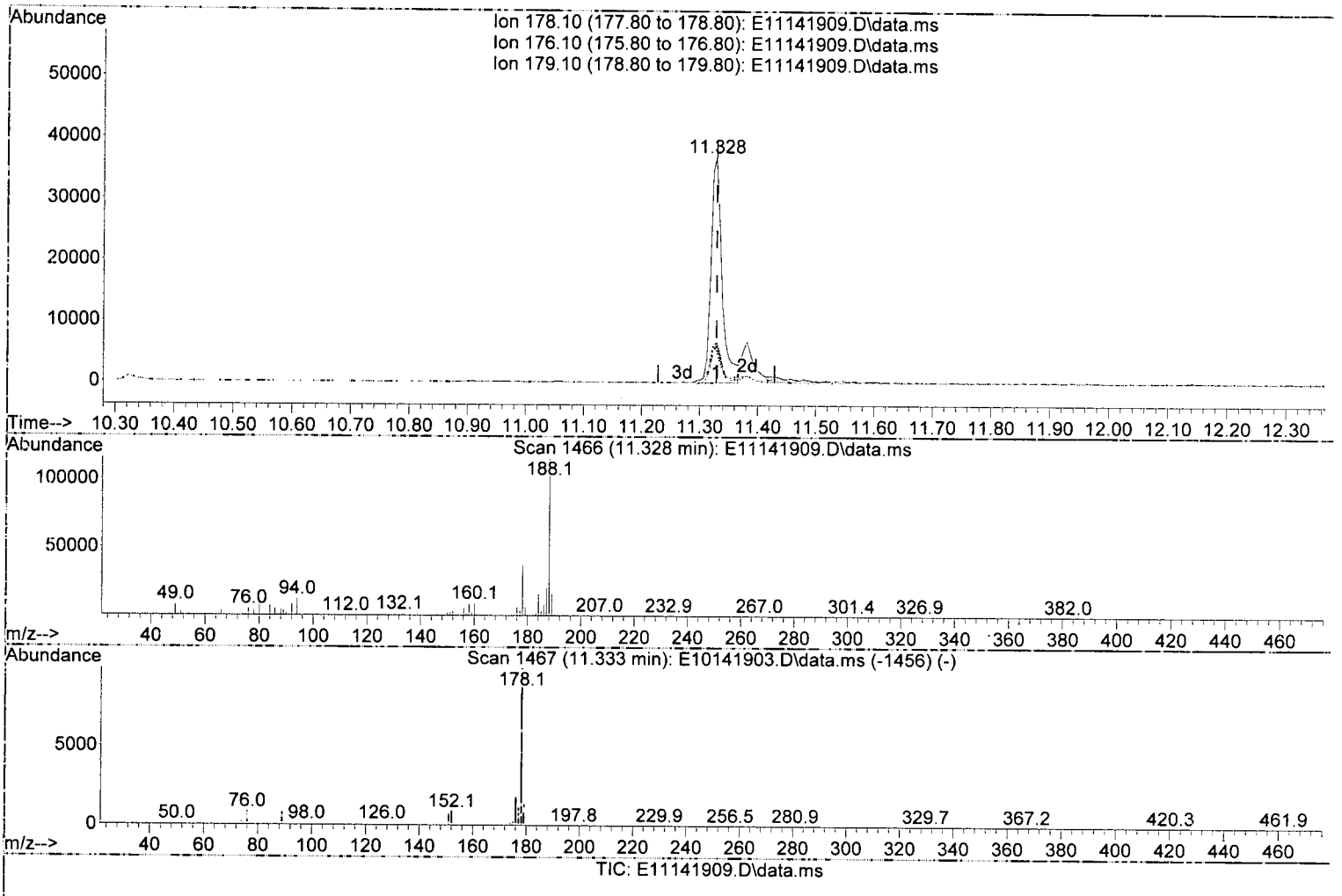
MI Hit mos

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.000) 53.60 ng/ml

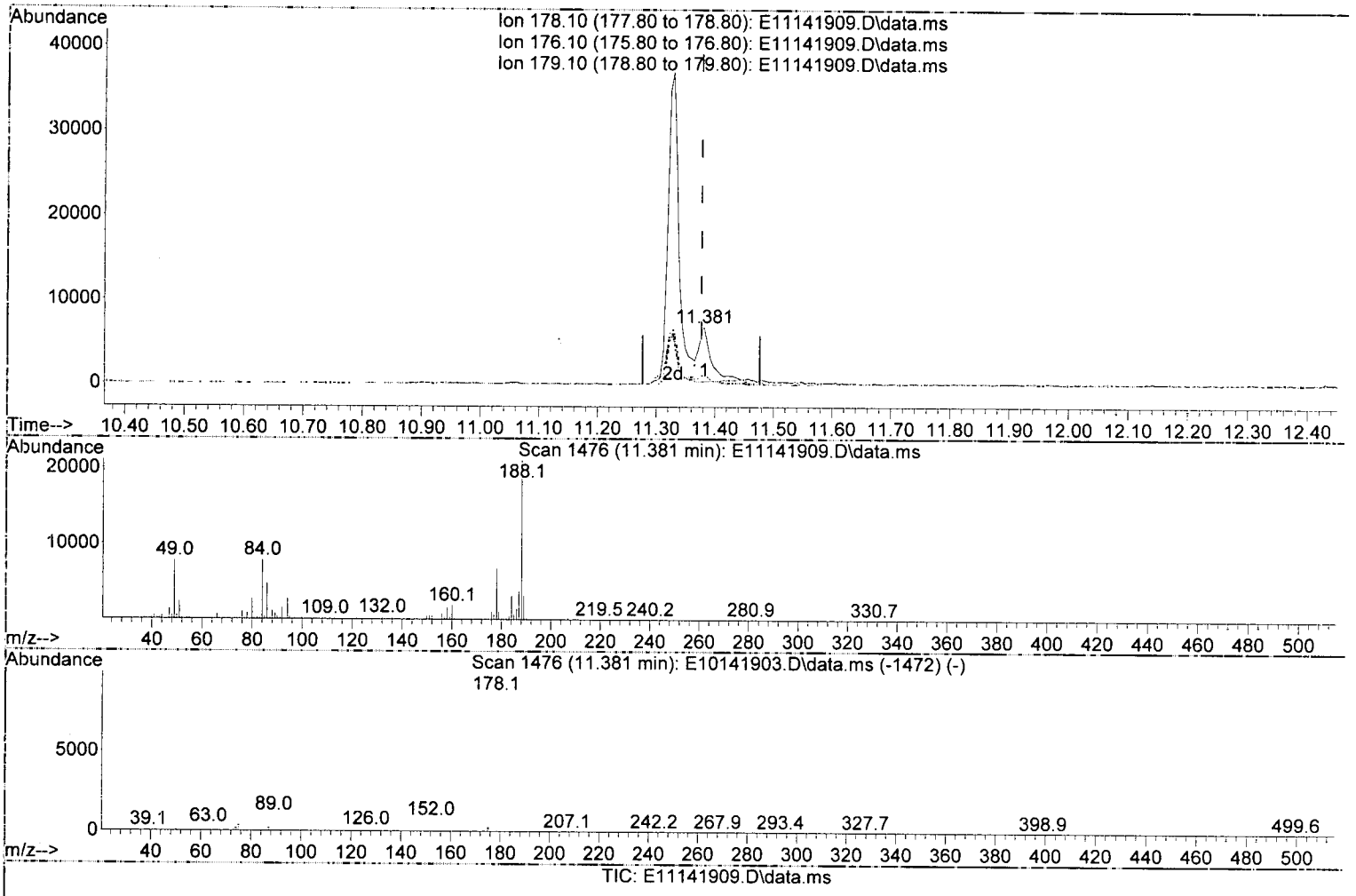
response 49466

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	17.66
179.10	15.20	16.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(72) Anthracene (T)

11.381min (+ 0.005) 10.56 ng/ml J

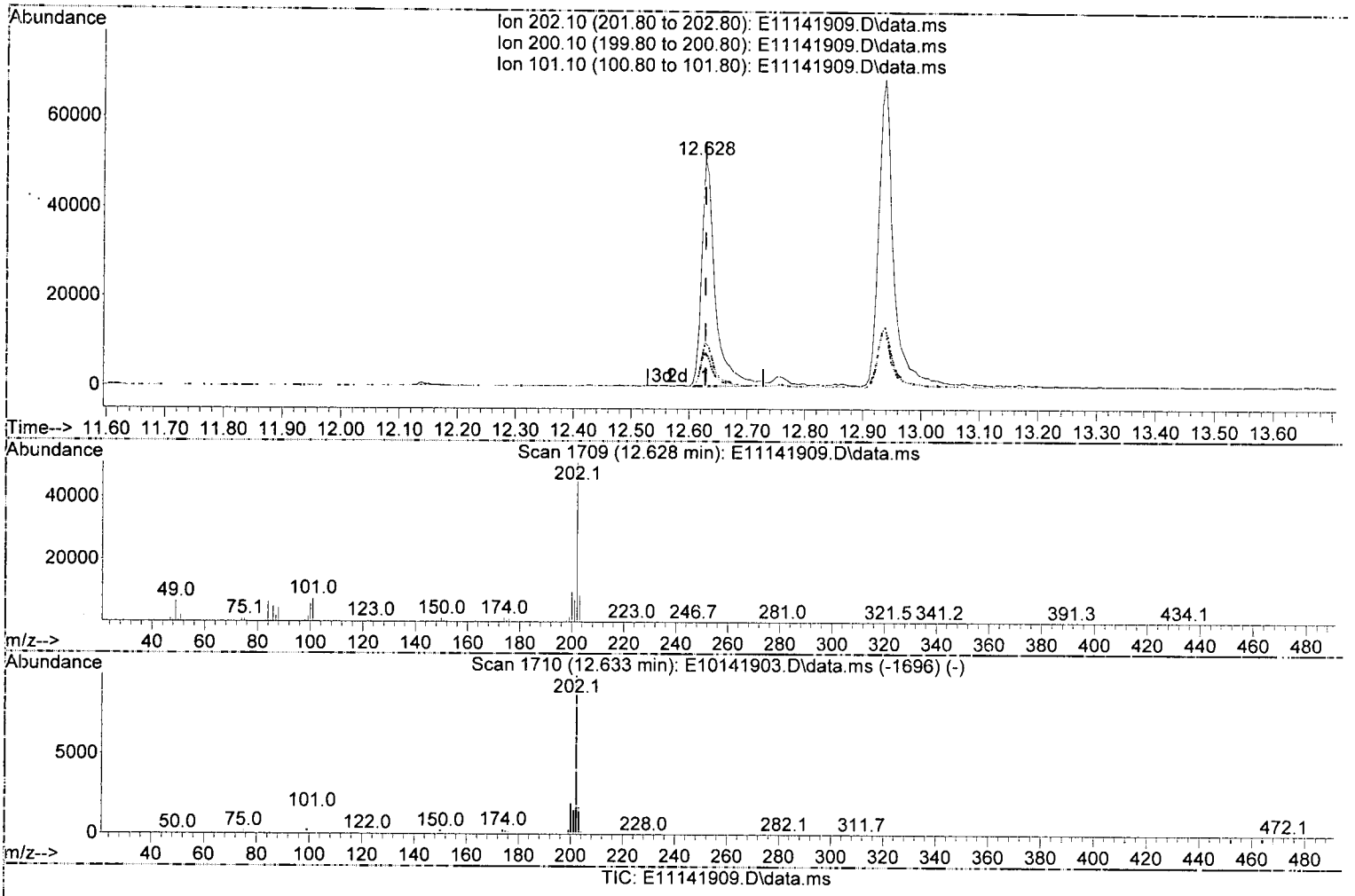
response 9311

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.10	16.18
179.10	15.50	15.58
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(75) Fluoranthene (T)

12.628min (-0.000) 93.29 ng/ml

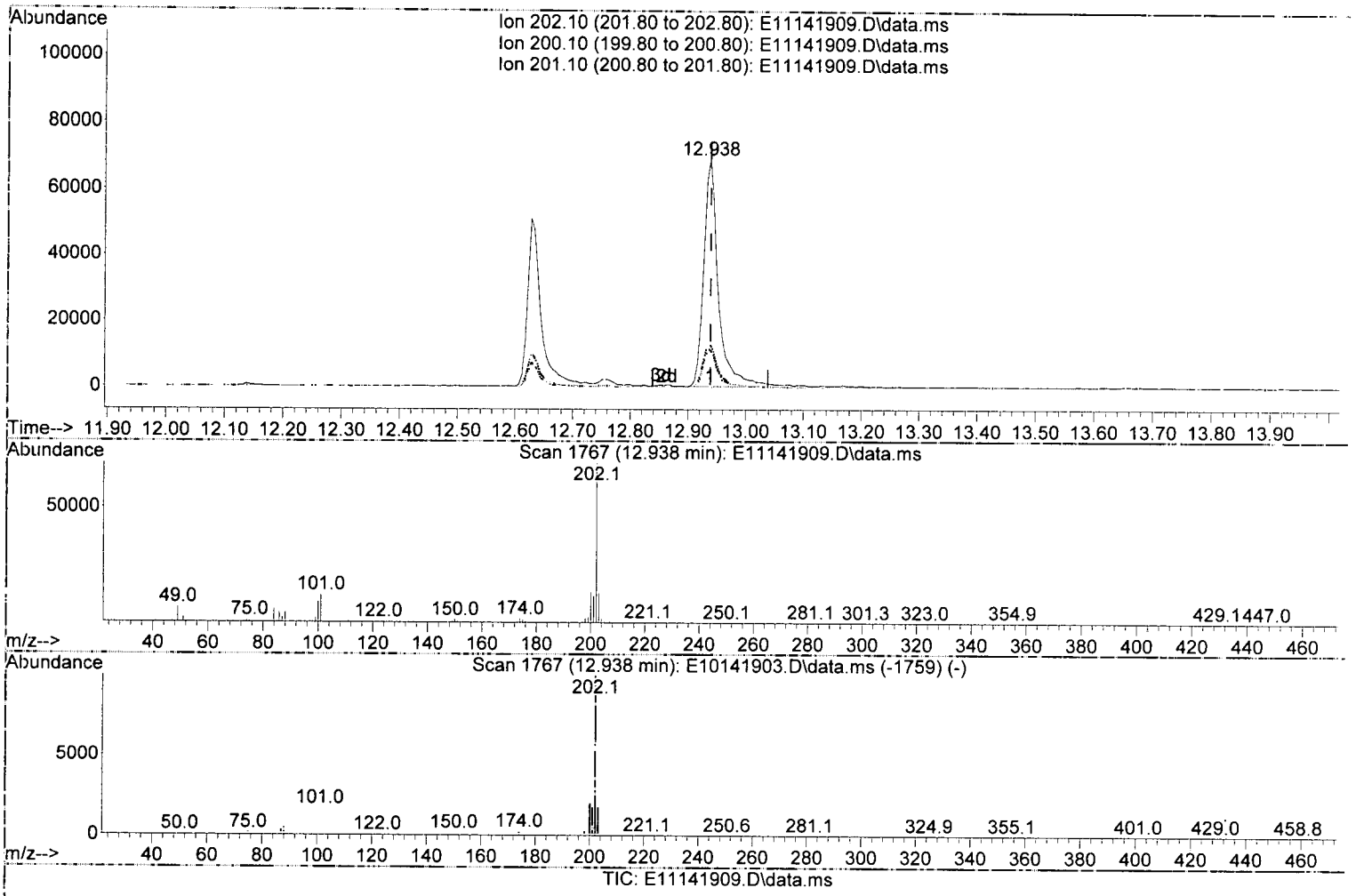
response 82708

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	19.23
101.10	14.50	14.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(77) Pyrene (T)

12.938min (-0.000) 132.12 ng/ml

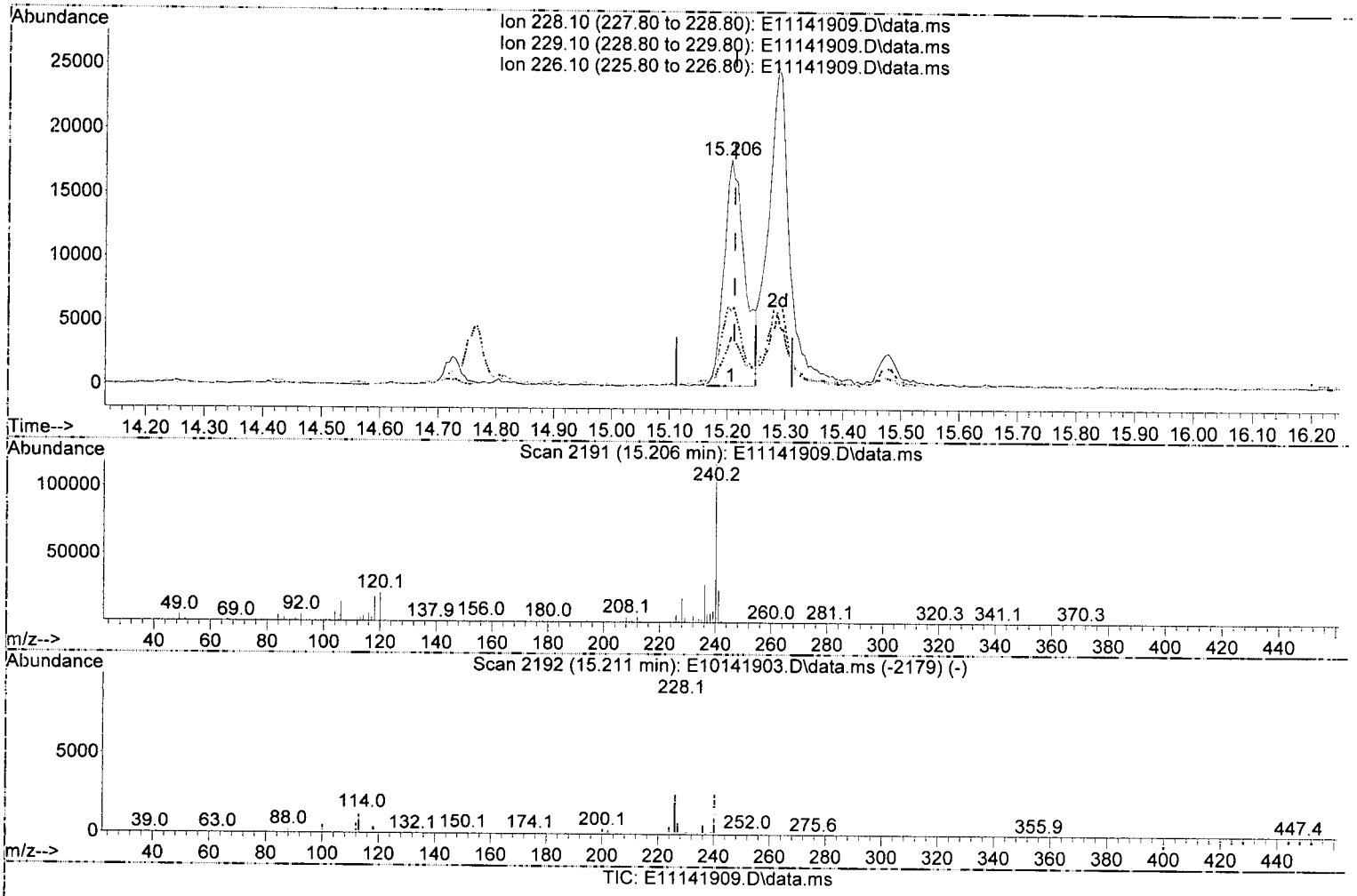
response 120524

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	19.26
201.10	16.80	16.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(83) Benz(a)anthracene (T)

15.206min (-0.005) 57.08 ng/ml

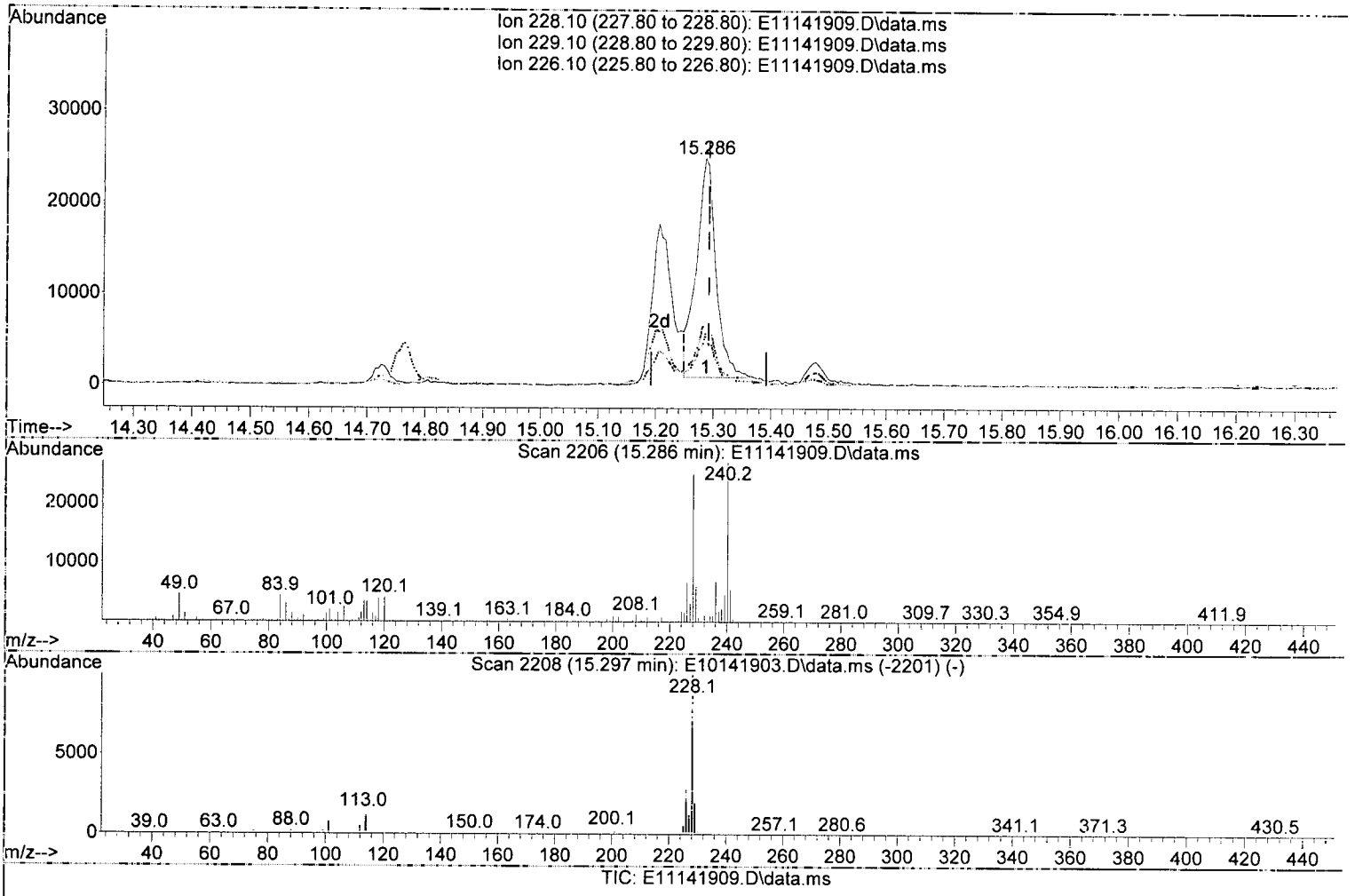
response 44493

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	21.68
226.10	25.90	33.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(84) Chrysene (T)

15.286min (-0.005) 73.37 ng/ml

response 57119

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	23.21
226.10	29.30	26.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
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Quant Title : EPA 8270D: Semivolatile Organics
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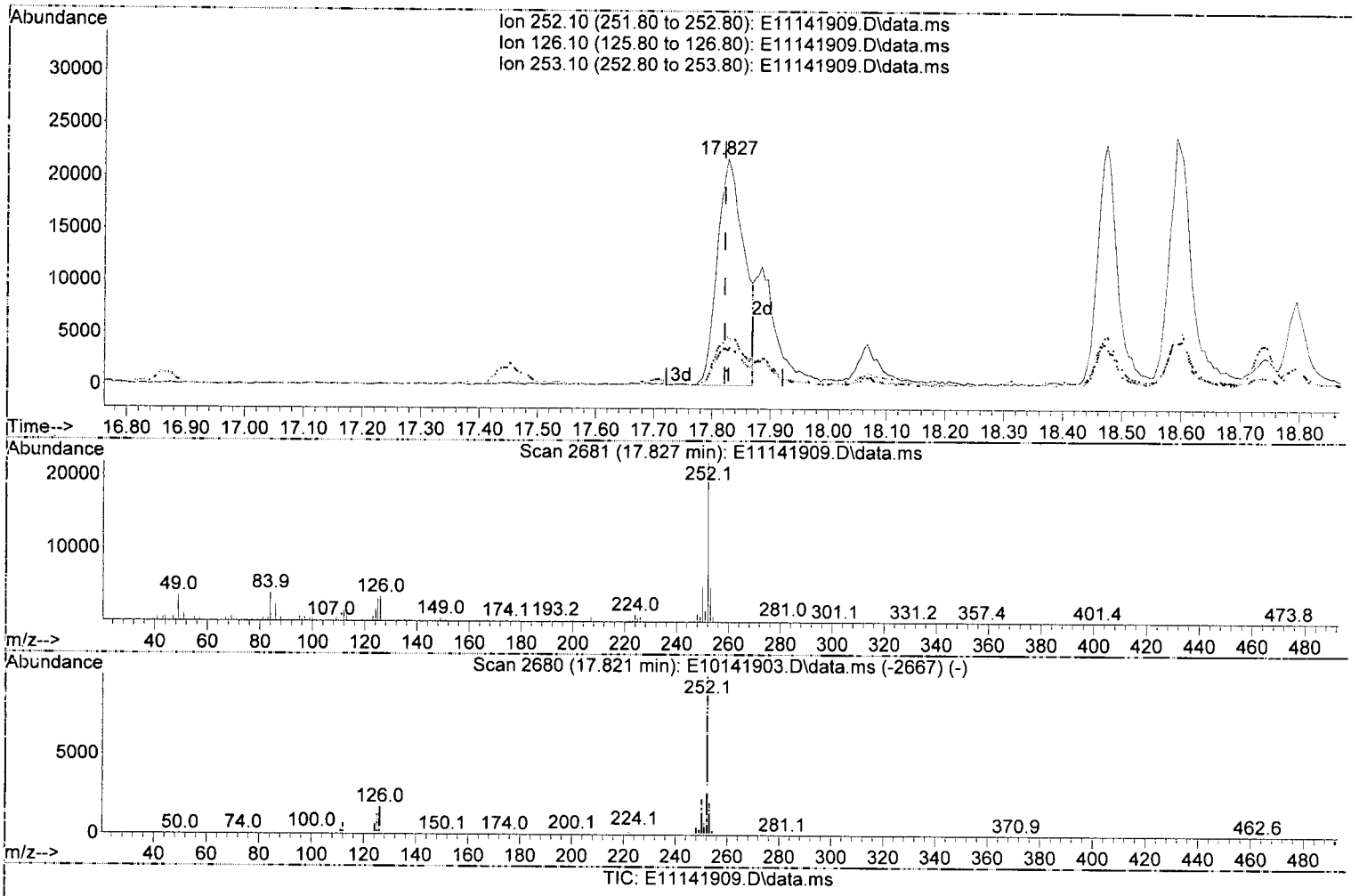
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.827min (+ 0.005) 108.67 ng/ml

response 68842

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	15.80
253.10	21.80	21.96
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
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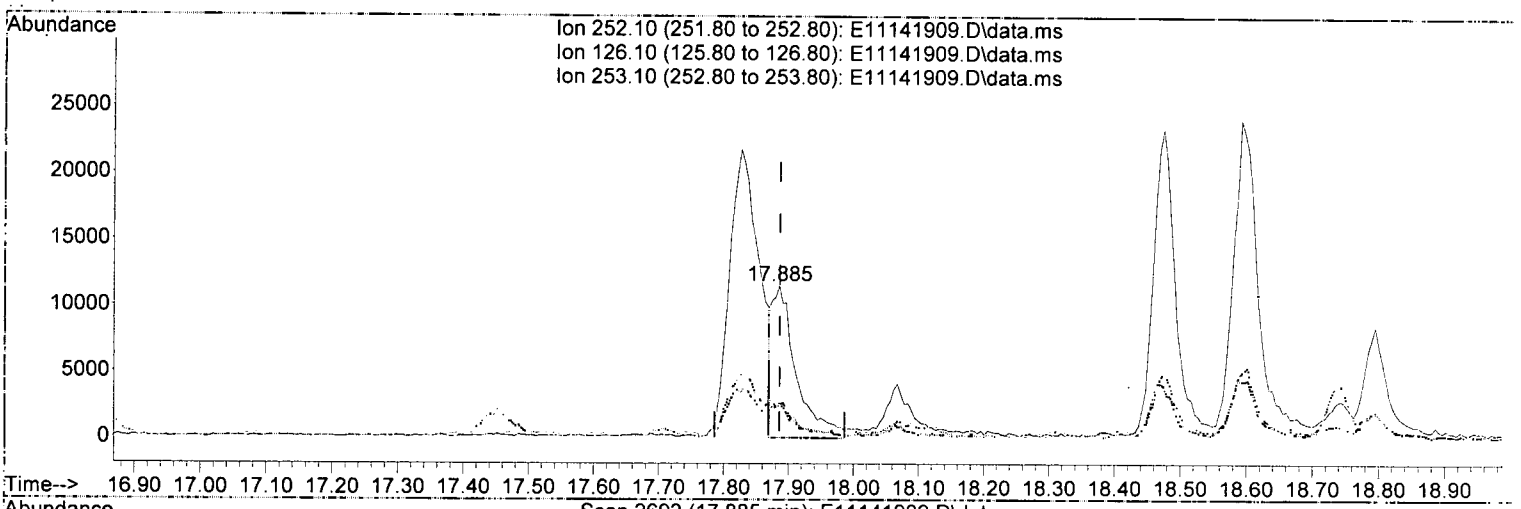
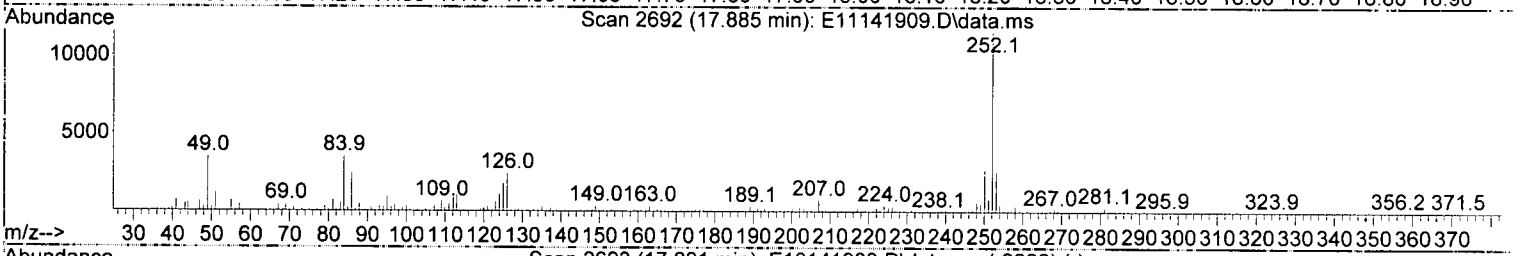
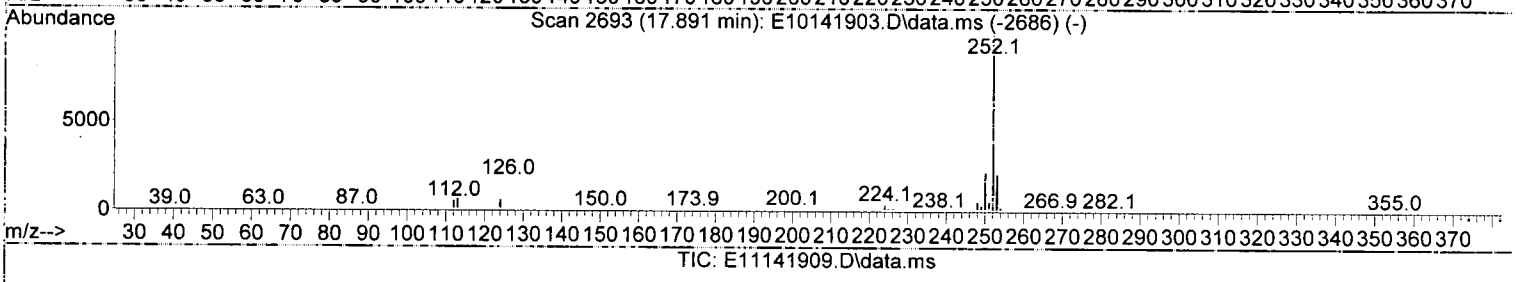






TIC: E11141909.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.885min (-0.000) 51.83 ng/ml m MOS DTH 11/15/19

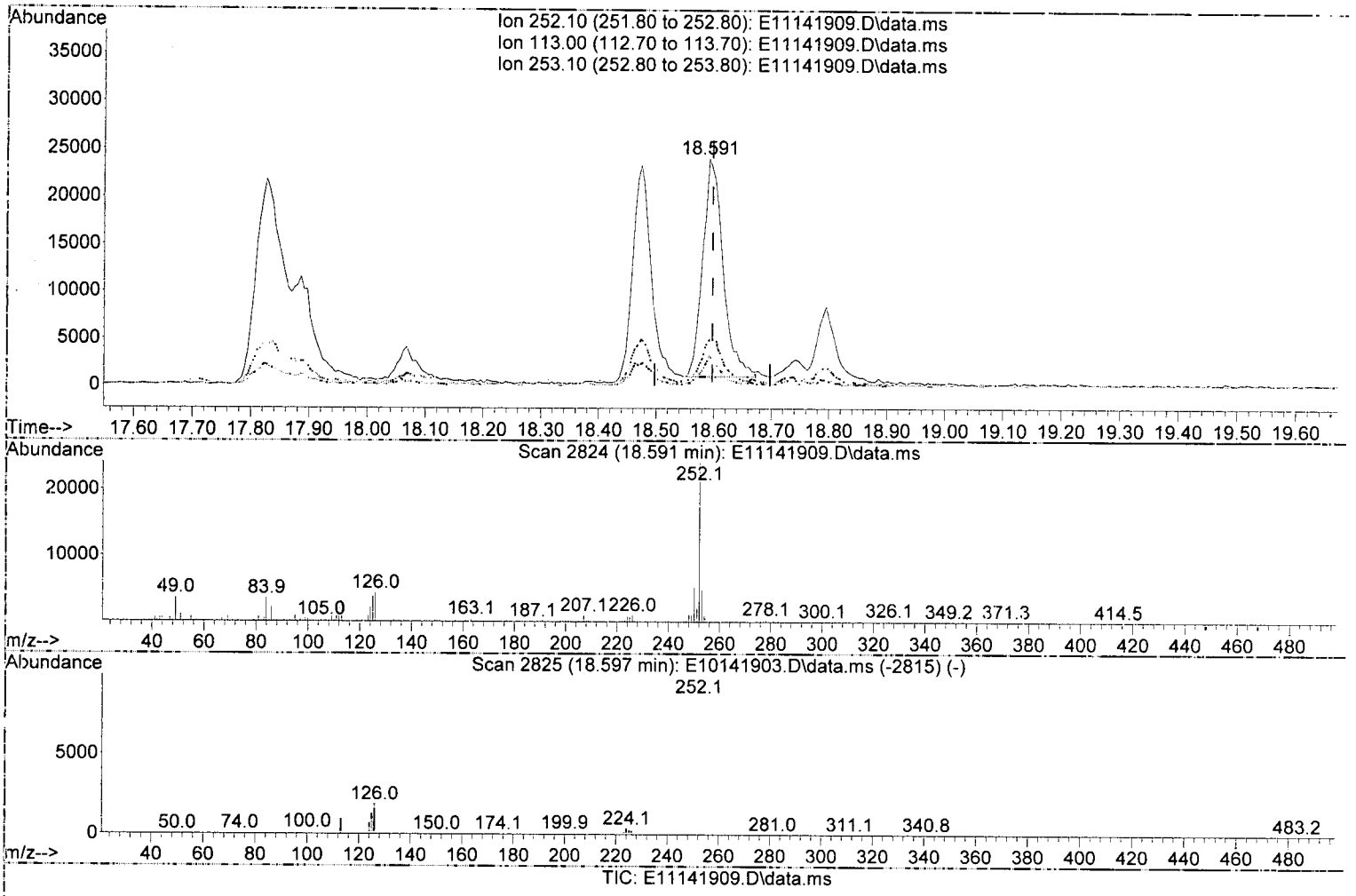
response 29761

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	21.25
253.10	22.00	22.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(92) Benzo(a)pyrene (T)

18.591min (-0.005) 104.26 ng/ml

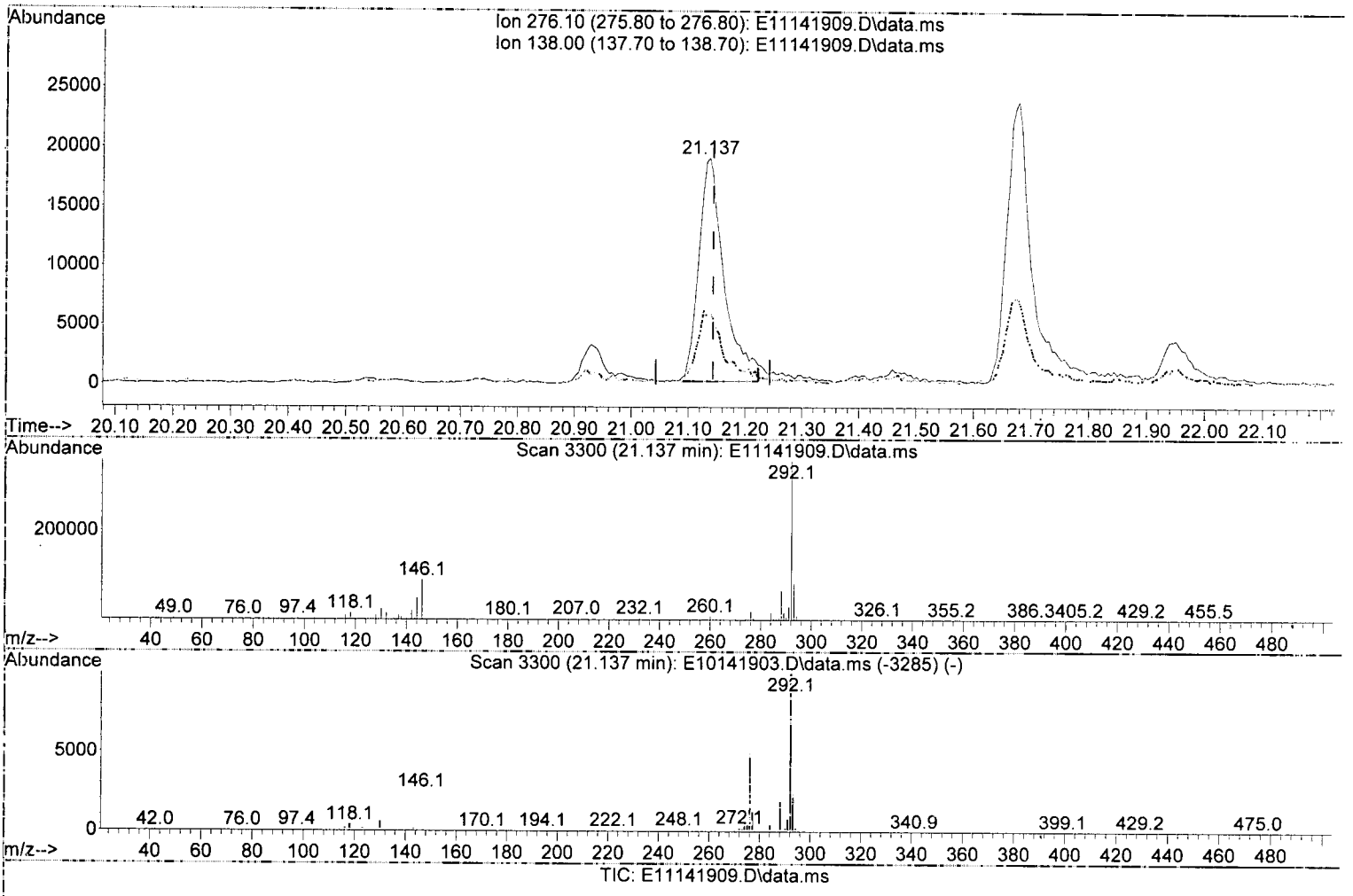
response 56953

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	13.19
253.10	21.70	20.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(95) Indeno(1,2,3-cd)pyrene (T)

21.137min (-0.005) 94.60 ng/ml

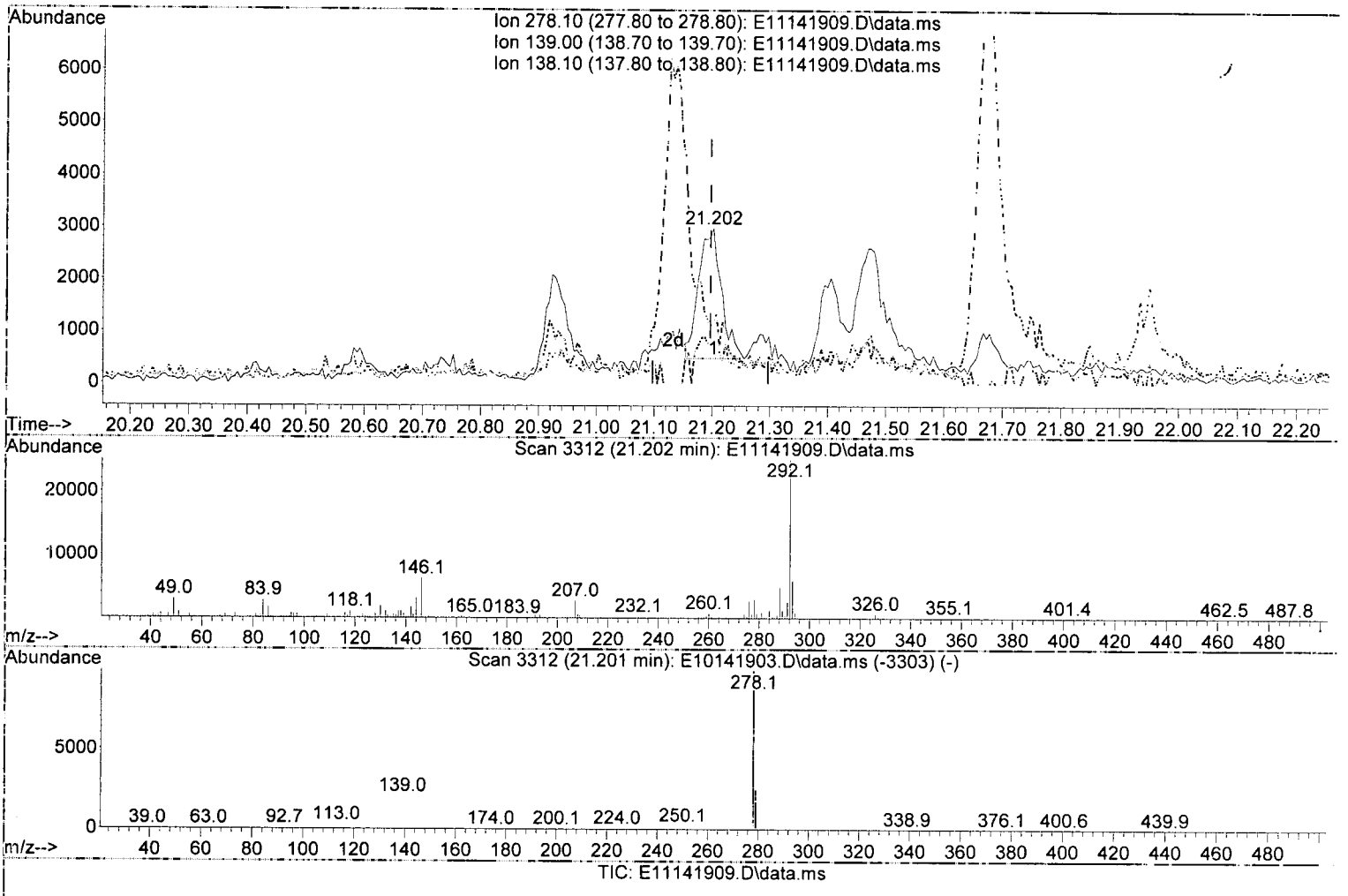
response 58584

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	31.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(96) Dibenz(a,h)anthracene (T)

21.202min (+ 0.005) 11.99 ng/ml J

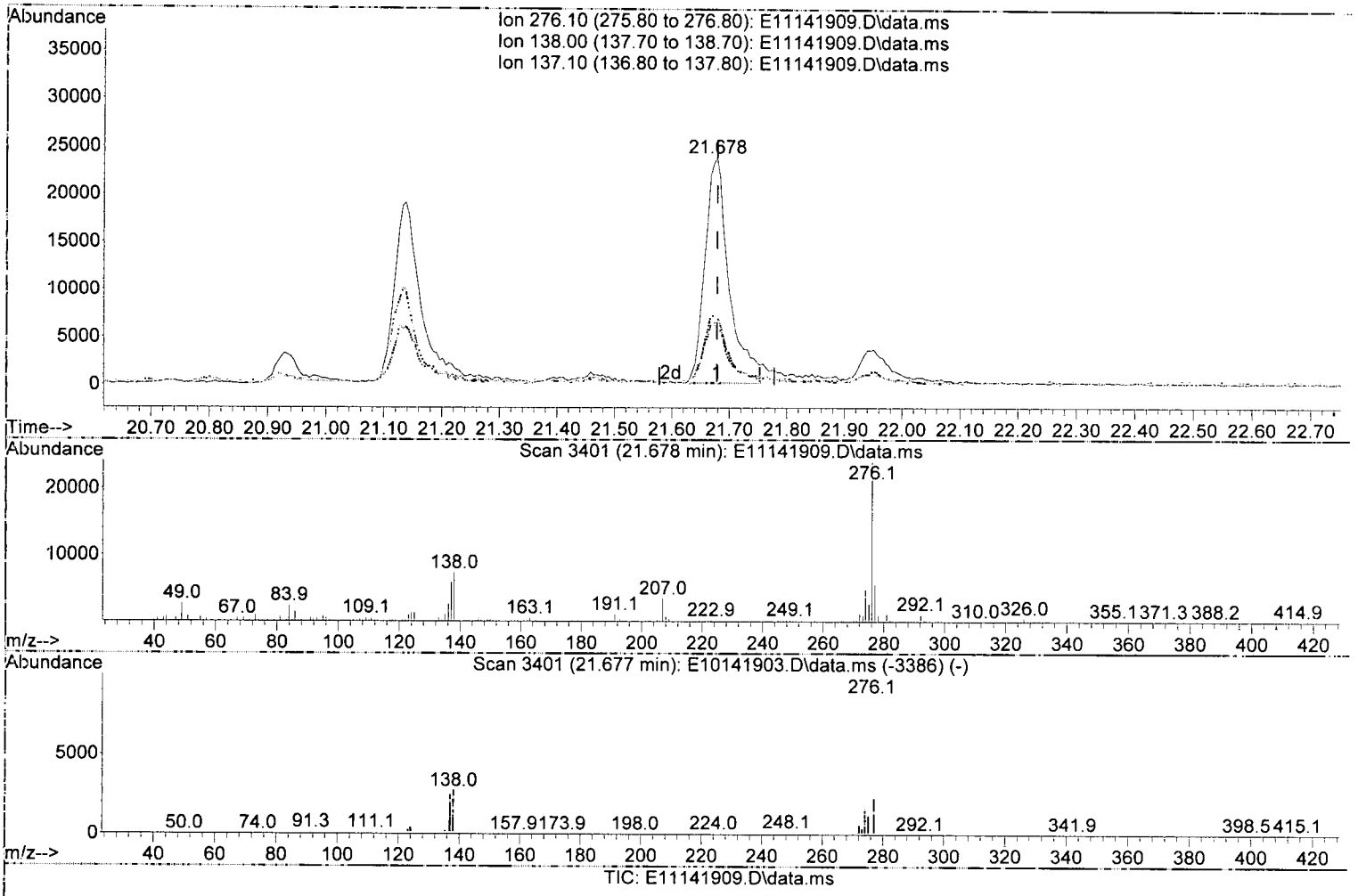
response 6839

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	23.10	24.27
138.10	17.40	38.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141909.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.678min (-0.000) 116.15 ng/ml

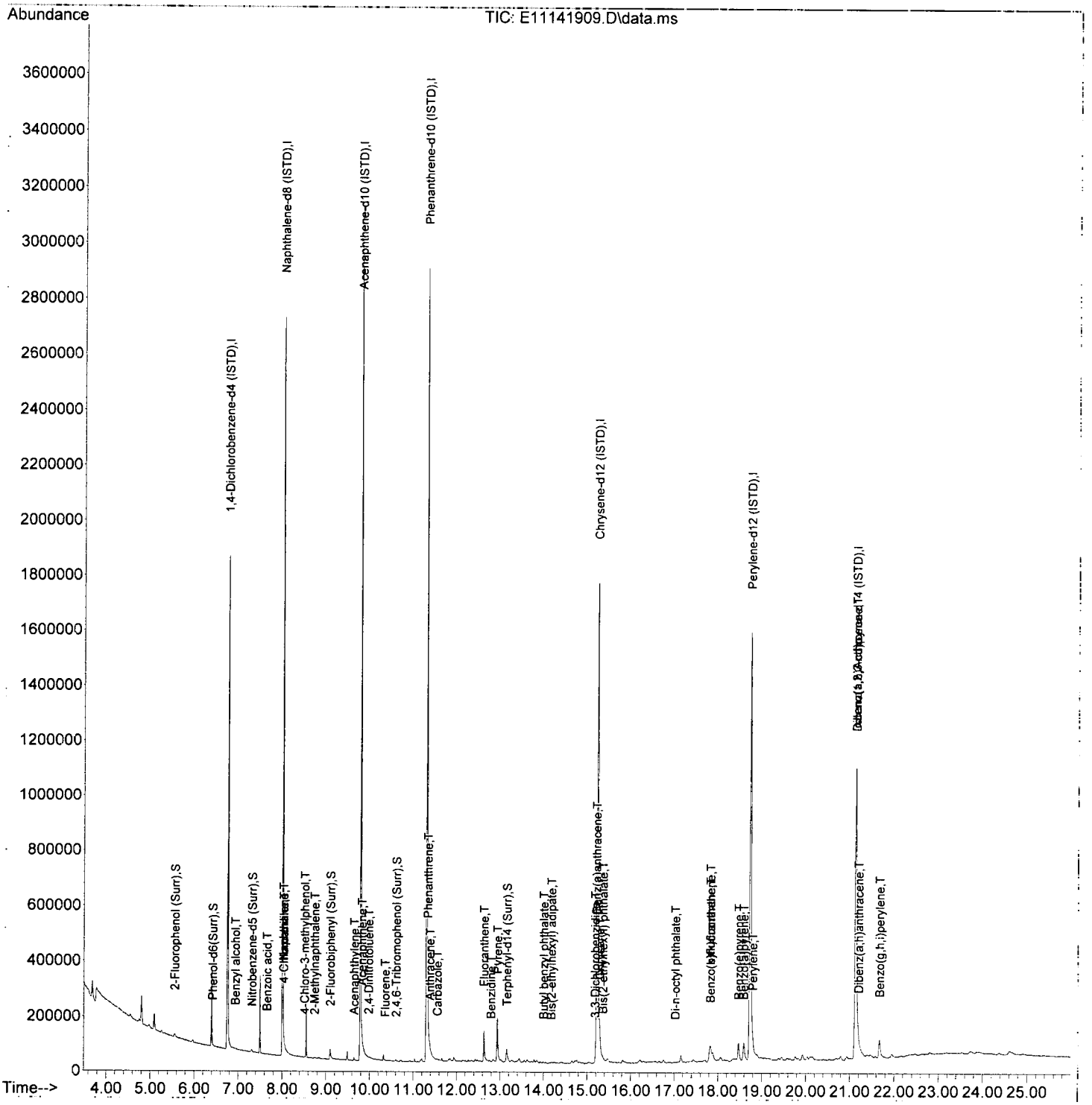
response 69093

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	32.50	30.48
137.10	27.70	24.72
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141909.D
Acq On : 14 Nov 2019 12:50 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-06@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:21 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

MDS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	390267	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1656633	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	863312	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1688061	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1575544	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1481808	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1169974	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	9477	41.53 ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	9031	31.90 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	7361	32.63 ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.092	172	32506	50.26 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	2483	61.23 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	45585	64.10 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.300	74	135	N.D.	
3) Pyridine	4.337	79	196	N.D.	
6) Phenol	6.434	94	91	N.D.	
7) Aniline	6.455	93	81	N.D.	
8) Bis(2-chloroethyl) ether	6.498	93	79	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	6.915	108	210	36.33 ng/ml#	49
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.017	107	53	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.985	45	55	N.D.	
16) N-Nitrosodi-n-propylamine	7.124	70	165	N.D.	
17) 3+4-Methylphenol	7.151	107	99	N.D.	
18) Hexachloroethane	7.274	117	480	4.57 ng/ml#	12
20) Nitrobenzene	7.306	77	639	2.76 ng/ml#	1
22) Isophorone	7.541	82	265	N.D.	
23) 2-Nitrophenol	7.696	139	197	29.16 ng/ml#	18
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.739	93	137	N.D.	
26) Benzoic acid	7.750	105	286	822.27 ng/ml#	1
27) 2,4-Dichlorophenol	7.948	162	138	7.95 ng/ml#	27
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.028	128	29392	33.37 ng/ml	98
30) 4-Chloroaniline	8.087	127	113	11.03 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.579	107	60	65.16 ng/ml#	1
33) 2-Methylnaphthalene	8.729	142	6309	10.63 ng/ml	93
34) 1-Methylnaphthalene	8.830	142	42492	75.43 ng/ml	99
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	9.199	154	1960	2.68 ng/ml	95
41) 2-Chloronaphthalene	9.205	162	670	N.D.	
42) 2-Nitroaniline	9.333	138	95	30.49 ng/ml#	7

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	22754	43.03 ng/ml	98
44) 1,4-Dinitrobenzene	9.472	168	918	77.84 ng/ml#	38
45) Dimethyl phthalate	9.504	163	389	N.D.	
46) 1,3-Dinitrobenzene	9.531	168	57	60.02 ng/ml#	1
47) 2,6-Dinitrotoluene	9.558	165	83	31.15 ng/ml#	1
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	38417	46.03 ng/ml	97
50) 3-Nitroaniline	9.734	138	98	N.D.	
51) Acenaphthene	9.820	153	284874	496.34 ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.943	139	553	89.43 ng/ml#	25
54) 2,4-Dinitrotoluene	9.948	165	1917	72.19 ng/ml#	57
55) Dibenzofuran	10.002	168	4566	5.96 ng/ml#	1
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	10.210	149	127	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	22637	46.50 ng/ml	97
60) Fluorene	~~10.344~~	~~166~~	~~96156~~	~~157.94 ng/ml~~	~~100~~
61) 4-Chlorophenyl phenyl ...	10.365	204	115	N.D.	
62) 4-Nitroaniline	10.344	138	948	6.80 ng/ml#	56
63) 4,6-Dinitro-2-methylph...	10.365	198	94	159.11 ng/ml#	1
65) N-Nitrosodiphenylamine	10.462	169	5260	9.96 ng/ml#	14
66) Azobenzene (1,2-DPH)	10.483	77	724	N.D.	
68) 4-Bromophenyl phenyl e...	10.831	248	59	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.328	178	85873	89.42 ng/ml	98
72) Anthracene	11.376	178	97924	106.71 ng/ml	98
73) Carbazole	11.542	167	6166	8.15 ng/ml	79
74) Di-n-butyl phthalate	11.874	149	2682	2.82 ng/ml	65
75) Fluoranthene	12.628	202	431130	467.34 ng/ml	99
76) Benzidine	12.772	184	493	153.50 ng/ml#	1
77) Pyrene	12.933	202	612360	645.09 ng/ml	99
80) Butyl benzyl phthalate	13.997	149	6472	50.15 ng/ml	92
81) Bis(2-ethylhexyl) adipate	14.173	129	1763	58.28 ng/ml	52
82) 3,3-Dichlorobenzidine	15.163	252	330	26.45 ng/ml	74
83) Benz(a)anthracene	15.206	228	141532	166.99 ng/ml	77
84) Chrysene	15.286	228	198288	234.24 ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.356	149	48632	139.95 ng/ml	97
87) Di-n-octyl phthalate	17.035	149	348	74.57 ng/ml#	1
88) Benzo(b)fluoranthene	17.821	252	183516	242.75 ng/ml	99
89) Benzo(k)fluoranthene	~~17.821~~	~~252~~	~~237078~~	~~301.67 ng/ml~~	~~96~~
90) Benzo(b+k)fluoranthene	17.821	252	279196	356.41 ng/ml	96
91) Benzo(e)pyrene	18.474	252	148245	~~193.63~~ ng/ml	98
92) Benzo(a)pyrene	18.591	252	175580	261.55 ng/ml	98
93) Perylene	18.795	252	53620	75.90 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.132	276	141726	199.08 ng/ml	99
96) Dibenz(a,h)anthracene	21.191	278	17365	26.48 ng/ml	73
97) Benzo(g,h,i)perylene	21.667	276	176315	257.84 ng/ml	98

MI Hit

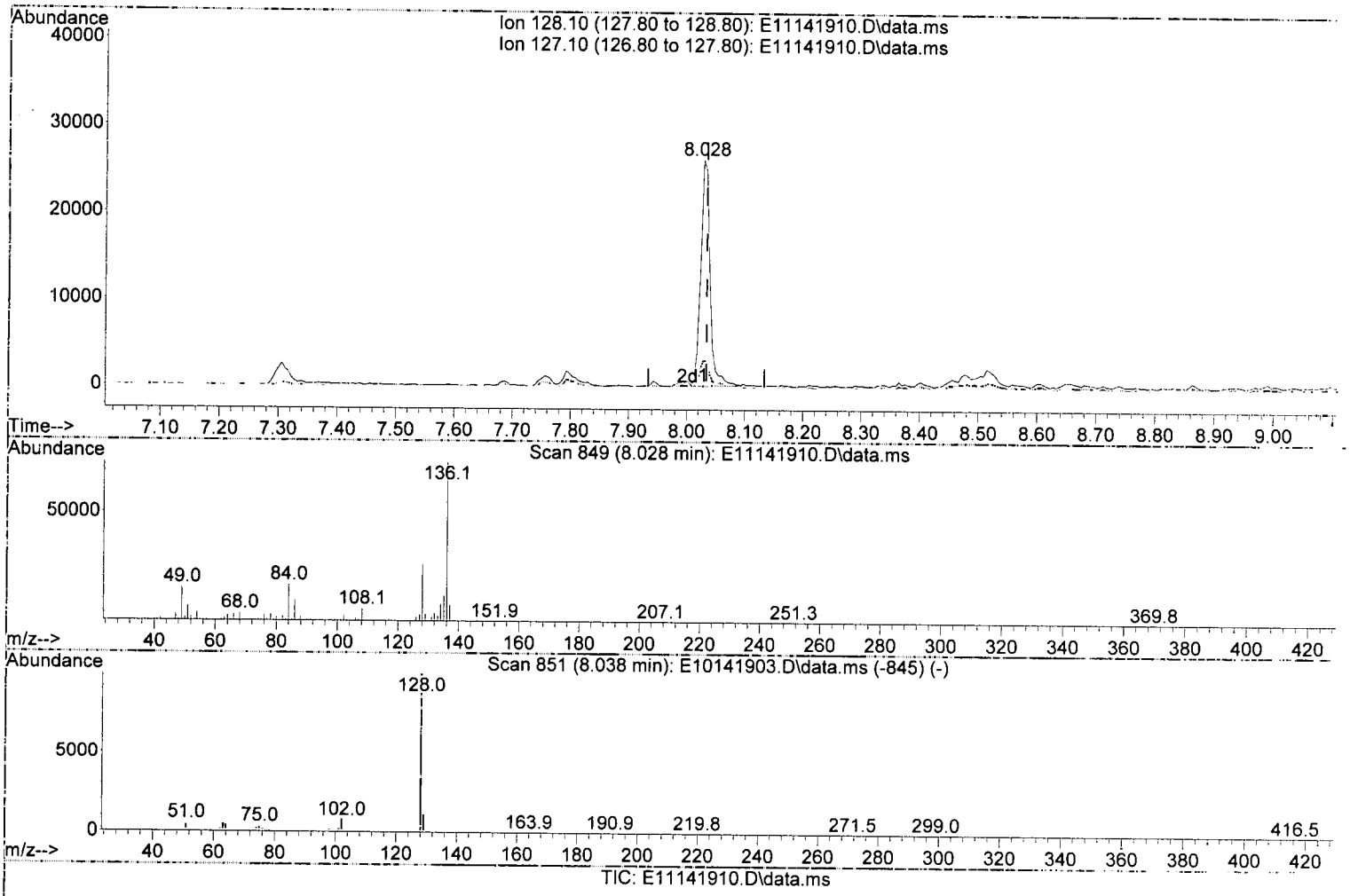
MI Hit MOS

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(29) Naphthalene (T)

8.028min (-0.005) 33.37 ng/ml

J

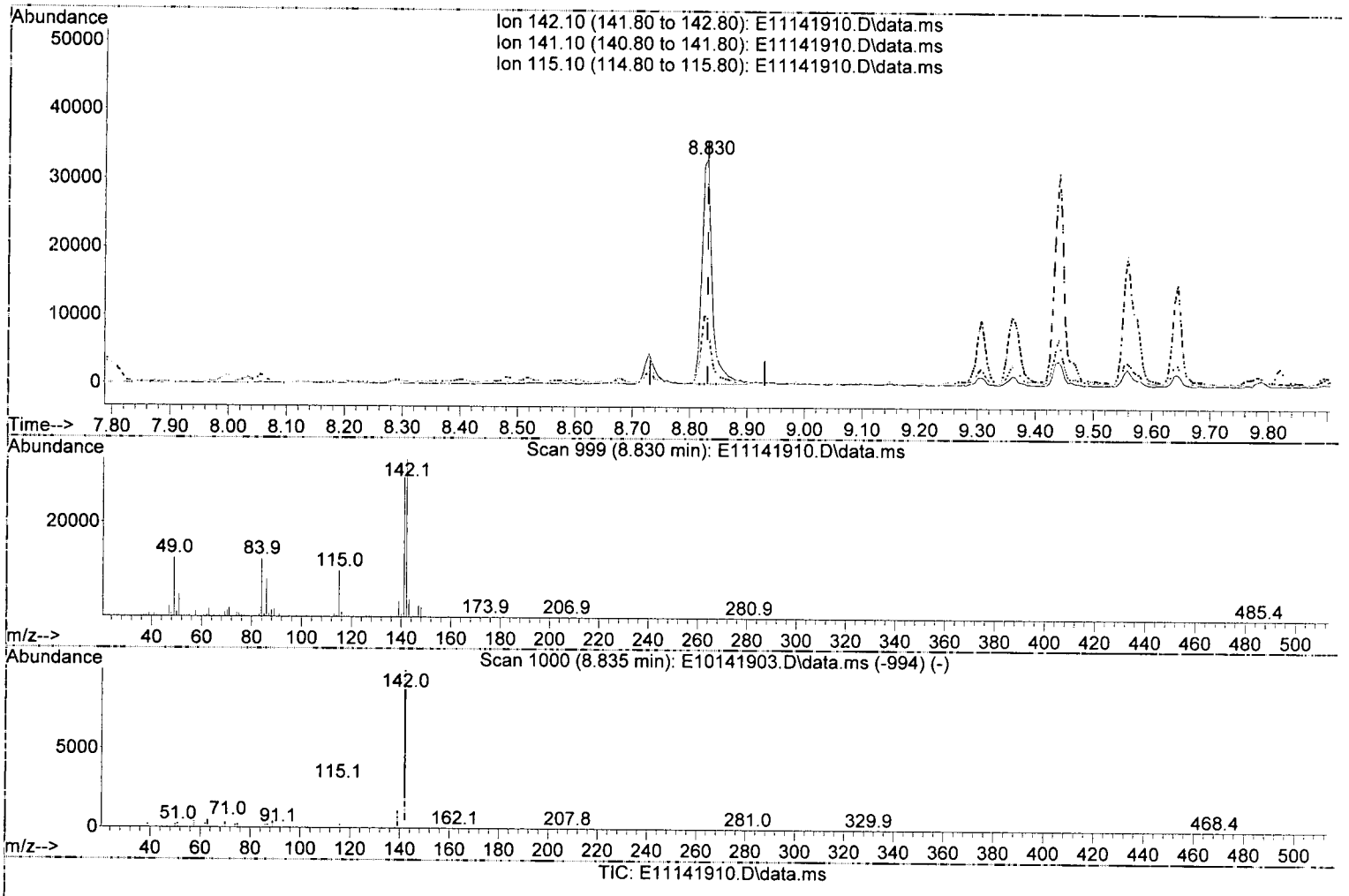
response 29392

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	11.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(34) 1-Methylnaphthalene (T)

8.830min (-0.000) 75.43 ng/ml

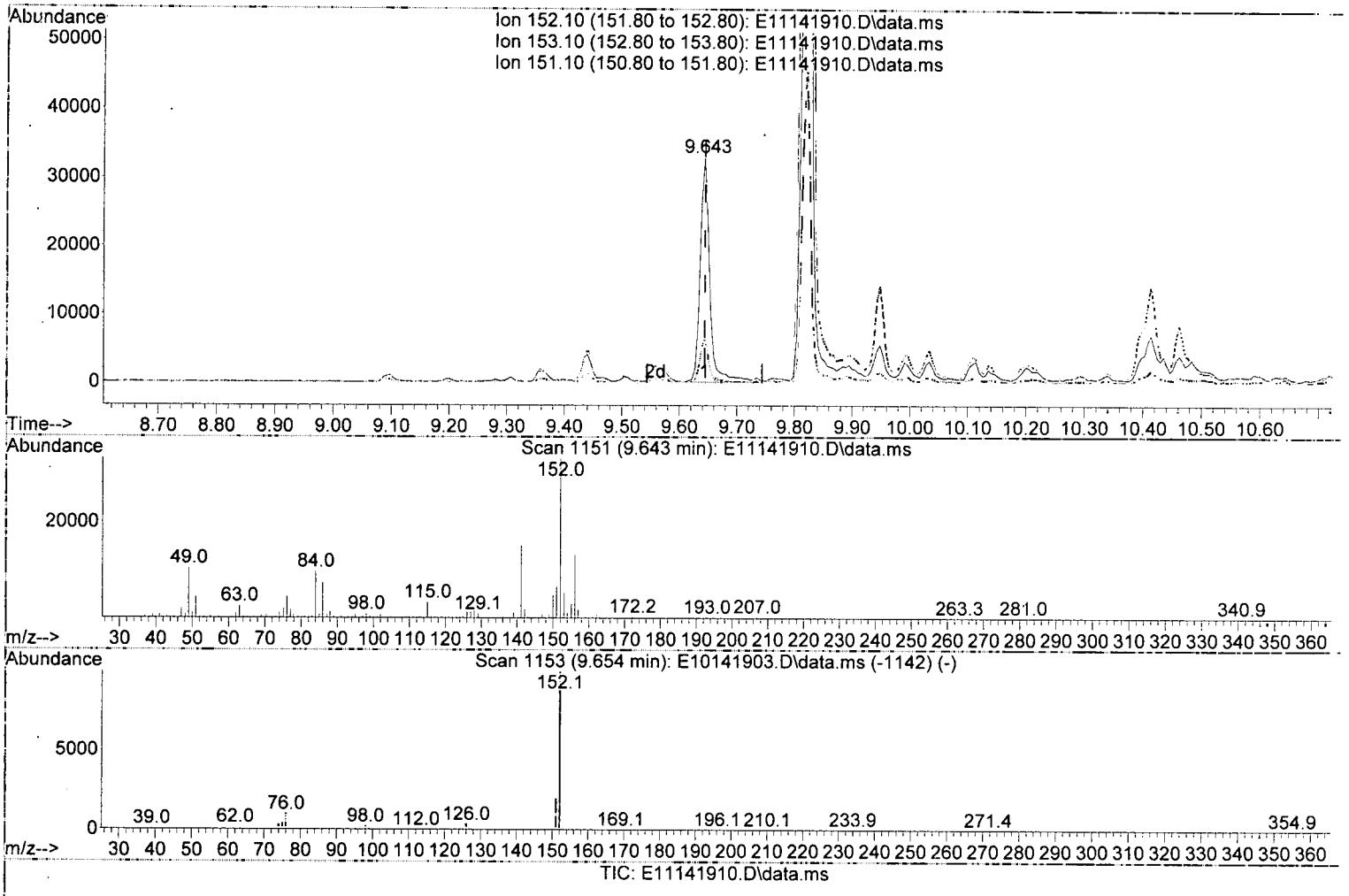
response 42492

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	89.60	89.14
115.10	30.30	29.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(49) Acenaphthylene (T)

9.643min (-0.000) 46.03 ng/ml

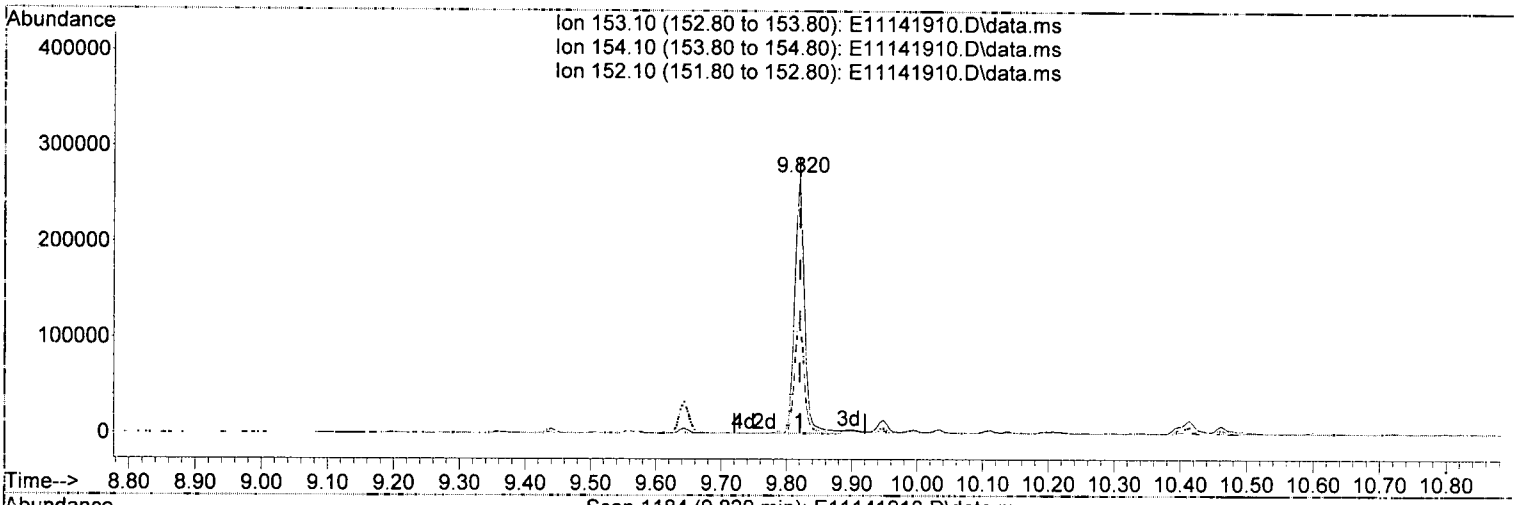
response 38417

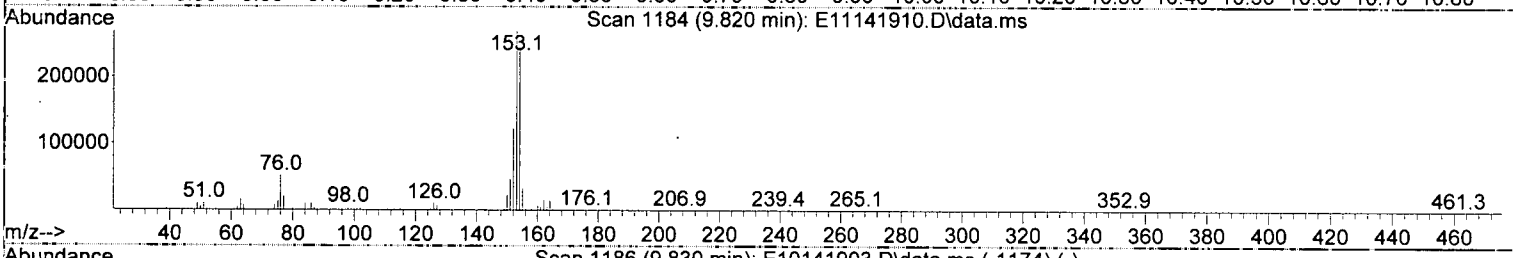
Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.10	16.02
151.10	19.80	19.98
0.00	0.00	0.00

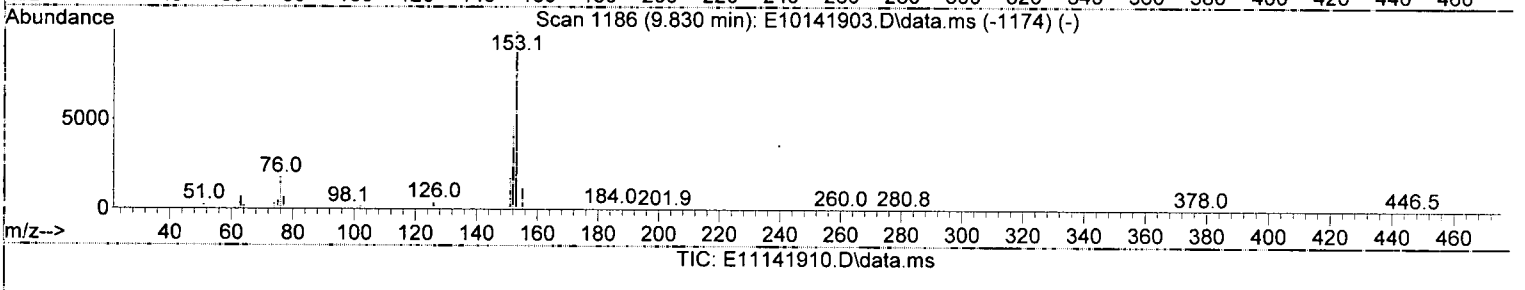
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5







(51) Acenaphthene (T)

9.820min (-0.000) 496.34 ng/ml

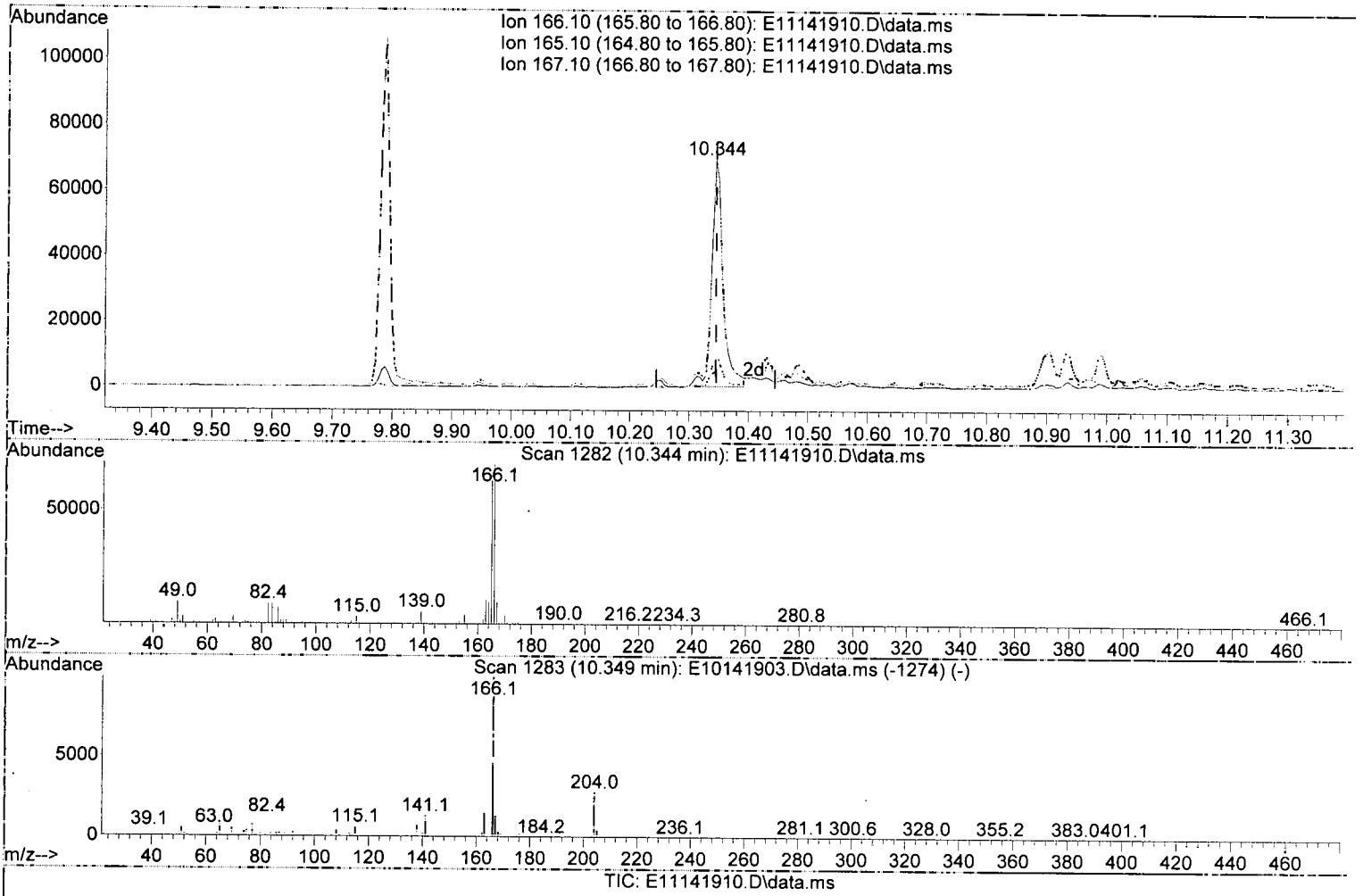
response 284874

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	91.00	91.26
152.10	46.40	45.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:09:10 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(60) Fluorene (T)

10.344min (-0.000) 147.91 ng/ml (m) DTH 11/14/19

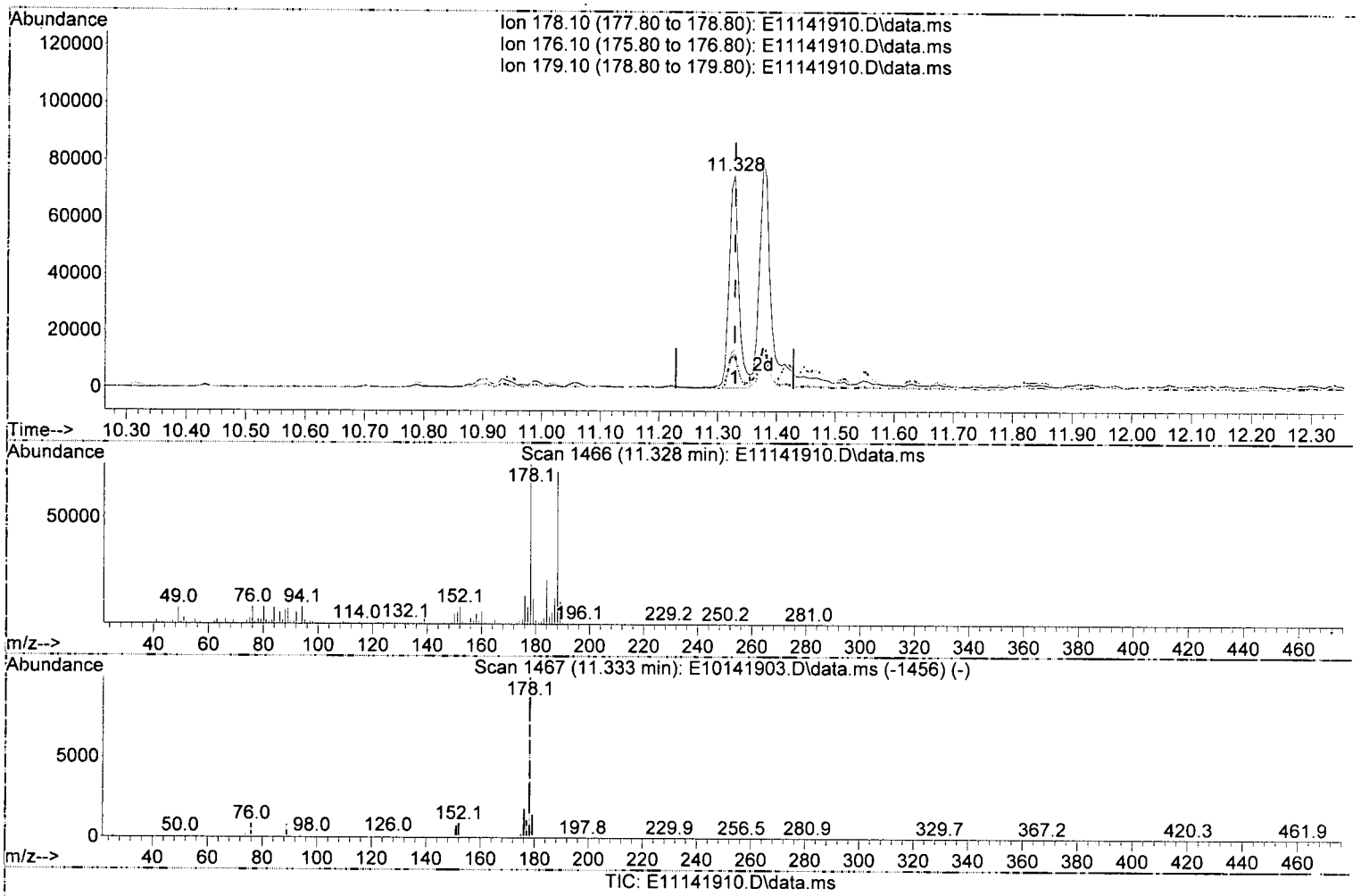
response 90047

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.30	93.31
167.10	13.30	14.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.000) 89.42 ng/ml

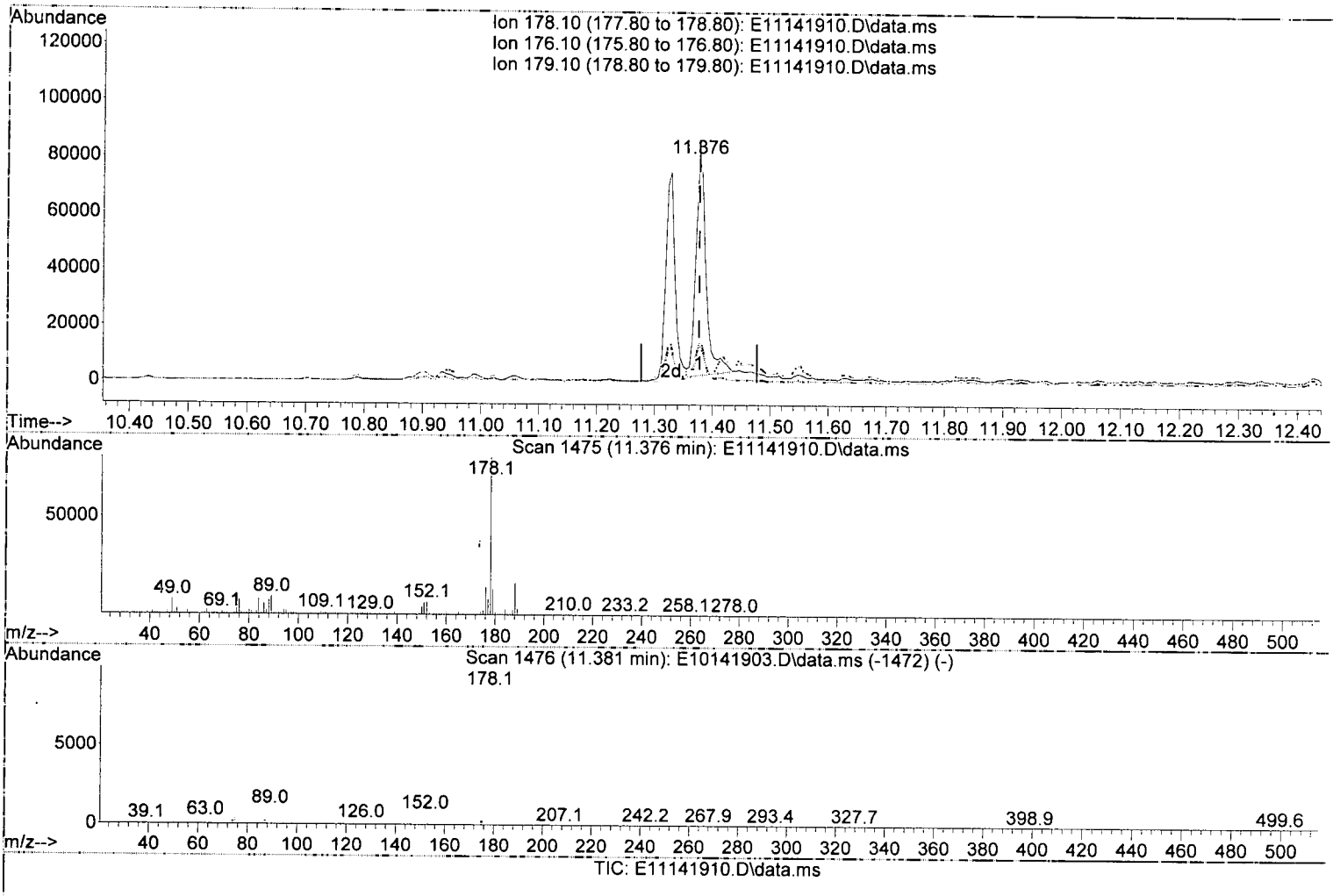
response 85873

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	18.30
179.10	15.20	16.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(72) Anthracene (T)

11.376min (-0.000) 106.71 ng/ml

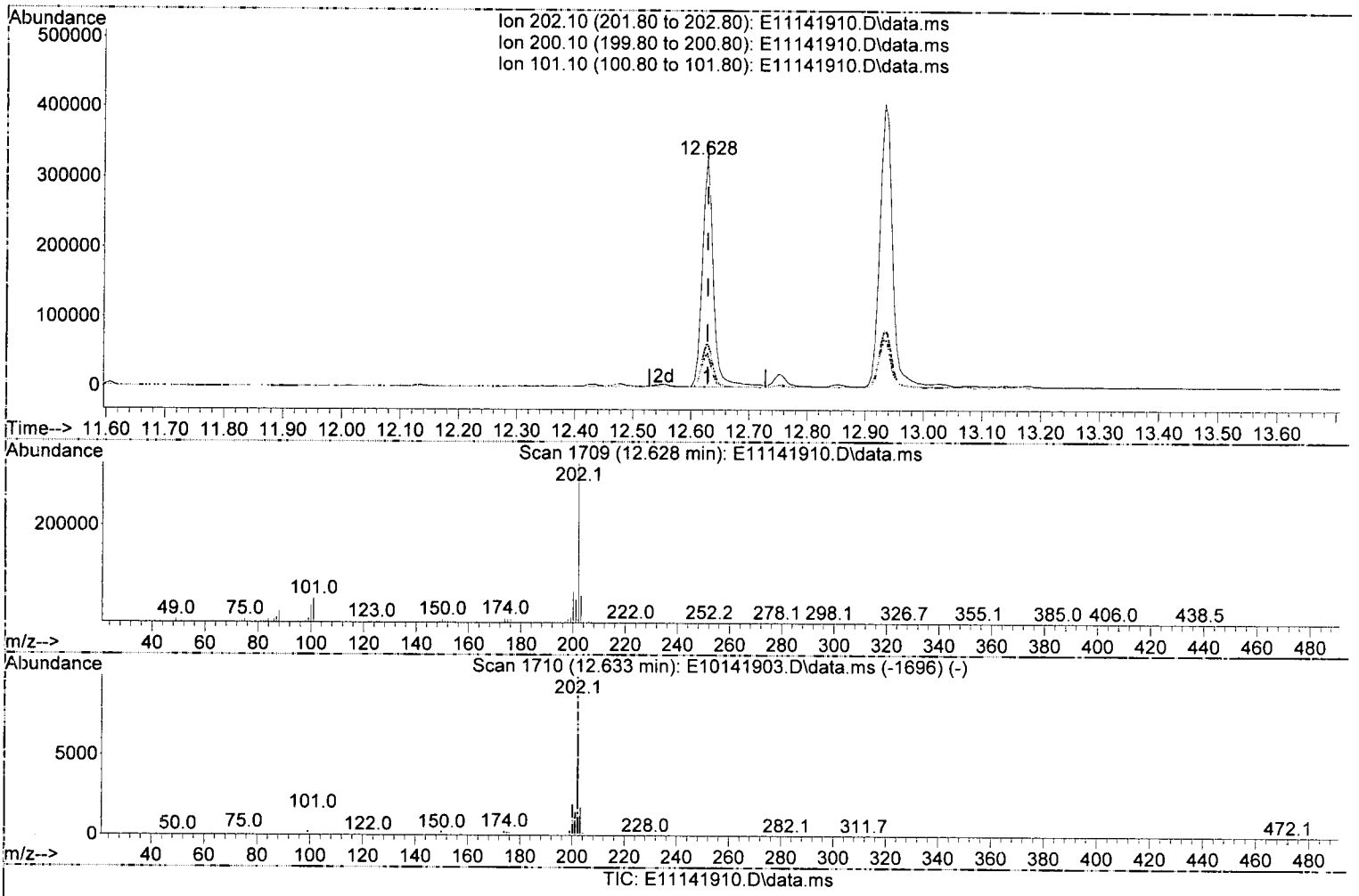
response 97924

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.10	17.64
179.10	15.50	16.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(75) Fluoranthene (T)

12.628min (-0.000) 467.34 ng/ml

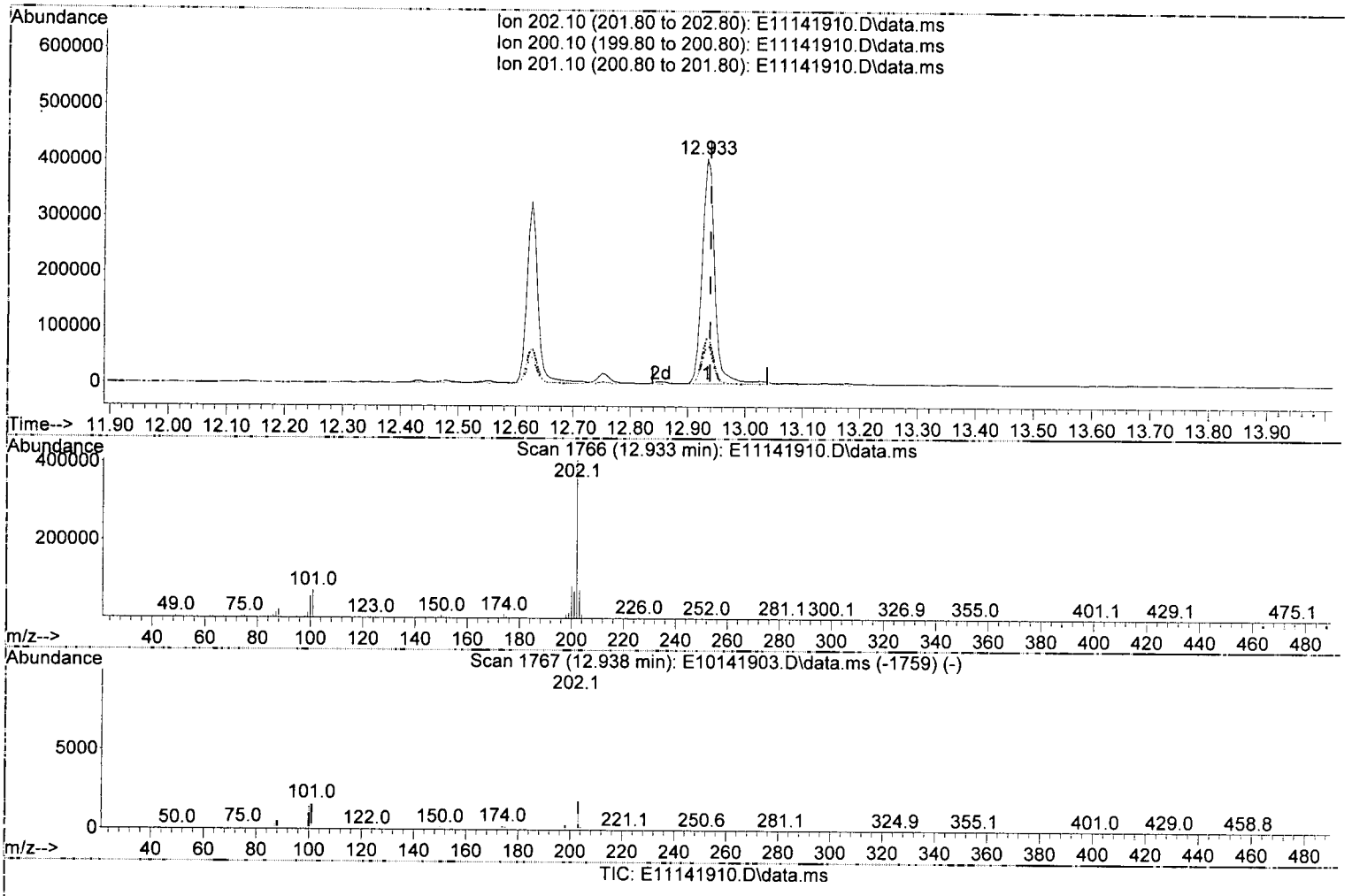
response 431130

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	19.65
101.10	14.50	15.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(77) Pyrene (T)

12.933min (-0.005) 645.09 ng/ml

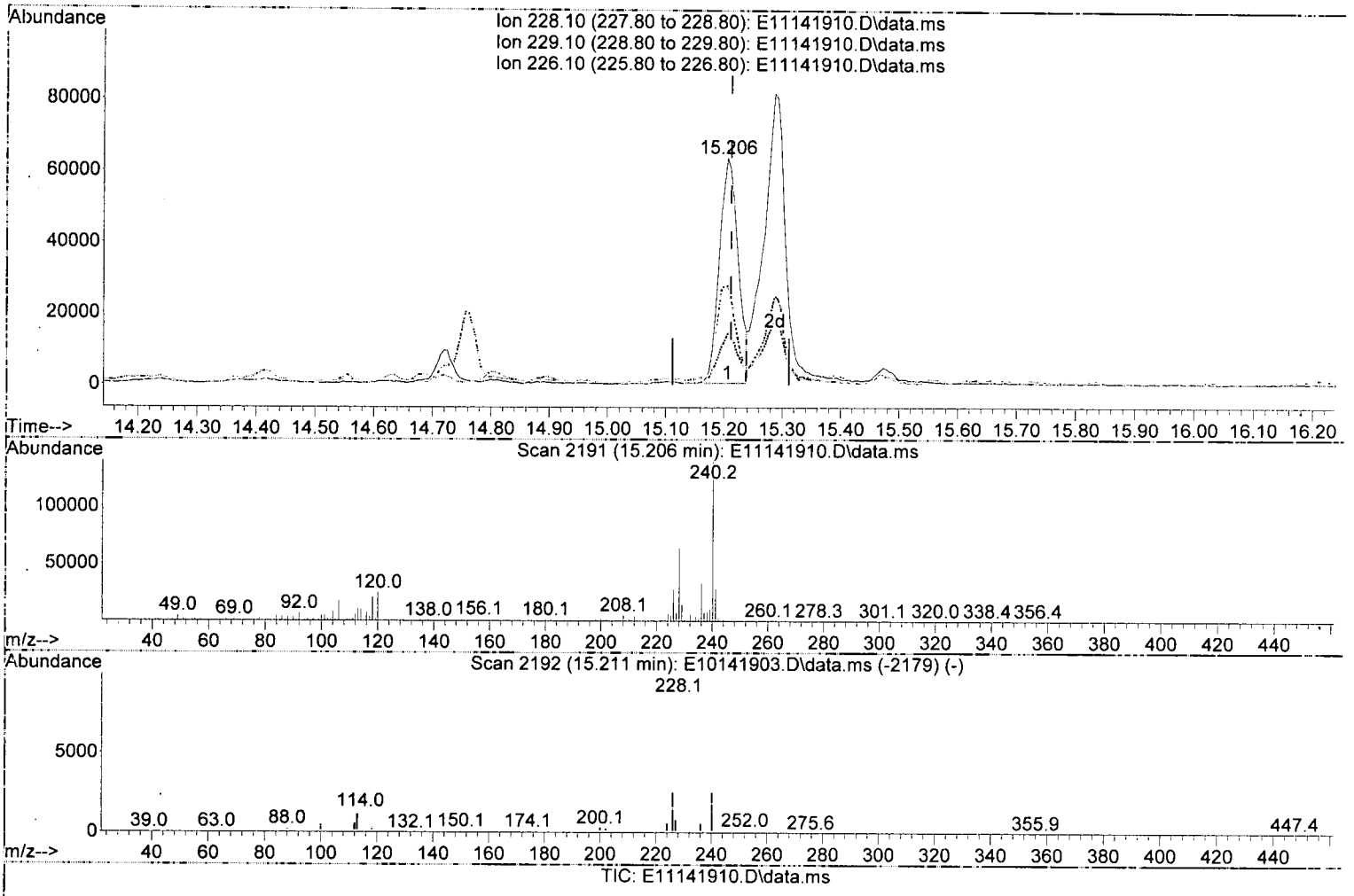
response 612360

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	20.46
201.10	16.80	17.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(83) Benz(a)anthracene (T)

15.206min (-0.005) 166.99 ng/ml

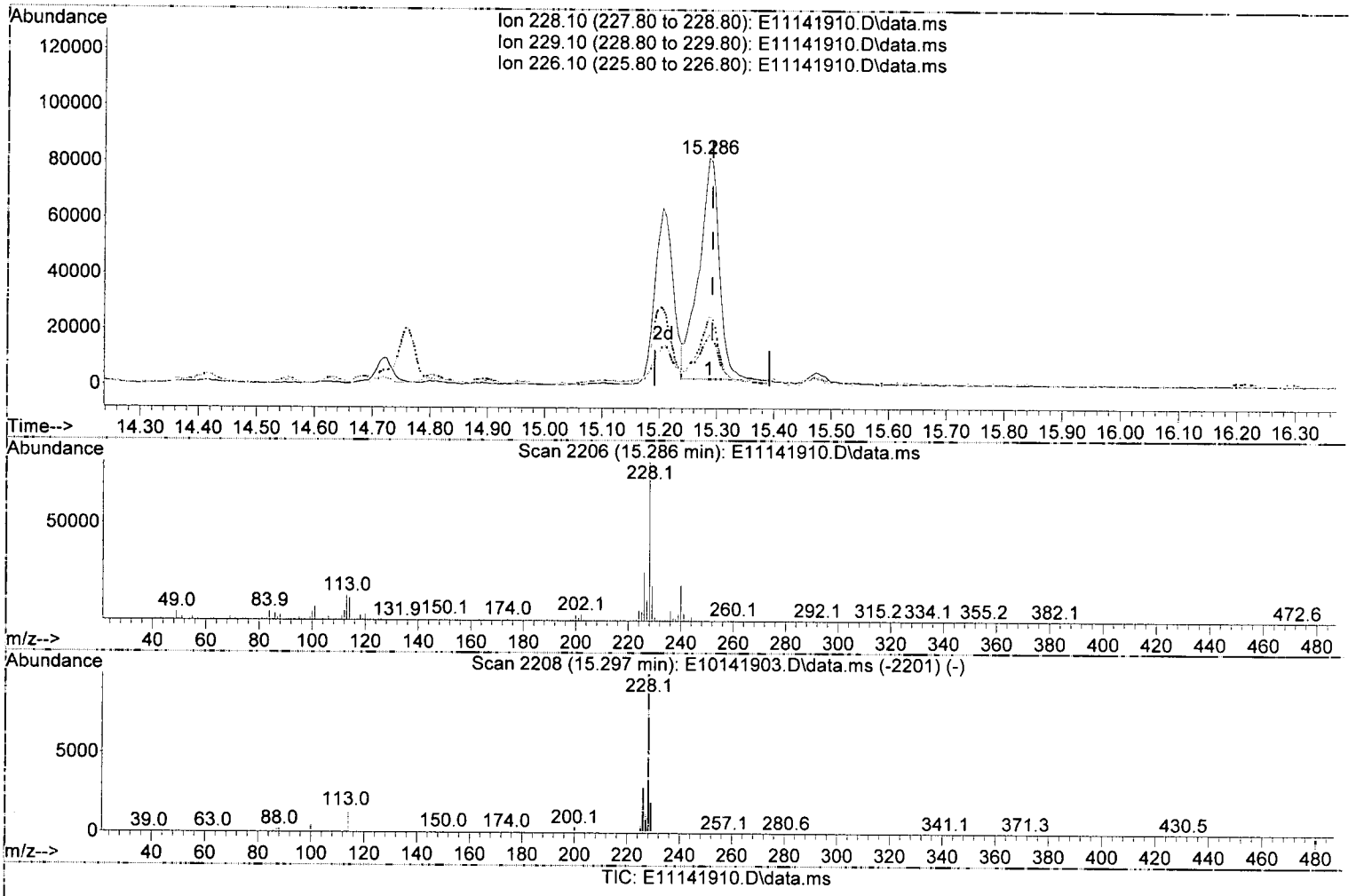
response 141532

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	22.77
226.10	25.90	43.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(84) Chrysene (T)

15.286min (-0.005) 234.24 ng/ml

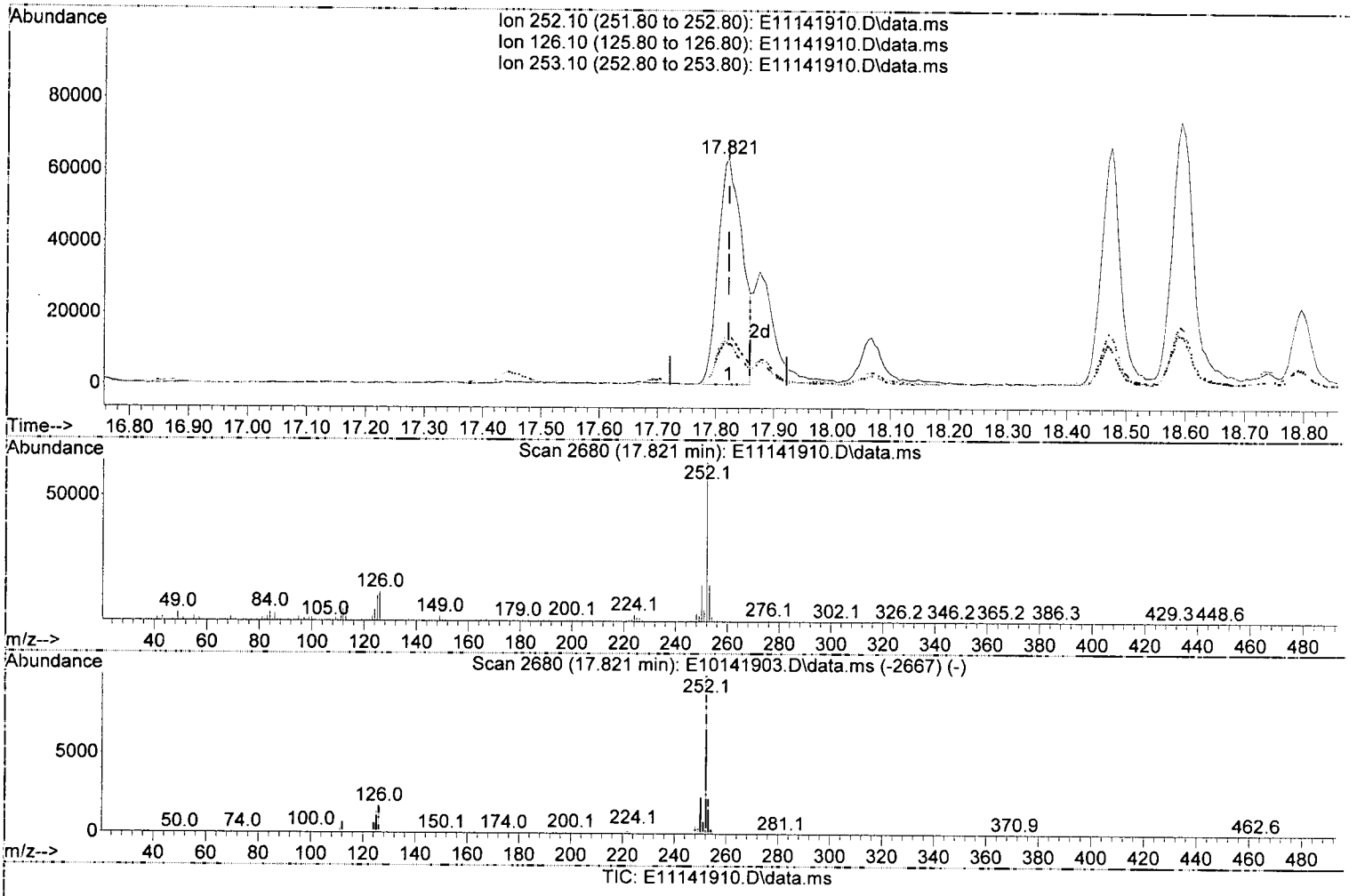
response 198288

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	22.21
226.10	29.30	30.41
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.821min (-0.000) 242.75 ng/ml

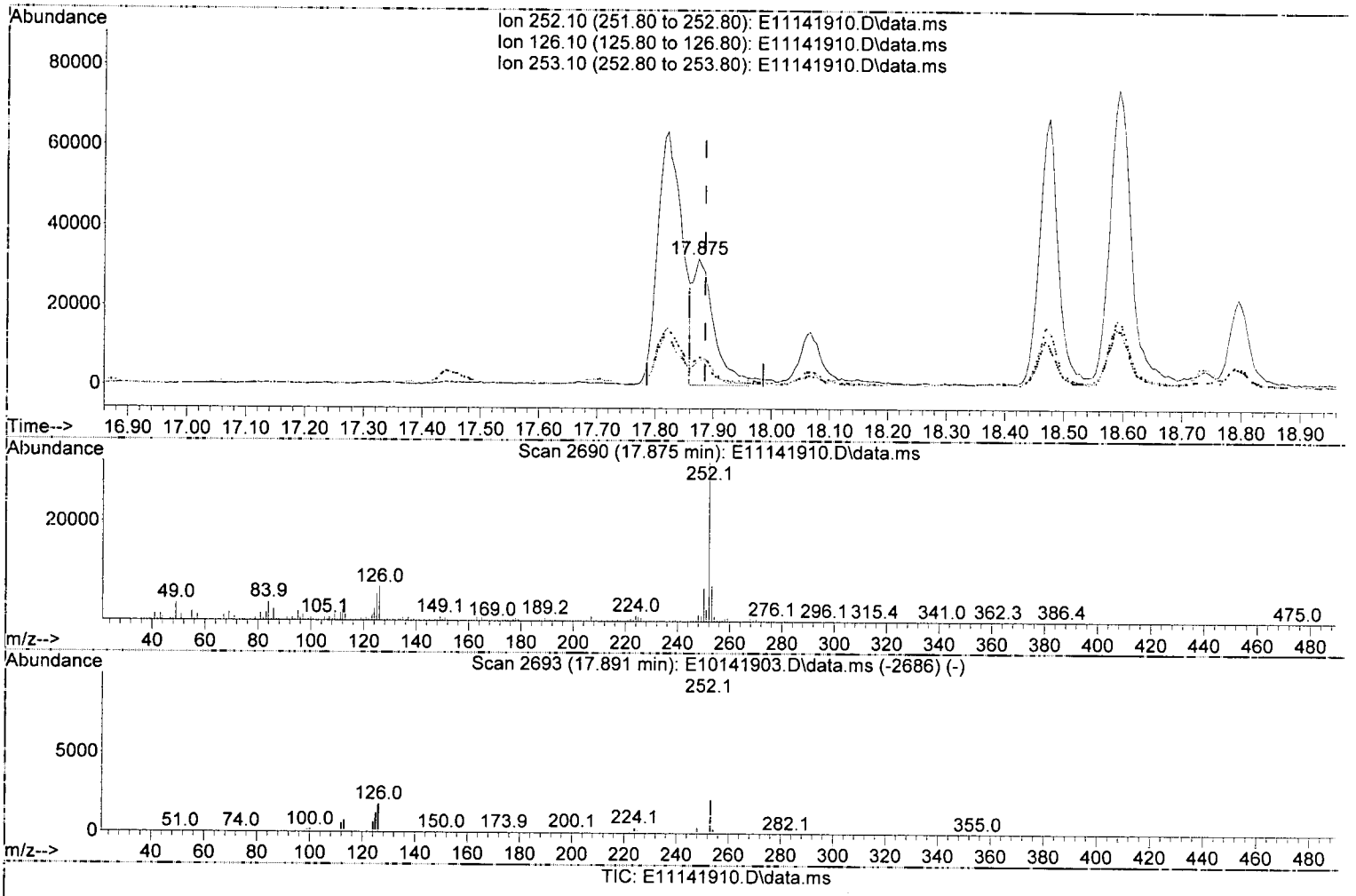
response 183516

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	18.32
253.10	21.80	22.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.875min (-0.011) 109.36 ng/ml (m) MOS DTH 11/14/19

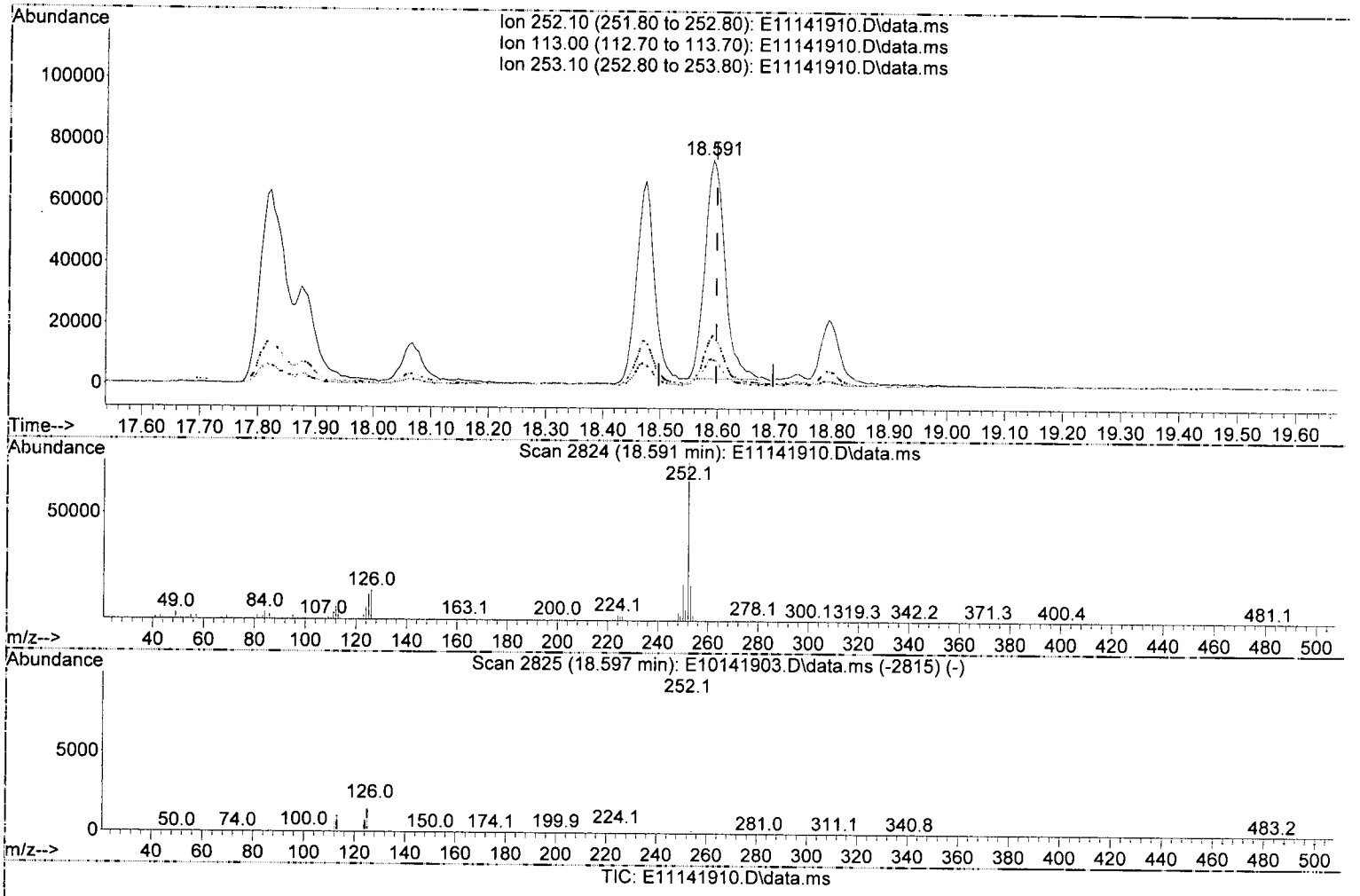
response 80347

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	21.33
253.10	22.00	22.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(92) Benzo(a)pyrene (T)

18.591min (-0.005) 261.55 ng/ml

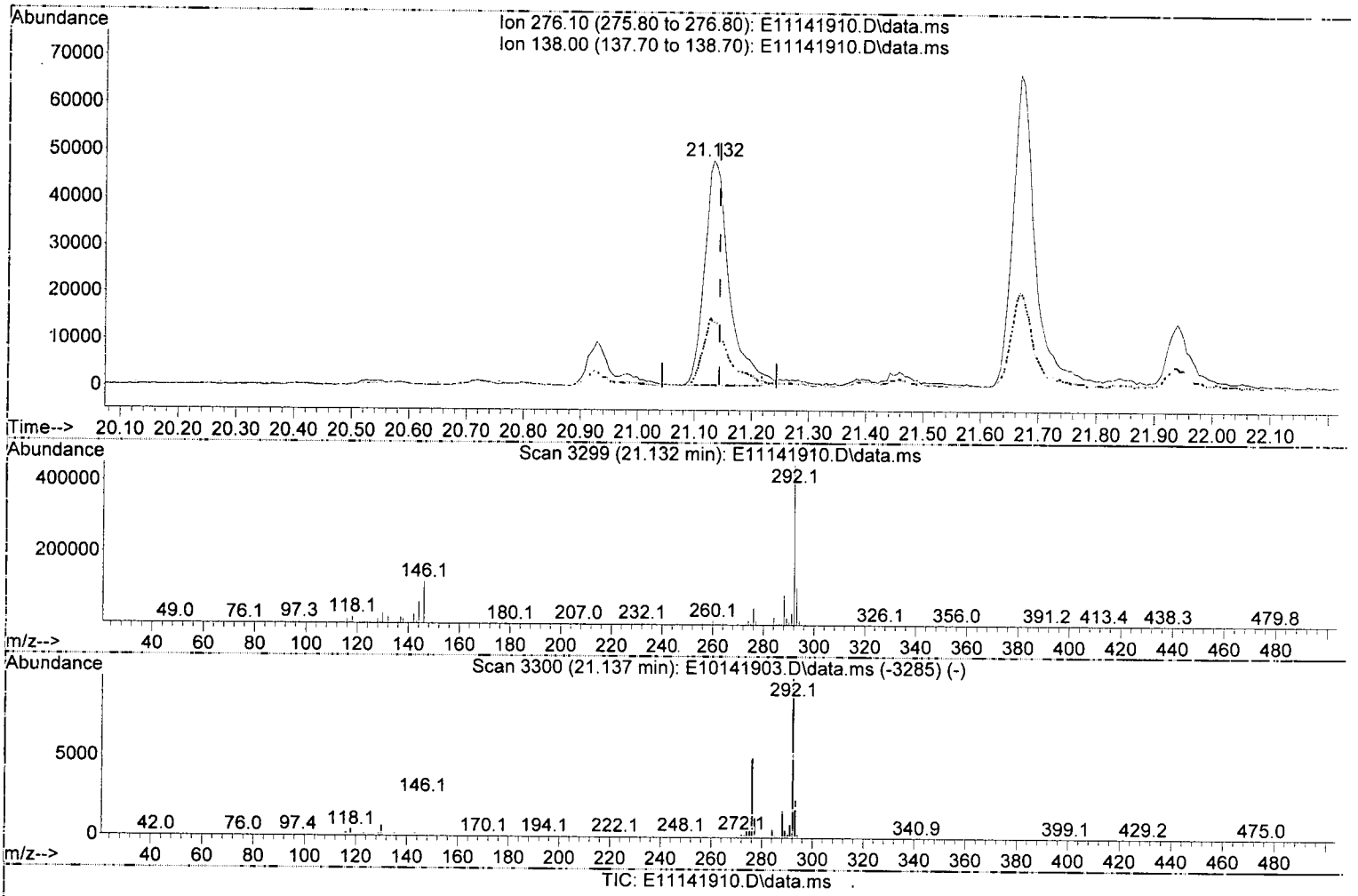
response 175580

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	11.70
253.10	21.70	22.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.132min (-0.011) 199.08 ng/ml

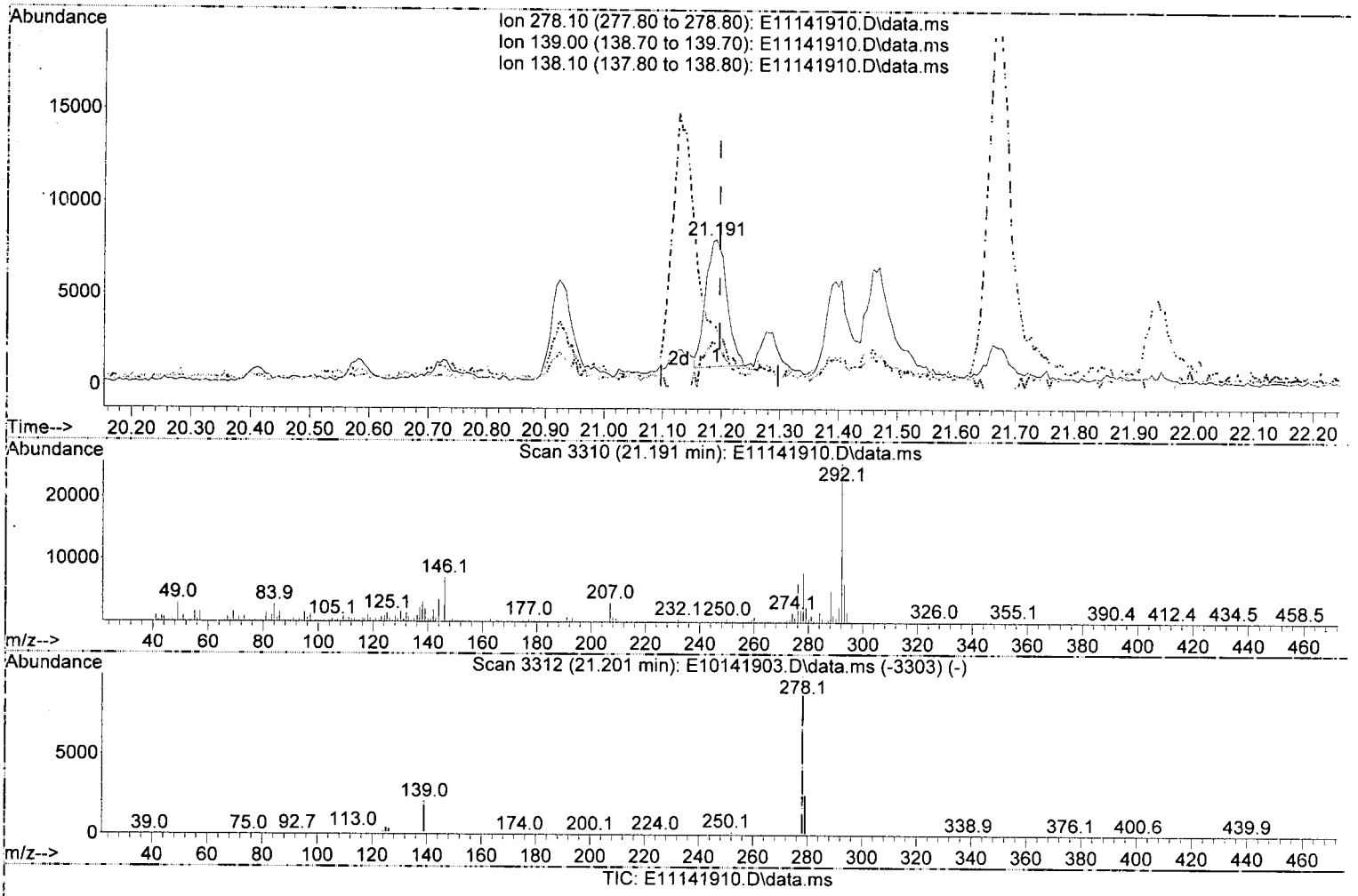
response 141726

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	28.85
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(96) Dibenz(a,h)anthracene (T)

21.191min (-0.005) 26.48 ng/ml

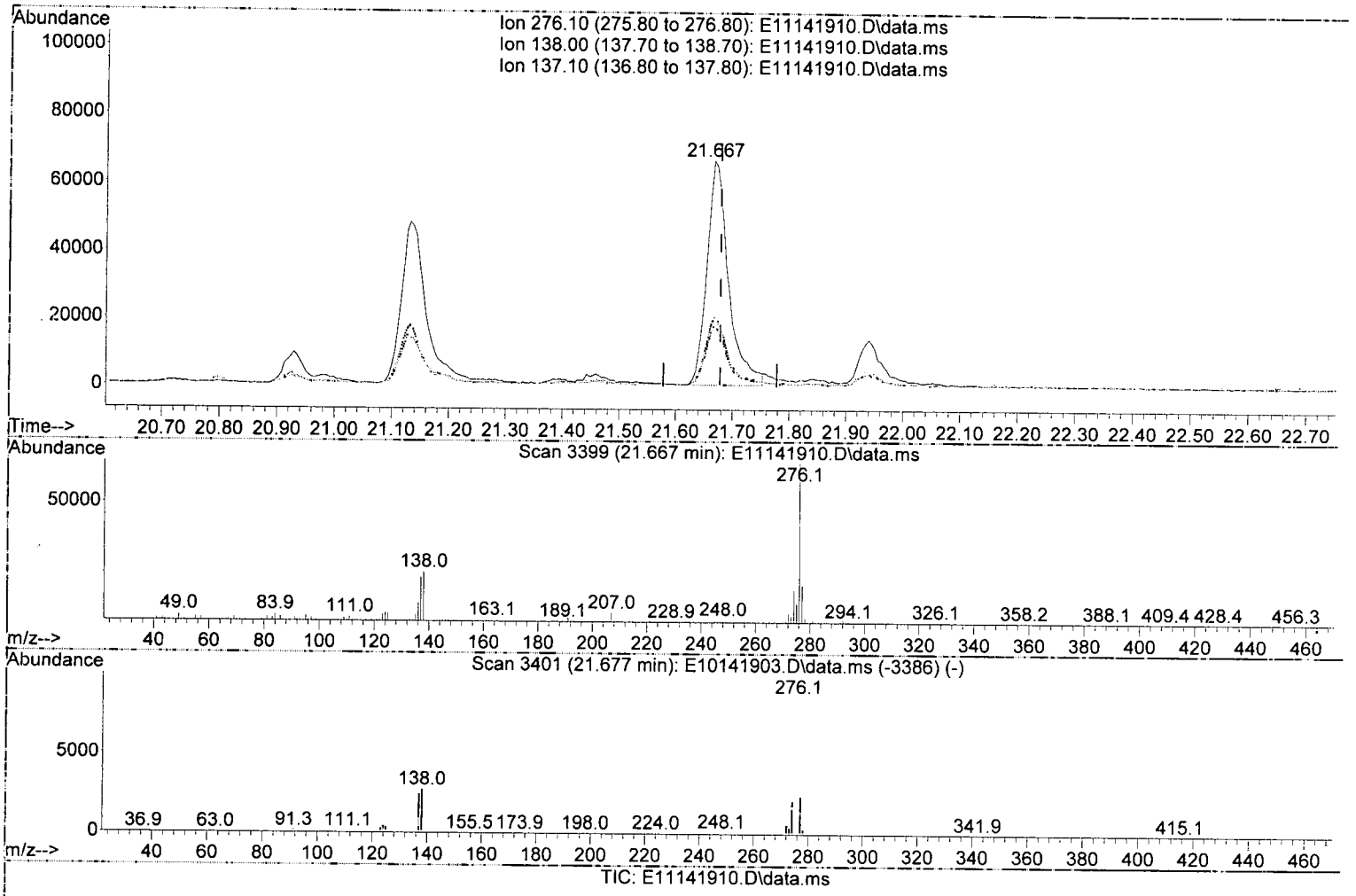
response 17365

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	23.10	27.26
138.10	17.40	39.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141910.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.667min (-0.011) 257.84 ng/ml

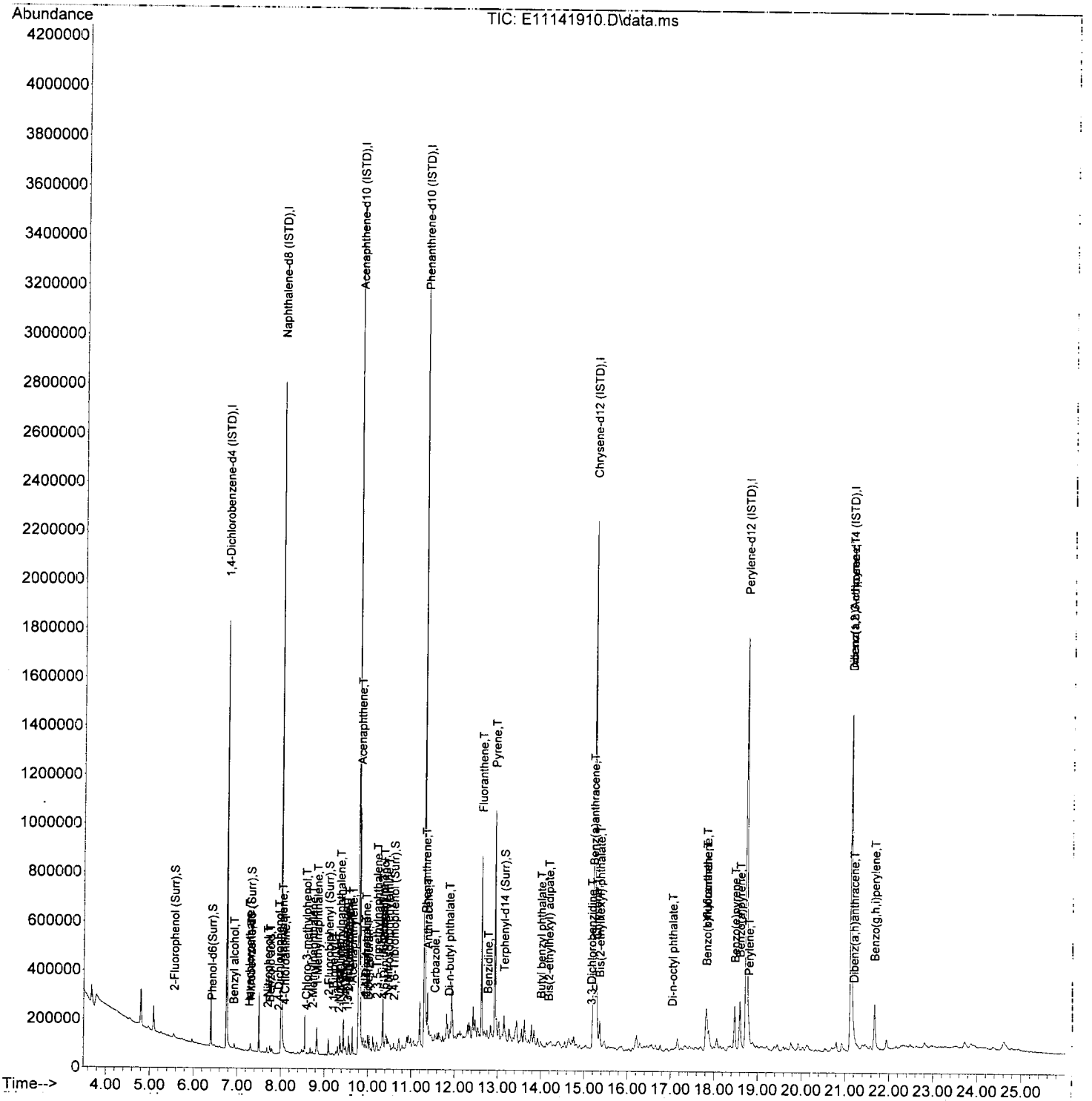
response 176315

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	32.50	30.91
137.10	27.70	27.58
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141910.D
Acq On : 14 Nov 2019 1:26 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-10@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141911.D
Acq On : 14 Nov 2019 2:02 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:29 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

RPI
DTH 11/14/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	408909	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1658968	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.787	162	801241	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1617050	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1433805	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1289431	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	943369	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	9339	39.06 ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	7891	26.60 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	6999	29.61 ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.103	172	25001	41.65 ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.606	330	1402	47.82 ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.162	244	33783	52.20 ng/ml	0.02
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.262	74	131	N.D.	
3) Pyridine	4.326	79	148	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	6.455	93	82	N.D.	
8) Bis(2-chloroethyl) ether	6.482	93	57	N.D.	
9) 2-Chlorophenol	6.509	128	53	N.D.	
10) 1,3-Dichlorobenzene	6.765	146	85	N.D.	
11) 1,4-Dichlorobenzene	6.765	146	85	N.D.	
12) Benzyl alcohol	6.830	108	61	35.20 ng/ml#	25
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	7.135	70	57	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.284	117	105	N.D.	
20) Nitrobenzene	7.300	77	117	N.D.	
22) Isophorone	7.546	82	81	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.728	93	64	N.D.	
26) Benzoic acid	7.905	105	52	819.96 ng/ml#	60
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	3542	4.02 ng/ml	99
30) 4-Chloroaniline	8.028	127	365	11.79 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.605	107	73	65.23 ng/ml#	1
33) 2-Methylnaphthalene	8.755	142	535	N.D.	
34) 1-Methylnaphthalene	8.841	142	295	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	9.210	154	180	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141911.D
Acq On : 14 Nov 2019 2:02 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:29 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

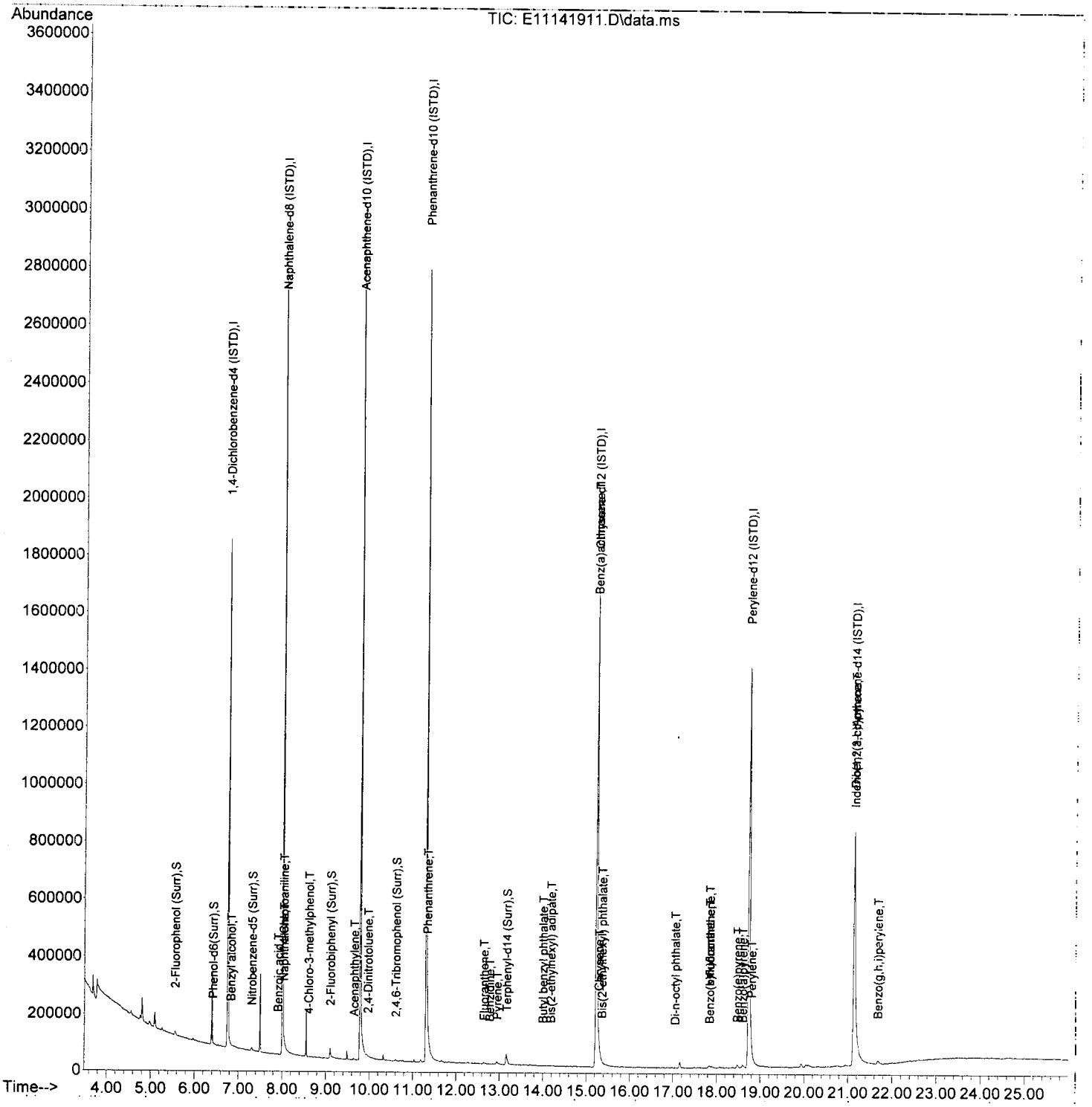
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.450	156	64	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.648	152	3469	4.48 ng/ml	98
50) 3-Nitroaniline	9.787	138	134	N.D.	
51) Acenaphthene	9.820	153	239	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.964	165	234	62.21 ng/ml#	28
55) Dibenzofuran	10.012	168	59	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...	10.333	170	202	N.D.	
60) Fluorene	10.370	166	308	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)	10.499	77	128	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	11.328	178	2610	2.84 ng/ml	91
72) Anthracene	11.387	178	845	N.D.	
73) Carbazole	11.606	167	63	N.D.	
74) Di-n-butyl phthalate	11.889	149	322	N.D.	
75) Fluoranthene	12.638	202	4630	5.24 ng/ml	96
76) Benzidine	12.772	184	51	152.45 ng/ml#	26
77) Pyrene	12.943	202	7984	8.78 ng/ml	96
80) Butyl benzyl phthalate	13.997	149	82	32.80 ng/ml#	1
81) Bis(2-ethylhexyl) adipate	14.179	129	705	55.43 ng/ml	92
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	8366	10.85 ng/ml	91
84) Chrysene	15.286	228	5488	7.12 ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.361	149	535	59.49 ng/ml	51
87) Di-n-octyl phthalate	17.046	149	83	74.25 ng/ml#	1
88) Benzo(b)fluoranthene	17.837	252	8993	23.25 ng/ml	97
89) Benzo(k)fluoranthene	17.837	252	10067	24.90 ng/ml	94
90) Benzo(b+k)fluoranthene	17.837	252	13637	38.09 ng/ml	94
91) Benzo(e)pyrene	18.474	252	8335	20.38 ng/ml	94
92) Benzo(a)pyrene	18.597	252	8414	26.97 ng/ml	99
93) Perylene	18.800	252	4984	8.11 ng/ml	89
95) Indeno(1,2,3-cd)pyrene	21.143	276	11627	20.25 ng/ml#	1
96) Dibenz(a,h)anthracene	21.196	278	1231	N.D.	
97) Benzo(g,h,i)perylene	21.677	276	13551	24.58 ng/ml	95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141911.D
Acq On : 14 Nov 2019 2:02 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:29 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	329403	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1373359	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	745605	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1714877	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1709713	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1610687	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1273918	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	6113	31.74 ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	5536	23.17 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.311	82	4847	25.45 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.098	172	20798	37.24 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	1608	49.39 ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.152	244	36053	46.72 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.268	74	98	N.D.	
3) Pyridine	4.300	79	85	N.D.	
6) Phenol	6.439	94	54	N.D.	
7) Aniline	6.482	93	118	N.D.	
8) Bis(2-chloroethyl) ether	6.482	93	118	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	6.915	108	59	35.29 ng/ml#	6
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.953	107	60	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	7.124	70	143	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.274	117	227	2.56 ng/ml#	12
20) Nitrobenzene	7.306	77	139	N.D.	
22) Isophorone	7.547	82	174	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.803	93	58	N.D.	
26) Benzoic acid	7.755	105	64	820.21 ng/ml#	27
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	198553	271.92 ng/ml	100
30) 4-Chloroaniline	8.113	127	214	11.47 ng/ml#	37
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.729	142	28793	58.51 ng/ml	99
34) 1-Methylnaphthalene	8.830	142	17330	37.11 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	9.199	154	15362	24.32 ng/ml	95
41) 2-Chloronaphthalene	9.274	162	644	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

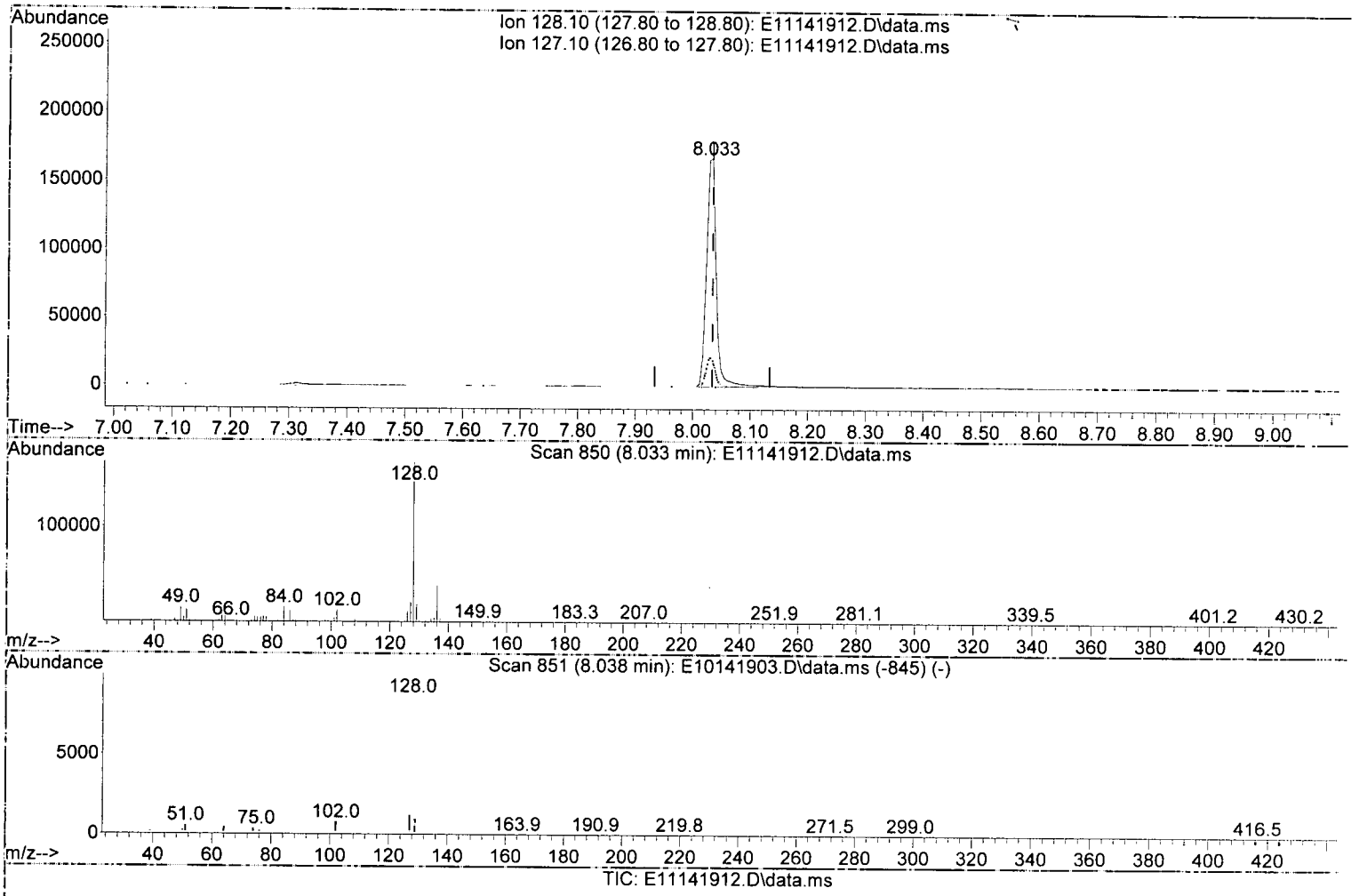
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.370	156	7215	15.80 ng/ml	89
44) 1,4-Dinitrobenzene	9.477	168	133	66.24 ng/ml	88
45) Dimethyl phthalate	9.483	163	123	N.D.	
46) 1,3-Dinitrobenzene	9.477	168	133	61.15 ng/ml#	1
47) 2,6-Dinitrotoluene	9.574	165	53	30.98 ng/ml#	1
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	34701	48.15 ng/ml	97
50) 3-Nitroaniline	9.782	138	197	N.D.	
51) Acenaphthene	9.820	153	35586	71.79 ng/ml	97
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.905	139	137	85.12 ng/ml#	1
54) 2,4-Dinitrotoluene	9.953	165	109	61.46 ng/ml#	39
55) Dibenzofuran	10.002	168	6088	9.20 ng/ml#	1
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	10.221	149	169	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	3692	8.78 ng/ml	84
60) Fluorene	~~10.349~~	~~166~~	~~32629~~	~~62.06 ng/ml~~	~~99~~ MI Hit
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.349	138	429	3.56 ng/ml#	43
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.467	169	742	N.D.	
66) Azobenzene (1,2-DPH)	10.494	77	93	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	11.328	178	446536	457.73 ng/ml	99
72) Anthracene	11.376	178	92946	99.71 ng/ml	98
73) Carbazole	11.547	167	12532	16.30 ng/ml	94
74) Di-n-butyl phthalate	11.874	149	421	N.D.	
75) Fluoranthene	12.628	202	319682	341.11 ng/ml	99
76) Benzidine	12.783	184	52	152.45 ng/ml#	1
77) Pyrene	12.938	202	400105	414.90 ng/ml	99
80) Butyl benzyl phthalate	14.040	149	75	32.75 ng/ml#	51
81) Bis(2-ethylhexyl) adipate	14.173	129	1577	57.38 ng/ml	64
82) 3,3-Dichlorobenzidine	15.211	252	50	24.91 ng/ml#	1
83) Benz(a)anthracene	15.206	228	80974	88.04 ng/ml	80
84) Chrysene	15.286	228	111077	120.92 ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.372	149	630	59.48 ng/ml	67
87) Di-n-octyl phthalate	17.030	149	113	74.26 ng/ml#	1
88) Benzo(b)fluoranthene	17.827	252	104021	131.78 ng/ml	98
89) Benzo(k)fluoranthene	~~17.827~~	~~252~~	~~131833~~	~~159.61 ng/ml~~	~~95~~ MI Hit mos
90) Benzo(b+k)fluoranthene	17.827	252	151961	188.20 ng/ml	95
91) Benzo(e)pyrene	18.474	252	73791	93.31 ng/ml	100
92) Benzo(a)pyrene	18.597	252	92638	134.17 ng/ml	99
93) Perylene	18.800	252	33092	43.09 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.137	276	81065	104.58 ng/ml	97
96) Dibenz(a,h)anthracene	21.196	278	8982	12.58 ng/ml	82
97) Benzo(g,h,i)perylene	21.678	276	91575	122.99 ng/ml	100

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(29) Naphthalene (T)

8.033min (-0.000) 271.92 ng/ml

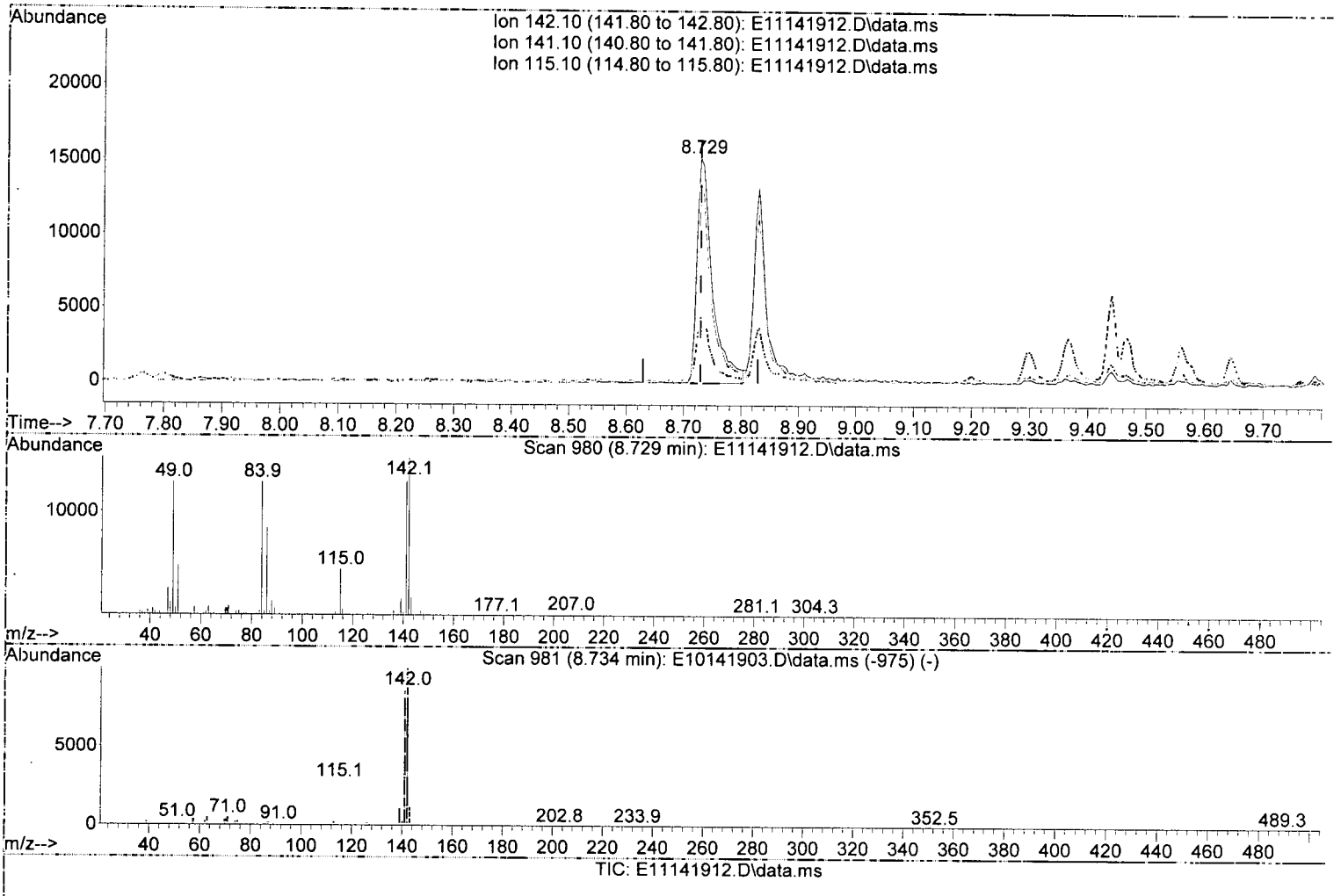
response 198553

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	12.42
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(33) 2-Methylnaphthalene (T)

8.729min (-0.000) 58.51 ng/ml

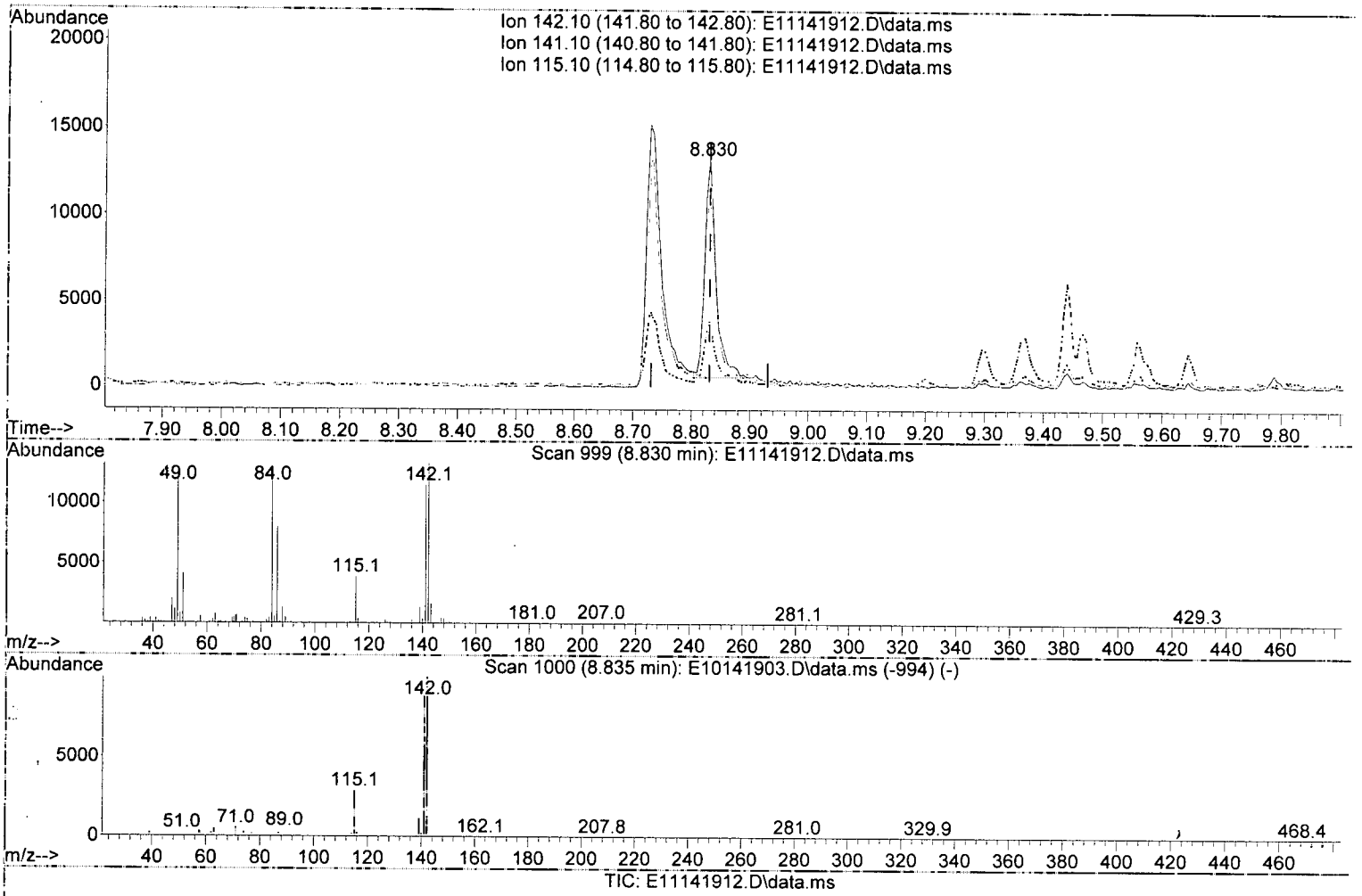
response 28793

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	86.50	85.36
115.10	28.30	29.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(34) 1-Methylnaphthalene (T)

8.830min (-0.000) 37.11 ng/ml J

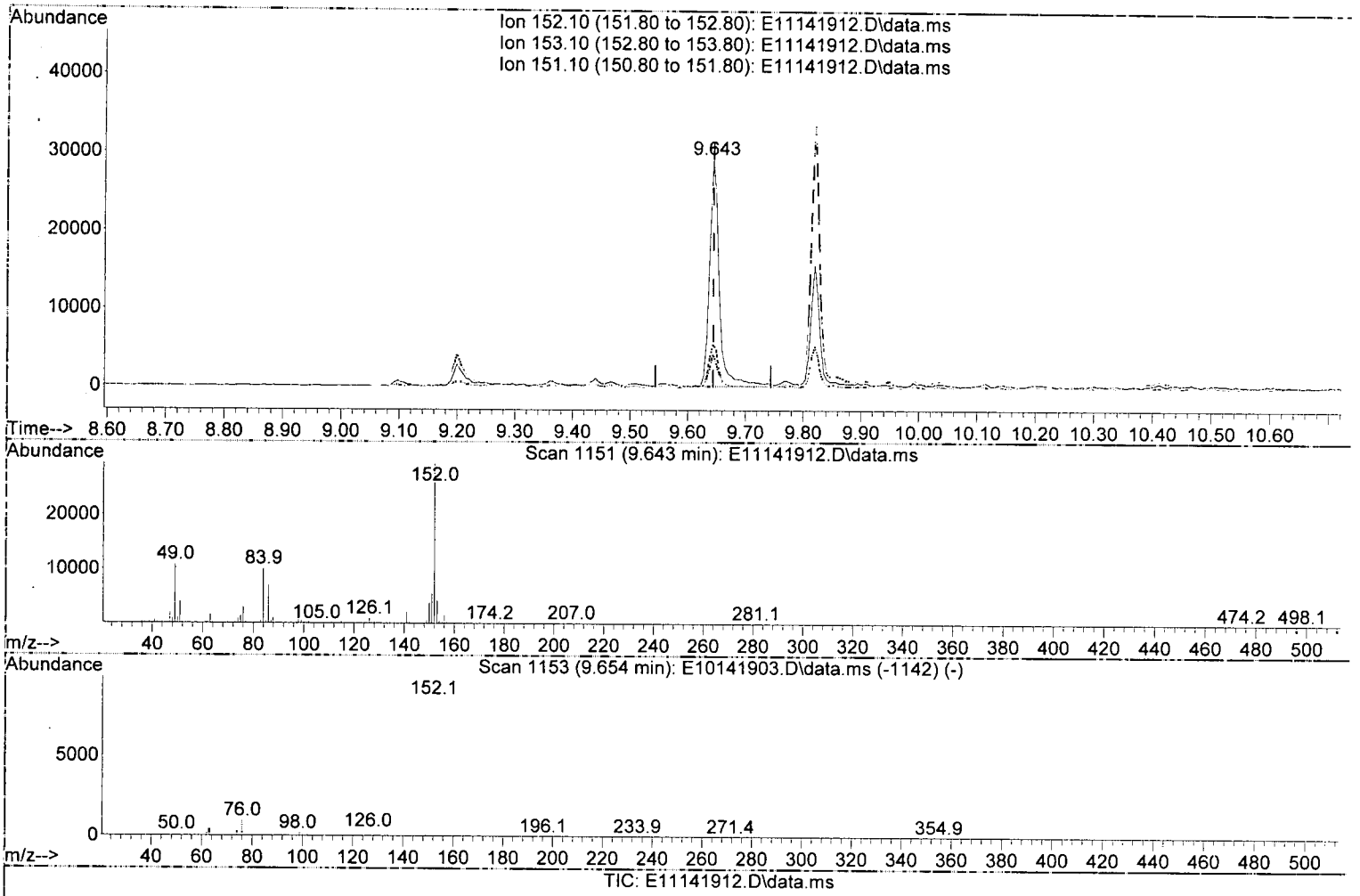
response 17330

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	89.60	86.37
115.10	30.30	29.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(49) Acenaphthylene (T)

9.643min (-0.000) 48.15 ng/ml

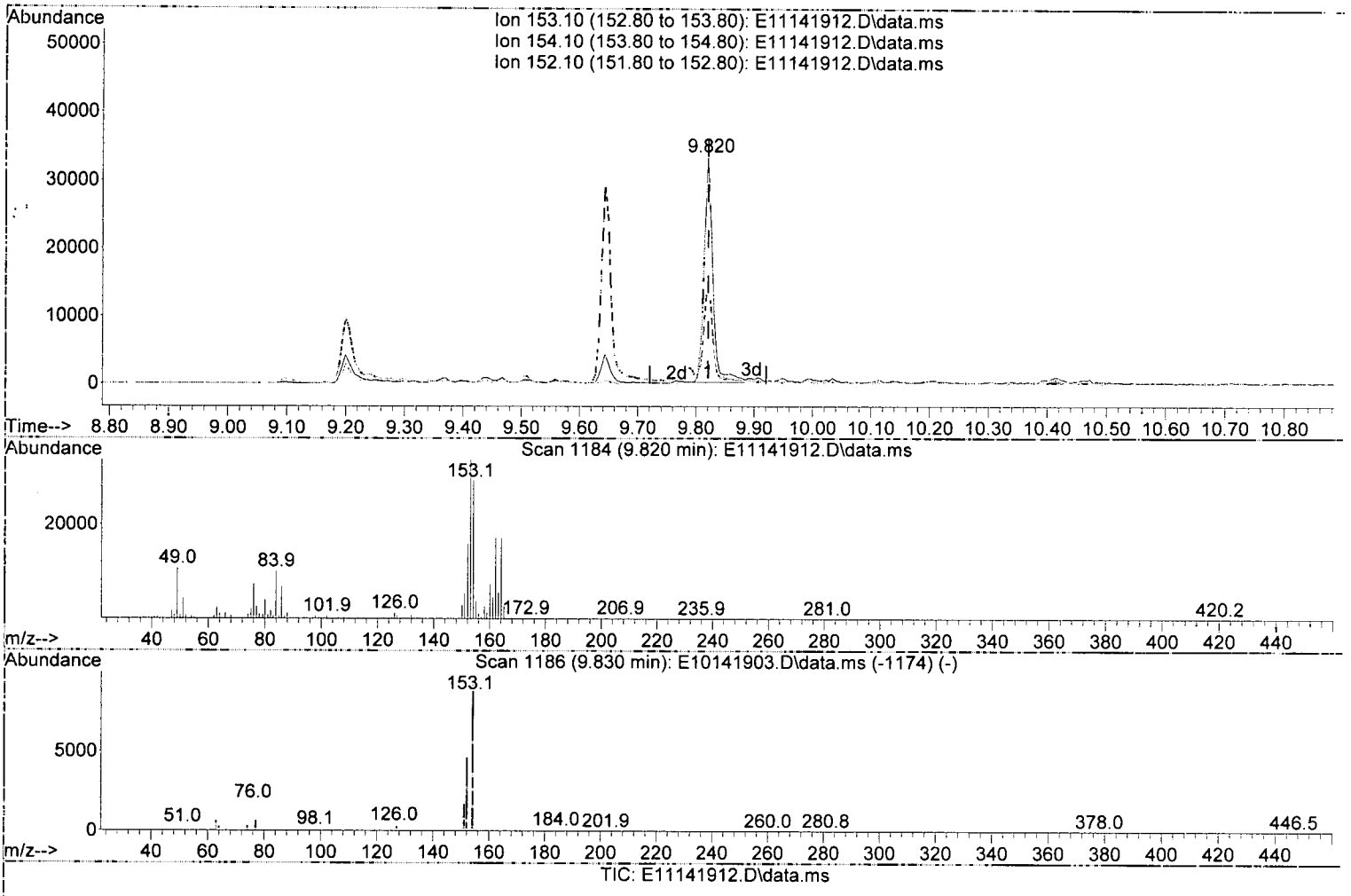
response 34701

Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.10	14.90
151.10	19.80	18.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(51) Acenaphthene (T)

9.820min (-0.000) 71.79 ng/ml

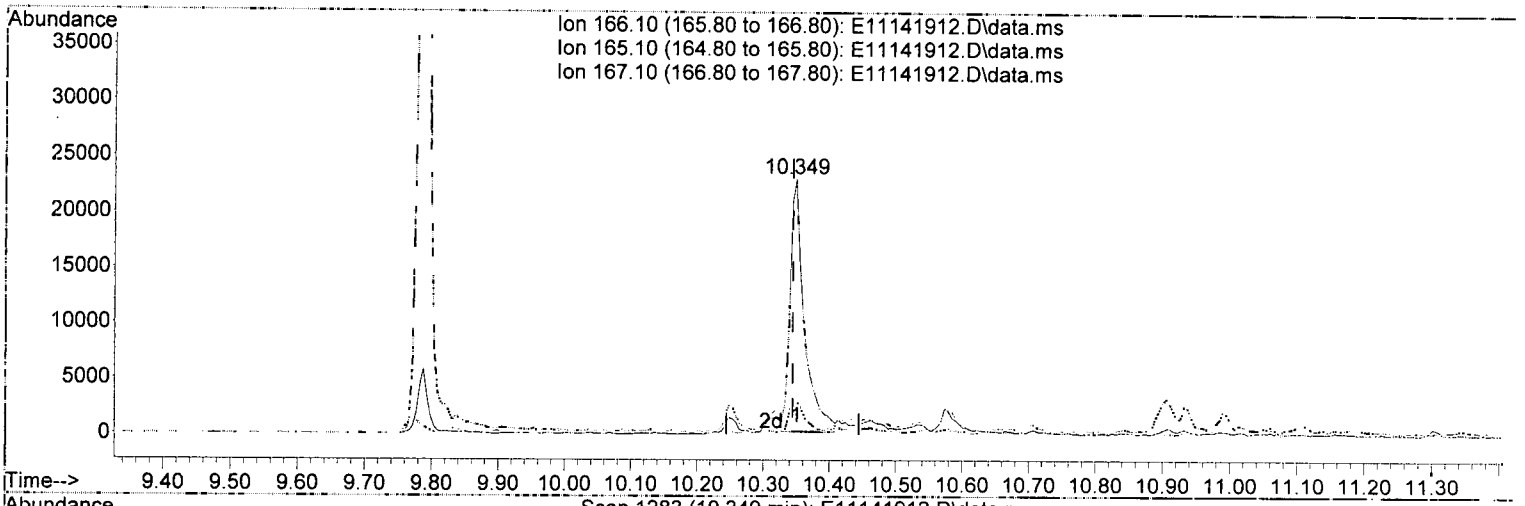
response 35586

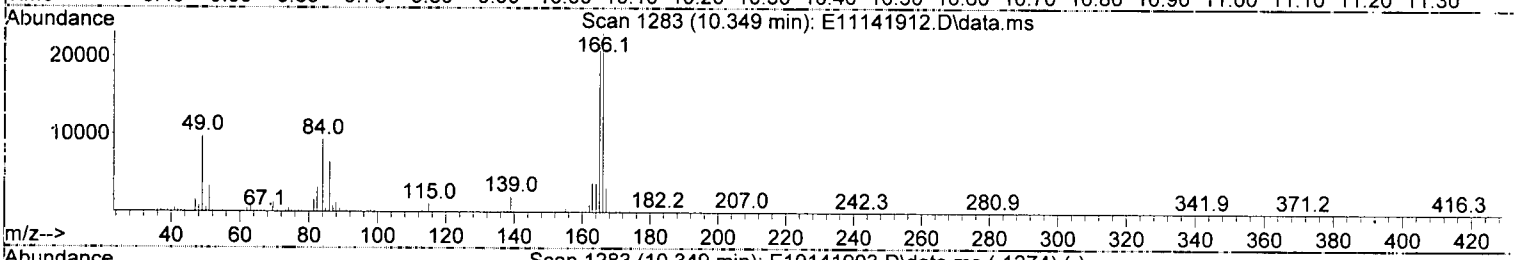
Ion	Exp%	Act%
153.10	100.00	100.00
154.10	91.00	87.16
152.10	46.40	47.06
0.00	0.00	0.00

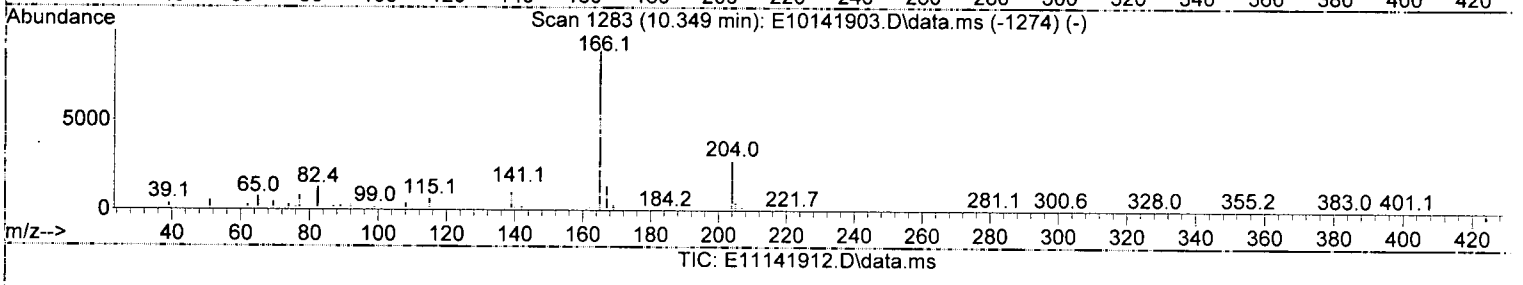
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E11141912.D\data.ms

(60) Fluorene (T)

10.349min (+ 0.005) 65.28 ng/ml m

DTH 11/14/19

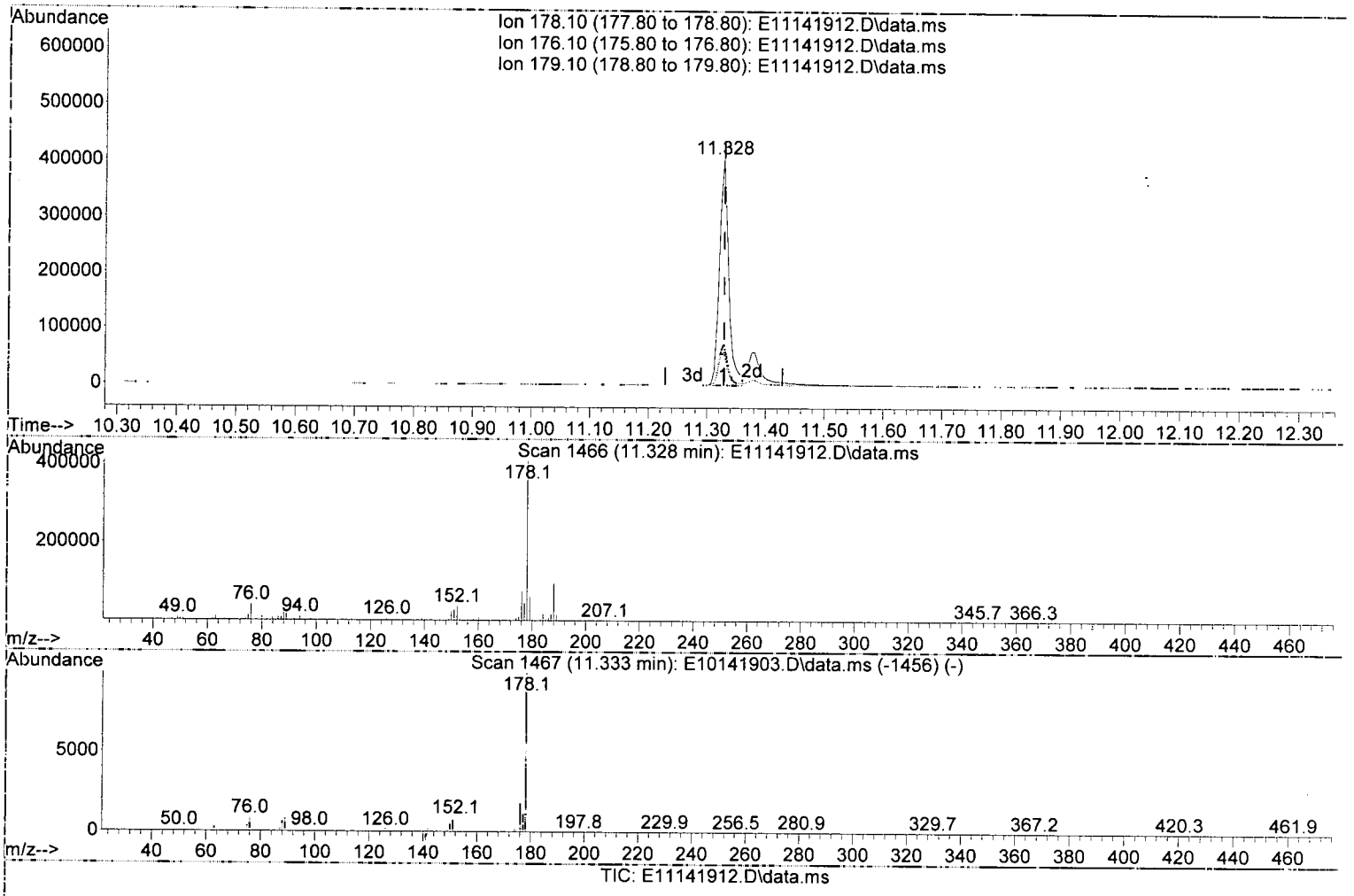
response 34322

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.30	94.23
167.10	13.30	13.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.000) 457.73 ng/ml

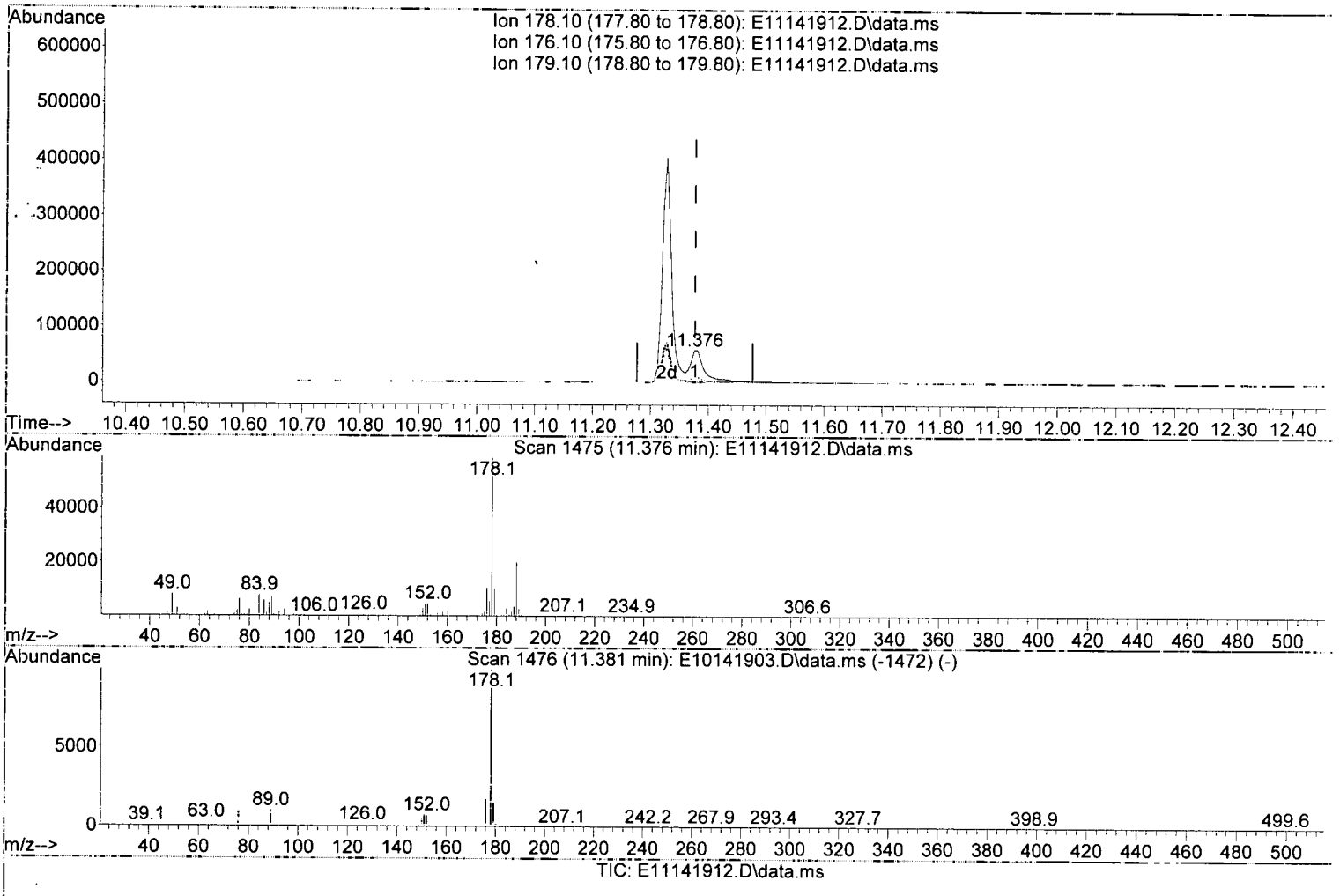
response 446536

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	18.25
179.10	15.20	15.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(72) Anthracene (T)

11.376min (-0.000) 99.71 ng/ml

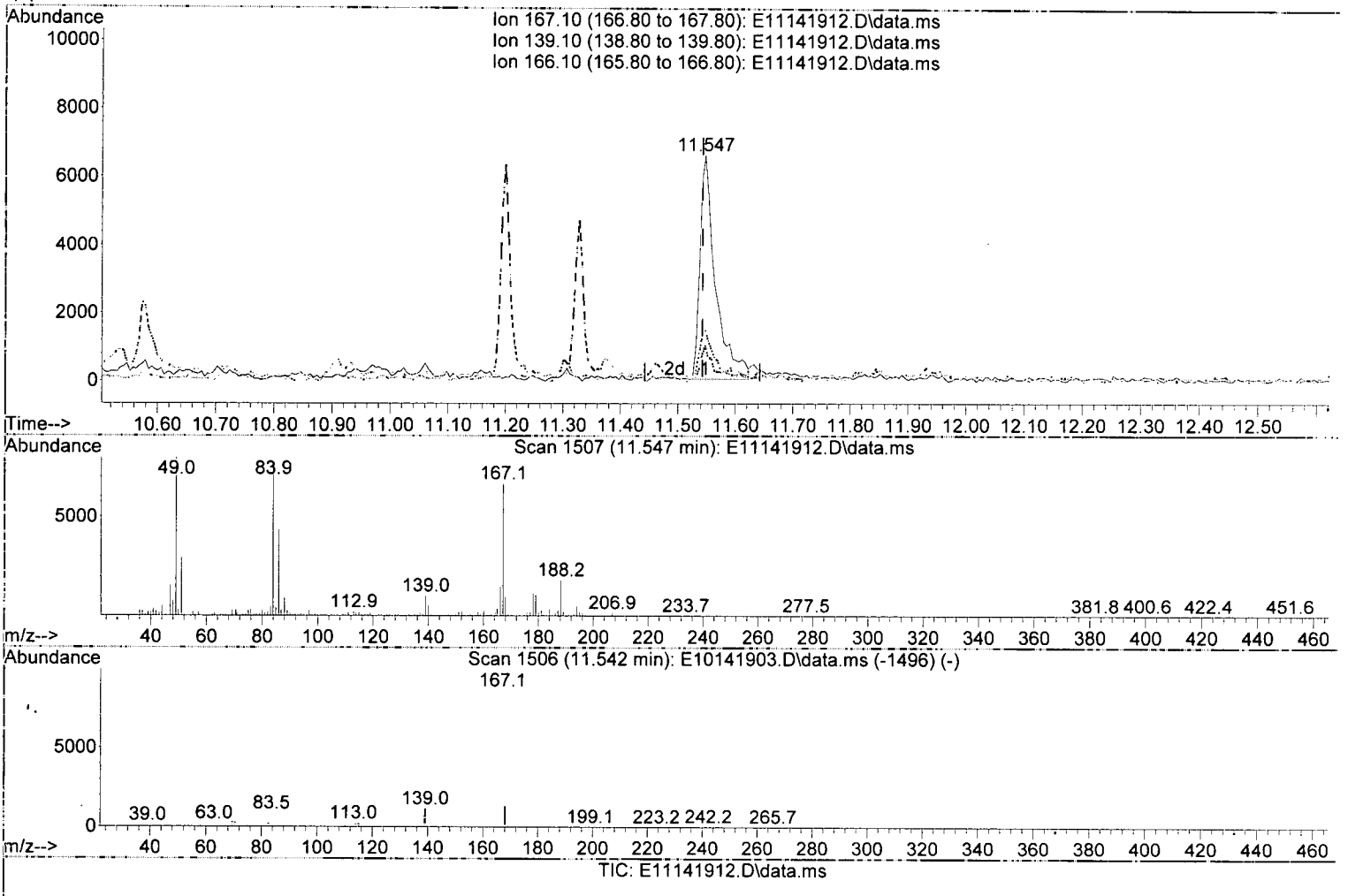
response 92946

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.10	18.14
179.10	15.50	17.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(73) Carbazole (T)

11.547min (+ 0.005) 16.30 ng/ml J

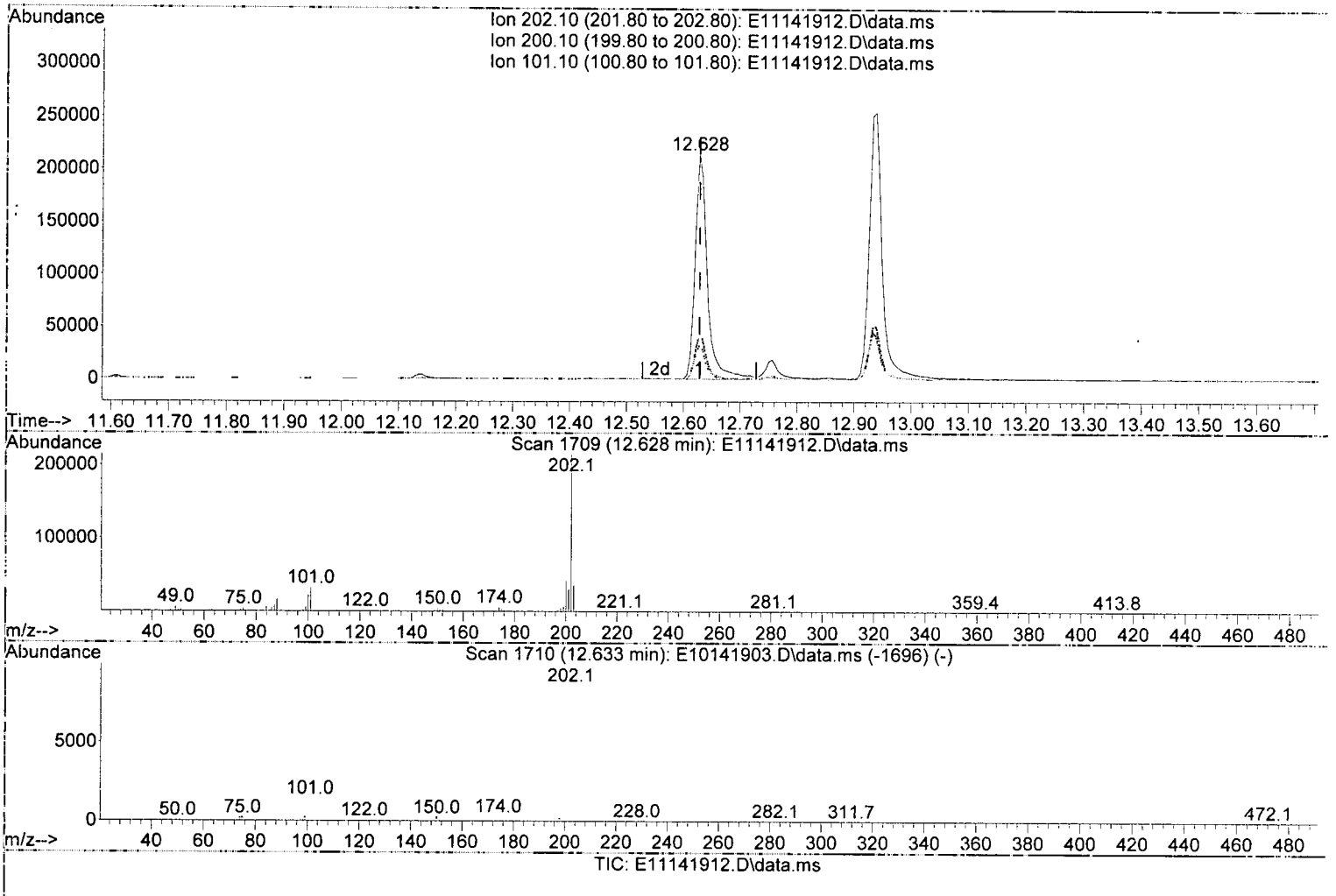
response 12532

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	11.80	15.69
166.10	20.90	22.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(75) Fluoranthene (T)

12.628min (-0.000) 341.11 ng/ml

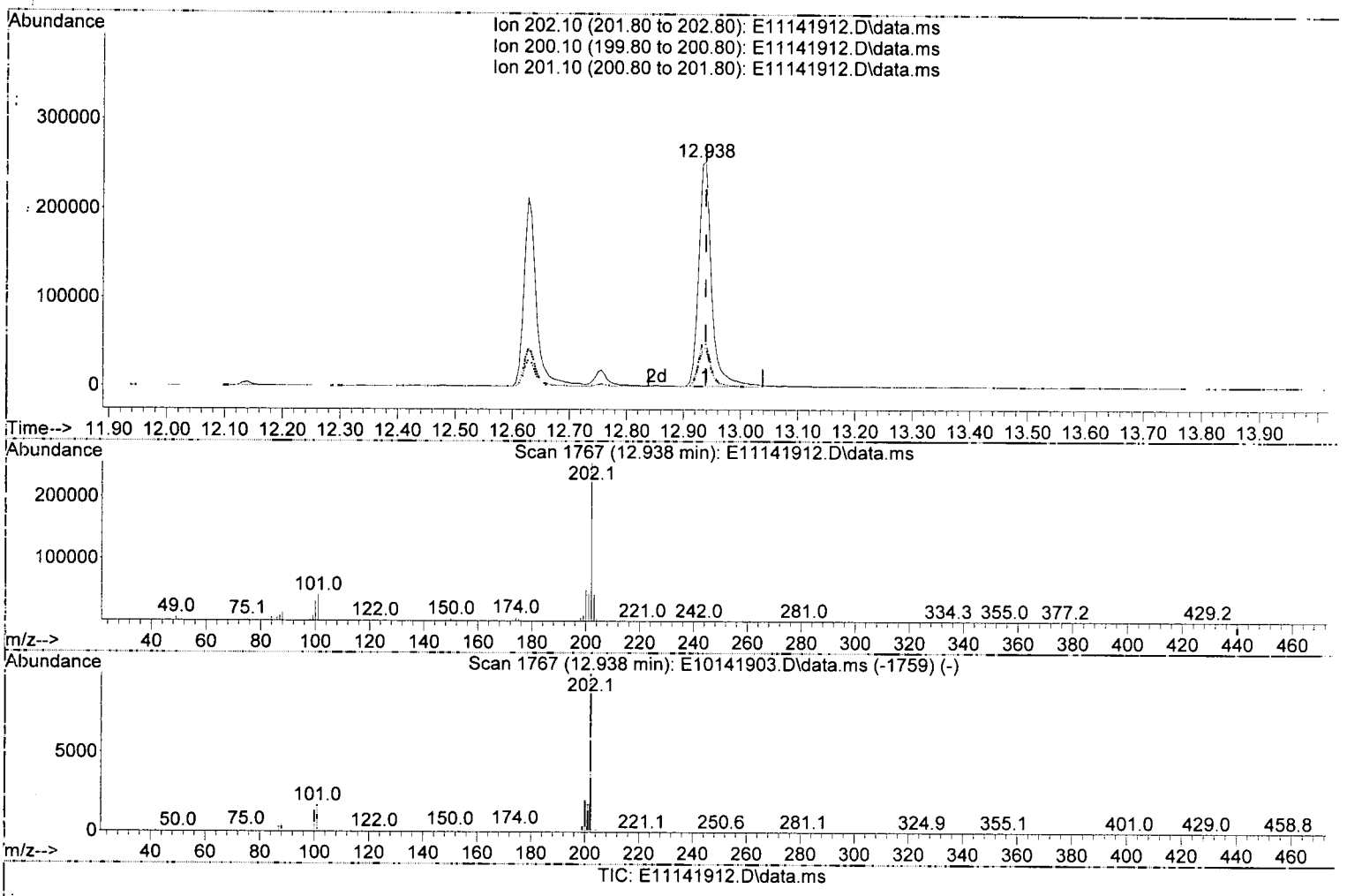
response 319682

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	19.89
101.10	14.50	15.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(77) Pyrene (T)

12.938min (-0.000) 414.90 ng/ml

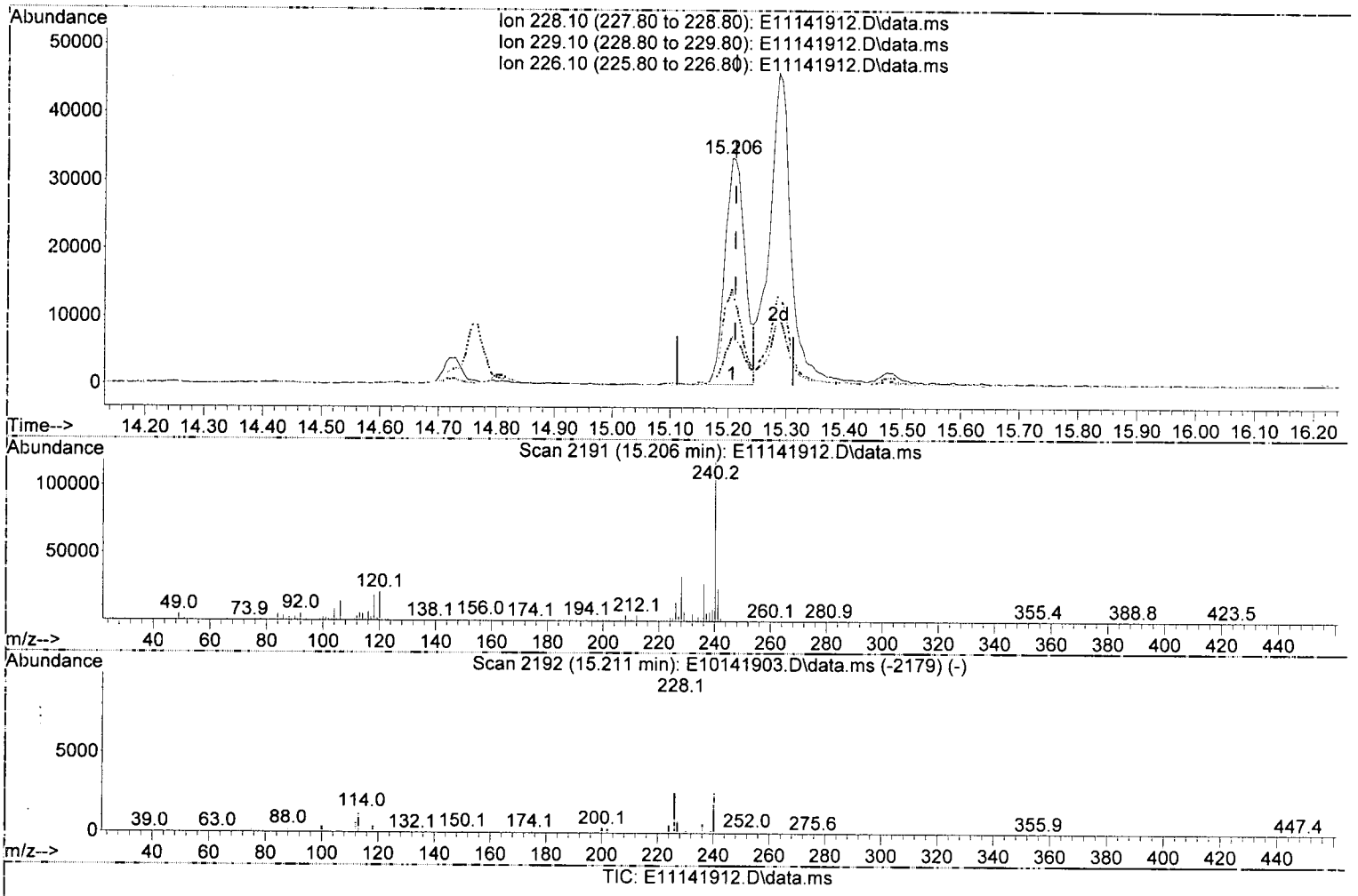
response 400105

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	20.03
201.10	16.80	17.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(83) Benz(a)anthracene (T)

15.206min (-0.005) 88.04 ng/ml

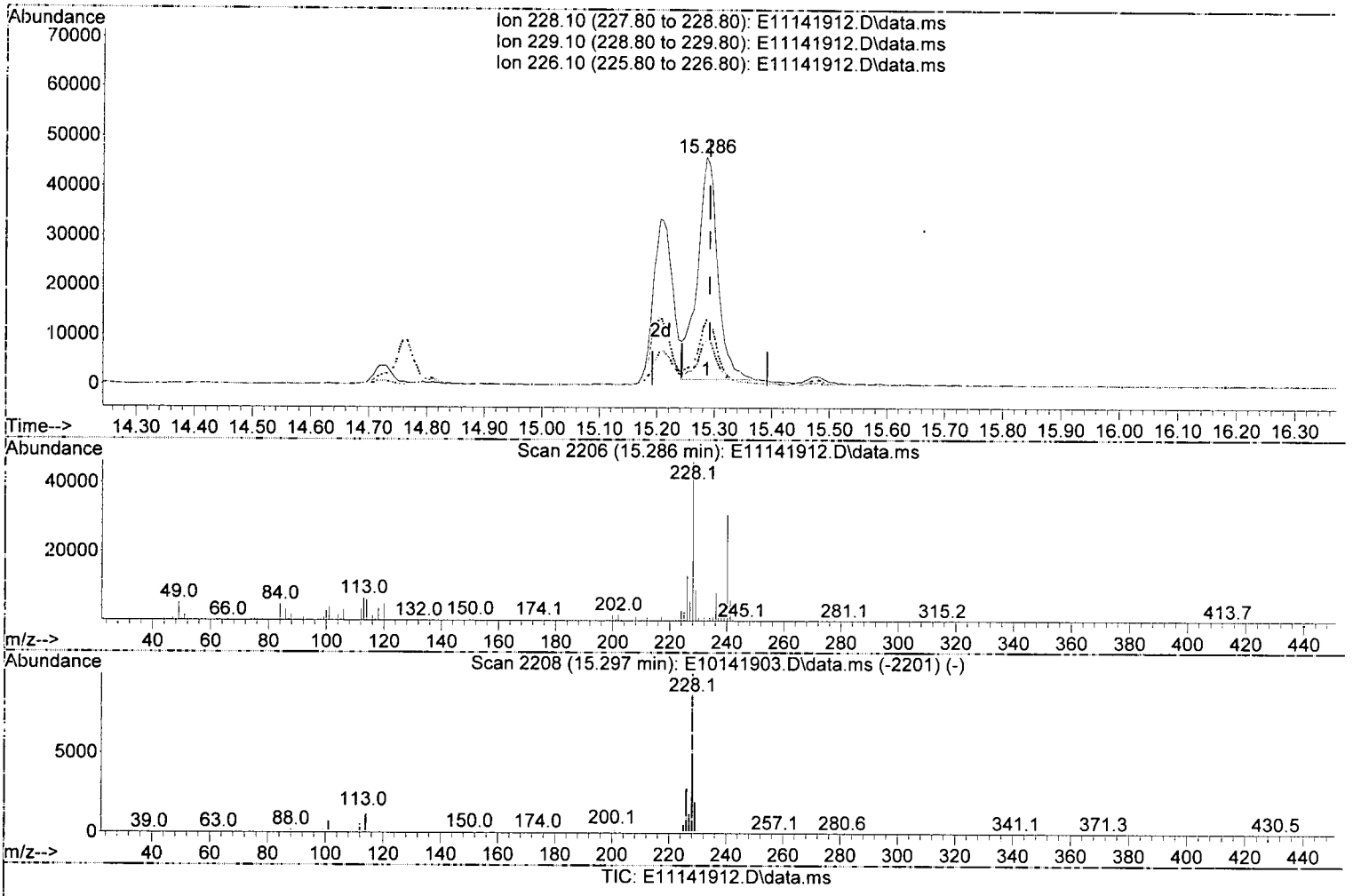
response 80974

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	21.40
226.10	25.90	42.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(84) Chrysene (T)

15.286min (-0.005) 120.92 ng/ml

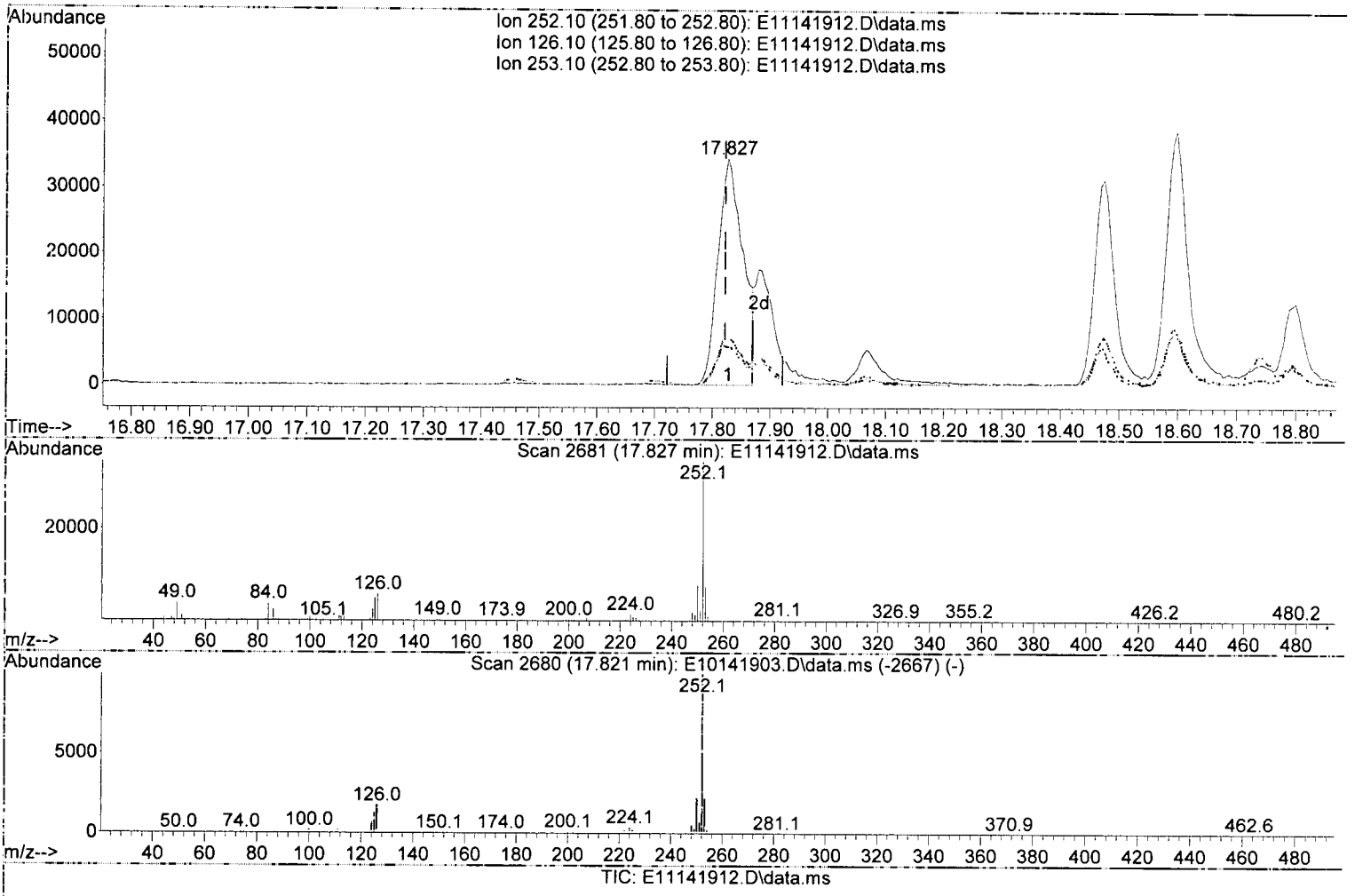
response 111077

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	19.62
226.10	29.30	28.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.827min (+ 0.005) 131.78 ng/ml

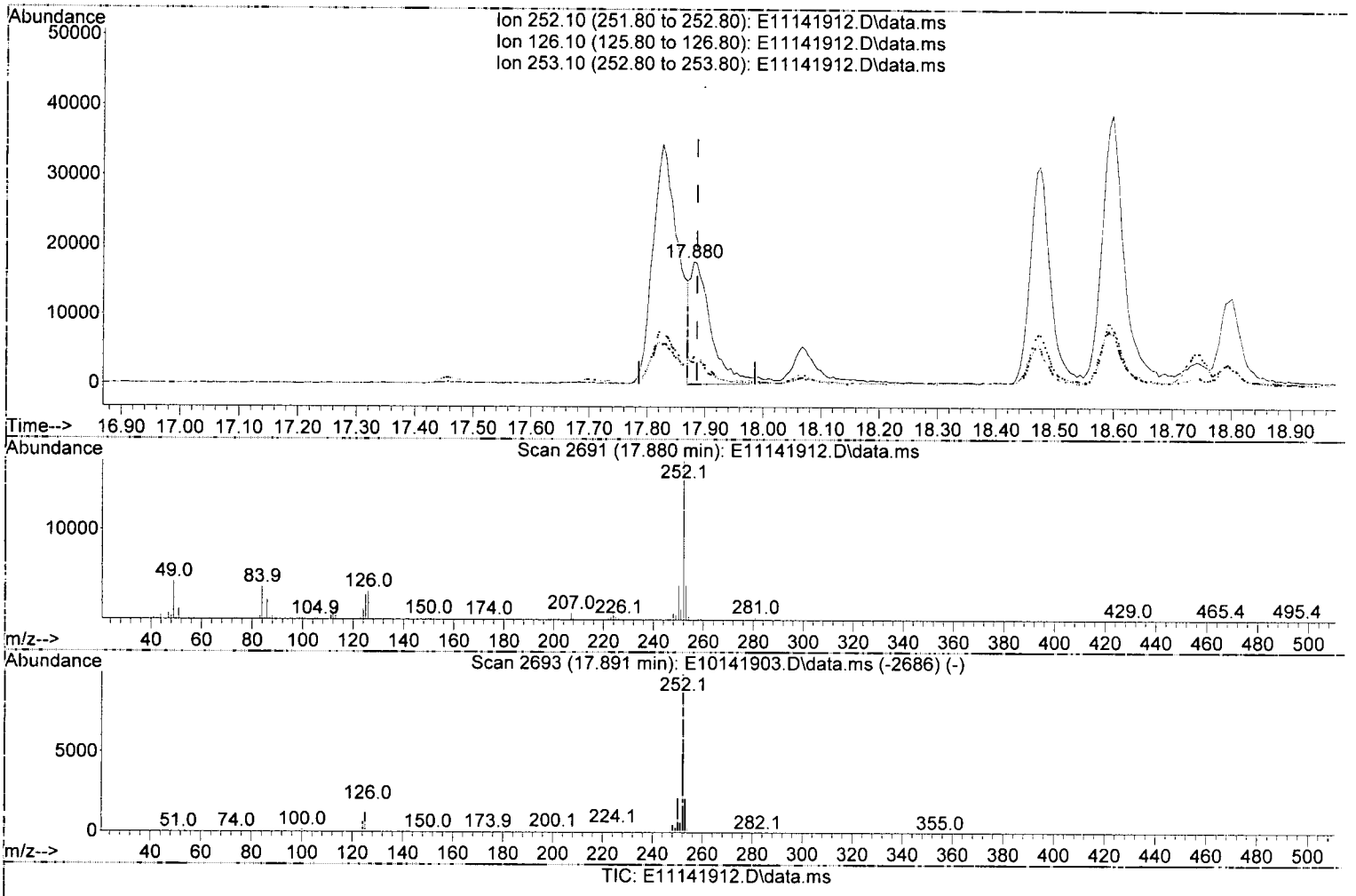
response 104021

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	16.62
253.10	21.80	21.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.880min (-0.005) 59.73 ng/ml (m)

mos
DTH 11/14/19

response 43403

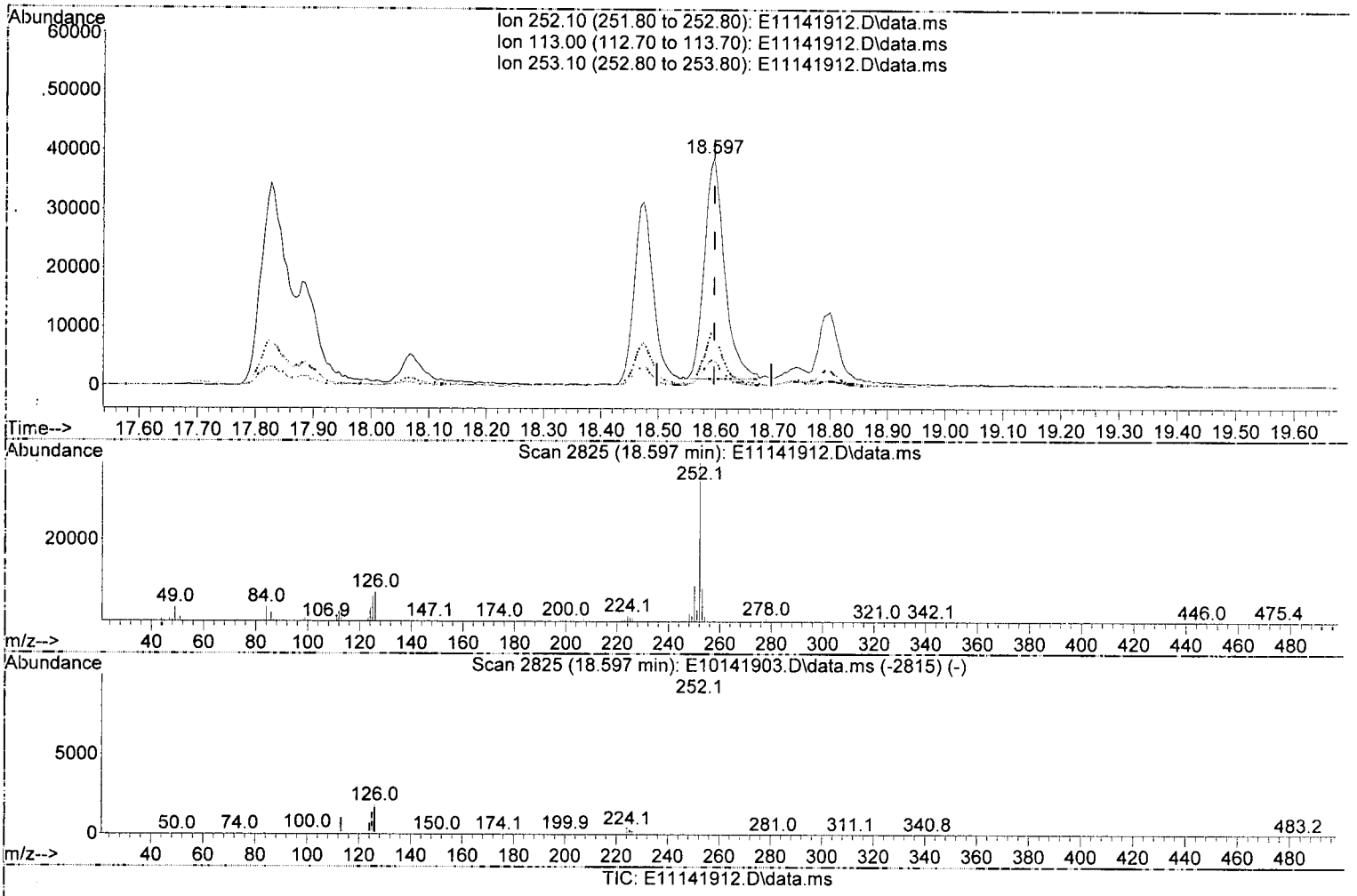
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	17.86
253.10	22.00	21.98
0.00	0.00	0.00

J

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(92) Benzo(a)pyrene (T)

18.597min (-0.000) 134.17 ng/ml

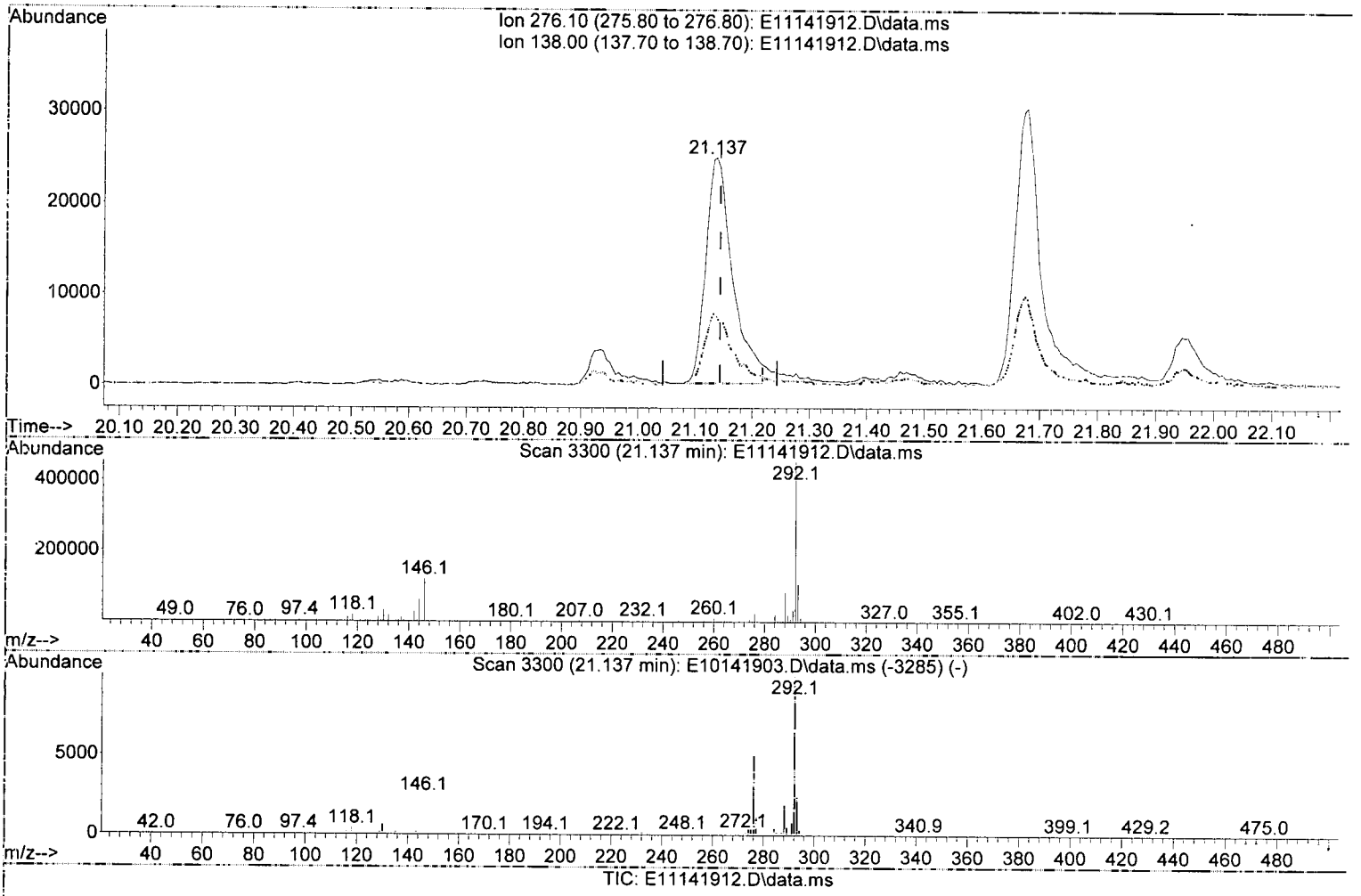
response 92638

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	10.87
253.10	21.70	21.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.137min (-0.005) 104.58 ng/ml

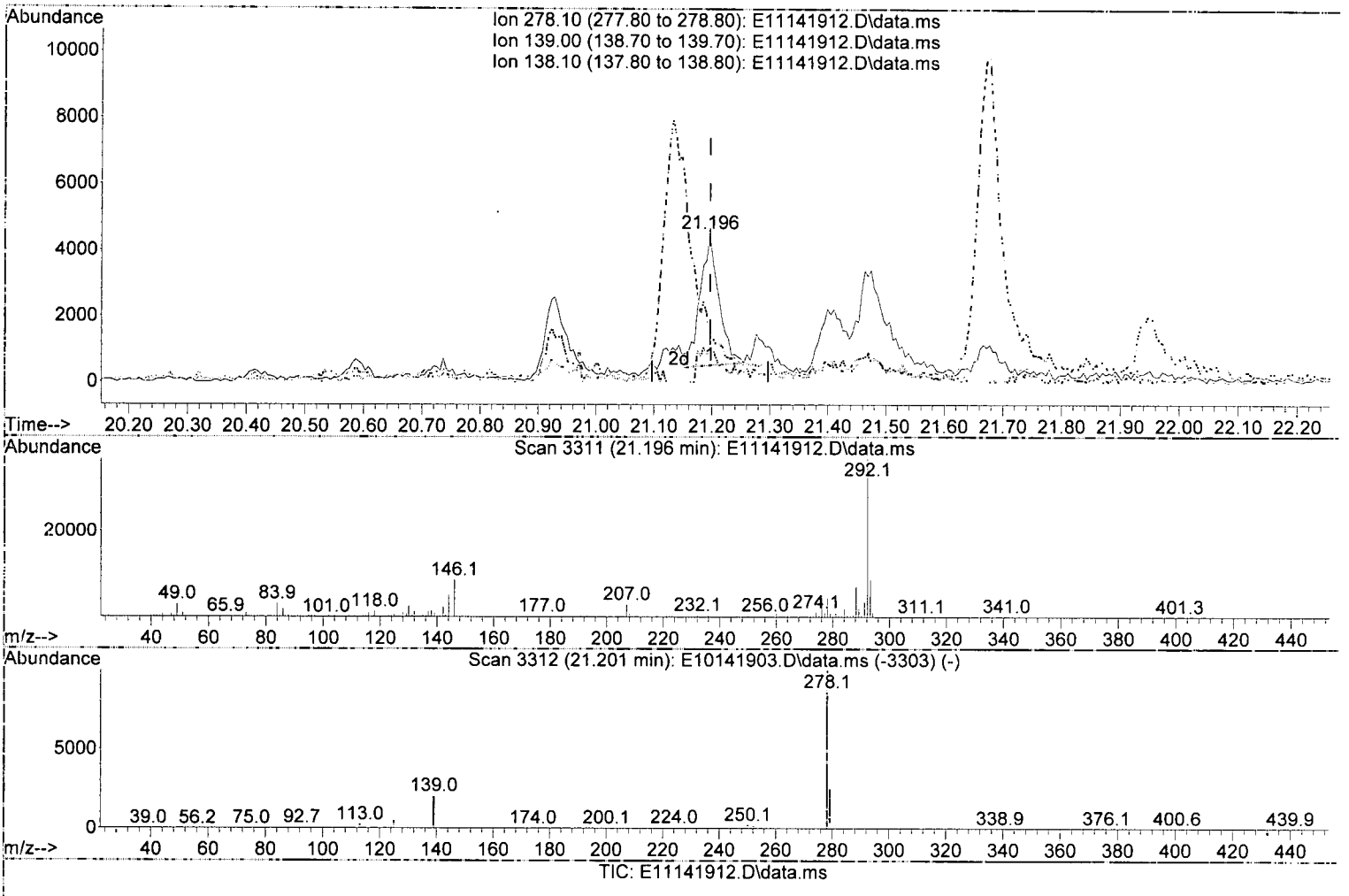
response 81065

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	30.16
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(96) Dibenz(a,h)anthracene (T)

21.196min (-0.000) 12.58 ng/ml J

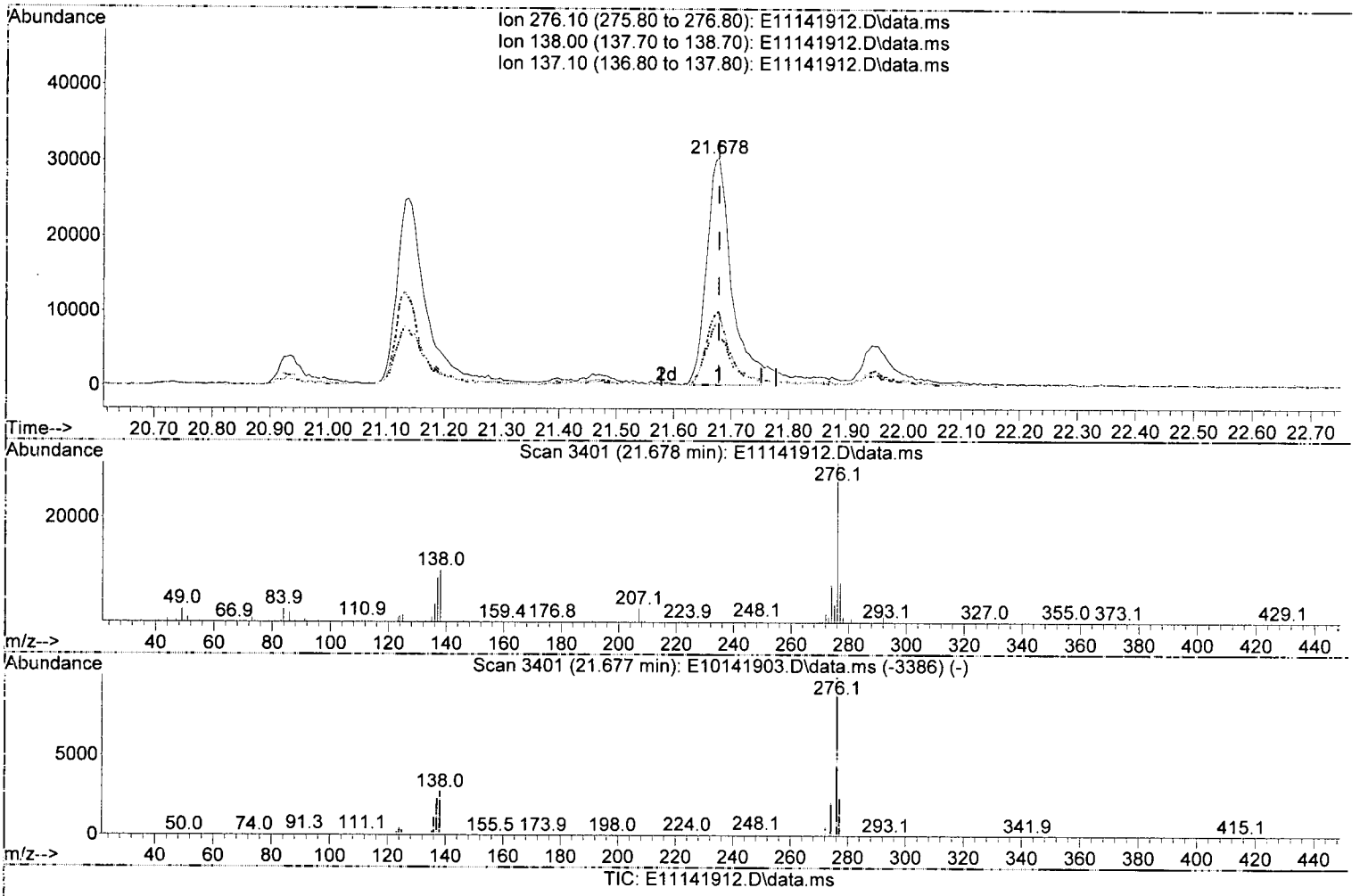
response 8982

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	23.10	19.72
138.10	17.40	32.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141912.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.678min (-0.000) 122.99 ng/ml

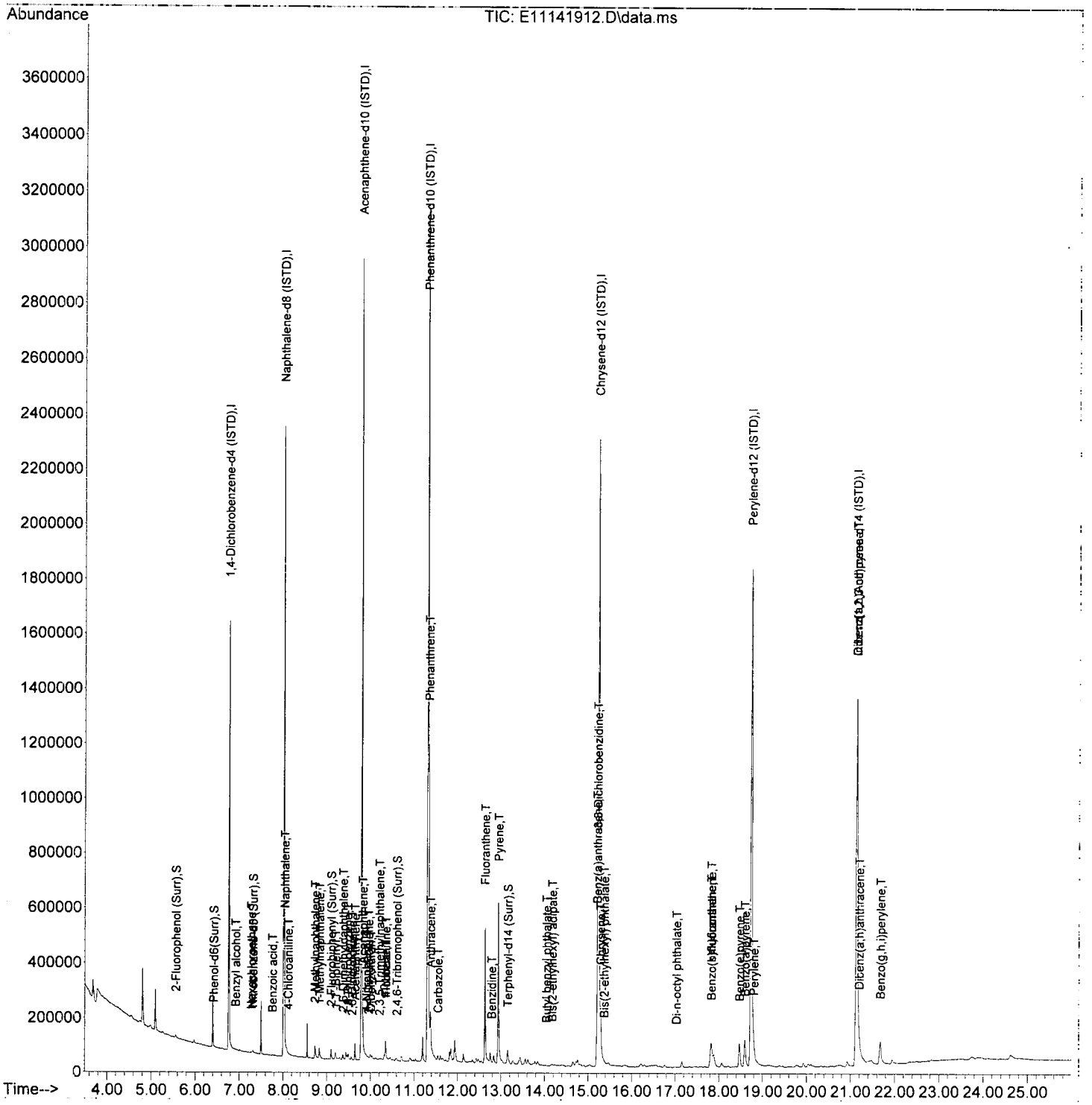
response 91575

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	32.50	32.55
137.10	27.70	27.98
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141912.D
Acq On : 14 Nov 2019 2:37 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-04@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:23:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141913.D
Acq On : 14 Nov 2019 3:13 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-05@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:57:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

RM
DTK 11/14/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	403244	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.006	136	1697917	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	831349	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1630957	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1412520	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	1236692	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	890331	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	8259	35.03 ng/ml	0.00
5) Phenol-d6(Surr)	6.423	99	7011	23.97 ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.306	82	5625	24.13 ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	22072	35.44 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.606	330	1306	46.34 ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.152	244	27376	42.94 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.327	74	56	N.D.	
3) Pyridine	4.316	79	239	N.D.	
6) Phenol	6.477	94	97	N.D.	
7) Aniline	6.471	93	74	N.D.	
8) Bis(2-chloroethyl) ether	6.487	93	104	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...	7.006	45	126	N.D.	
16) N-Nitrosodi-n-propylamine	7.161	70	58	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.263	117	171	N.D.	
20) Nitrobenzene	7.322	77	244	N.D.	
22) Isophorone	7.530	82	118	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	7.803	105	50	819.92 ng/ml#	1
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.028	128	13653	15.12 ng/ml	99
30) 4-Chloroaniline	8.033	127	1815	16.05 ng/ml#	32
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.745	142	1835	3.02 ng/ml	80
34) 1-Methylnaphthalene	8.841	142	993	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	9.210	154	806	N.D.	
41) 2-Chloronaphthalene	9.279	162	81	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141913.D
Acq On : 14 Nov 2019 3:13 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-05@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:57:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

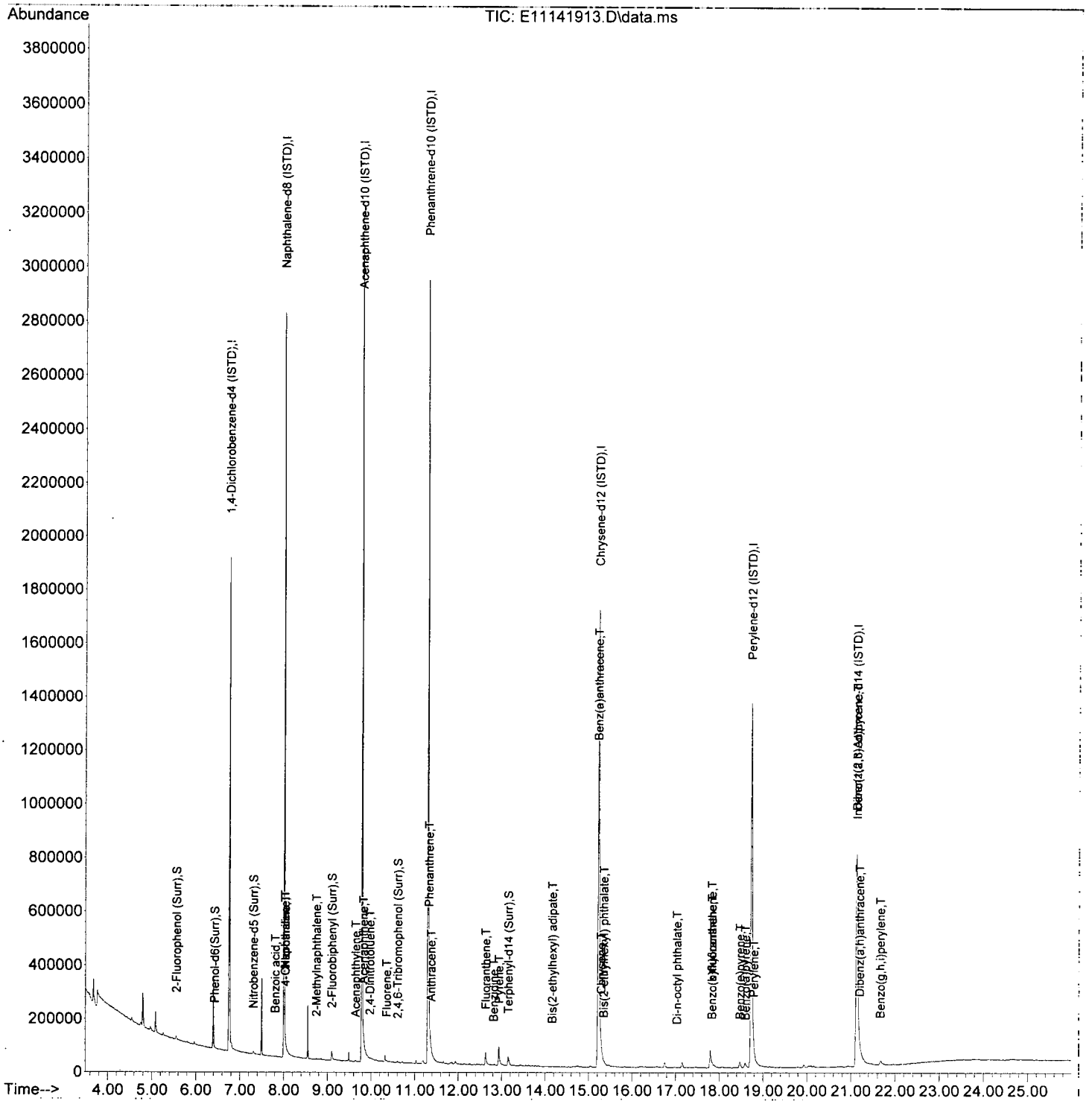
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.370	156	968	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	3189	3.97 ng/ml	99
50) 3-Nitroaniline	9.782	138	141	N.D.	
51) Acenaphthene	9.820	153	4562	8.25 ng/ml	91
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.969	165	212	62.02 ng/ml#	43
55) Dibenzofuran	10.007	168	587	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...	10.226	170	582	N.D.	
60) Fluorene	10.355	166	3098	5.28 ng/ml	91
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	10.472	169	187	N.D.	
66) Azobenzene (1,2-DPH)	10.504	77	126	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	11.323	178	45246	48.77 ng/ml	97
72) Anthracene	11.376	178	10861	12.25 ng/ml	97
73) Carbazole	11.563	167	916	N.D.	
74) Di-n-butyl phthalate	11.874	149	260	N.D.	
75) Fluoranthene	12.633	202	40291	45.20 ng/ml	96
76) Benzidine	12.815	184	78	152.52 ng/ml	68
77) Pyrene	12.938	202	55242	60.23 ng/ml	98
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.163	129	633	55.23 ng/ml	78
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.216	228	15720	20.69 ng/ml	92
84) Chrysene	15.286	228	21904	28.86 ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.345	149	397	59.25 ng/ml	51
87) Di-n-octyl phthalate	17.030	149	122	74.31 ng/ml#	1
88) Benzo(b)fluoranthene	17.832	252	21493	42.90 ng/ml	94
89) Benzo(k)fluoranthene	17.832	252	26199	49.24 ng/ml	97
90) Benzo(b+k)fluoranthene	17.832	252	32800	66.69 ng/ml	97
91) Benzo(e)pyrene	18.474	252	17097	34.03 ng/ml	96
92) Benzo(a)pyrene	18.597	252	16268	40.94 ng/ml	94
93) Perylene	18.789	252	6536	11.09 ng/ml	95
95) Indeno(1,2,3-cd)pyrene	21.137	276	17781	32.82 ng/ml	82
96) Dibenz(a,h)anthracene	21.196	278	1979	3.97 ng/ml#	57
97) Benzo(g,h,i)perylene	21.667	276	18478	35.51 ng/ml	87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141913.D
Acq On : 14 Nov 2019 3:13 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-05@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 15:57:32 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141914.D
Acq On : 14 Nov 2019 3:49 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-08@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 16:20:11 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

RPM
DTH 11/14/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	316545	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1376861	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.787	162	796984	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.306	188	1754464	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1677869	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.746	264	1528801	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1179221	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.562	112	7451	40.26 ng/ml	0.00
5) Phenol-d6(Surr)	6.434	99	6518	28.39 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.311	82	6006	32.82 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.103	172	25330	42.43 ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.611	330	1402	46.31 ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.157	244	38734	51.15 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.332	74	61	N.D.	
3) Pyridine	4.289	79	79	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	7.135	70	112	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.252	117	156	N.D.	
20) Nitrobenzene	7.316	77	50	N.D.	
22) Isophorone	7.541	82	189	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	8.028	128	1238	N.D.	
30) 4-Chloroaniline	8.028	127	134	11.17 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.750	142	180	N.D.	
34) 1-Methylnaphthalene	8.851	142	67	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	9.210	154	91	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141914.D
Acq On : 14 Nov 2019 3:49 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-08@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 16:20:11 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

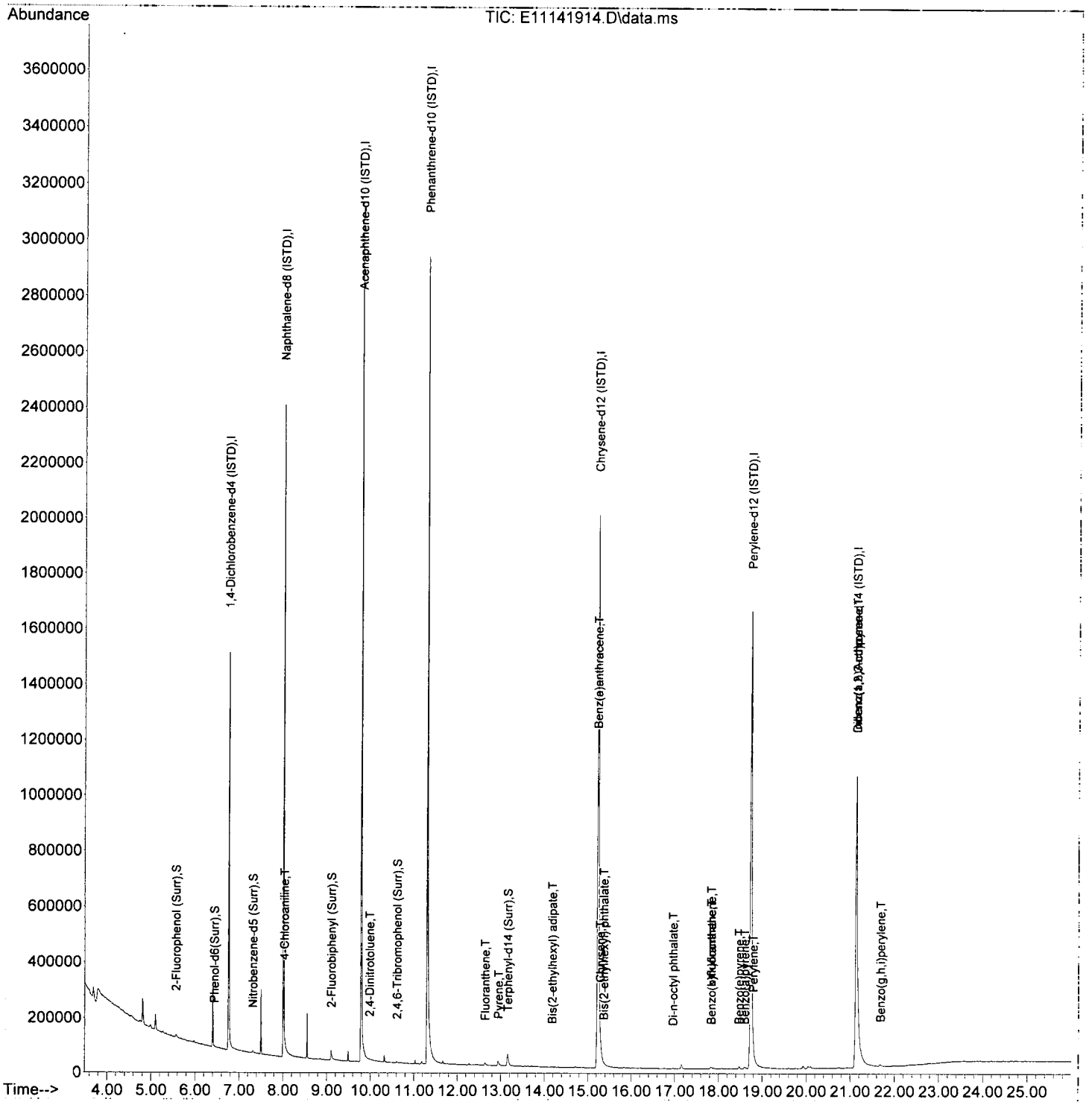
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43)	2,6-Dimethylnaphthalene	0.000		0	N.D.	
44)	1,4-Dinitrobenzene	0.000		0	N.D.	
45)	Dimethyl phthalate	0.000		0	N.D.	
46)	1,3-Dinitrobenzene	0.000		0	N.D.	
47)	2,6-Dinitrotoluene	0.000		0	N.D.	
48)	1,2-Dinitrobenzene	0.000		0	N.D.	
49)	Acenaphthylene	9.648	152	1293	N.D.	
50)	3-Nitroaniline	9.782	138	123	N.D.	
51)	Acenaphthene	9.814	153	123	N.D.	
52)	2,4-Dinitrophenol	0.000		0	N.D.	
53)	4-Nitrophenol	0.000		0	N.D.	
54)	2,4-Dinitrotoluene	9.980	165	228	62.18 ng/ml#	28
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...	10.333	170	159	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)	10.499	77	108	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	11.323	178	1216	N.D.	
72)	Anthracene	11.381	178	655	N.D.	
73)	Carbazole	0.000		0	N.D.	
74)	Di-n-butyl phthalate	11.879	149	203	N.D.	
75)	Fluoranthene	12.638	202	9754	10.17 ng/ml	97
76)	Benzidine	0.000		0	N.D.	
77)	Pyrene	12.943	202	15367	15.58 ng/ml	98
80)	Butyl benzyl phthalate	0.000		0	N.D.	
81)	Bis(2-ethylhexyl) adipate	14.179	129	821	55.42 ng/ml	83
82)	3,3-Dichlorobenzidine	0.000		0	N.D.	
83)	Benz(a)anthracene	15.216	228	10400	11.52 ng/ml	98
84)	Chrysene	15.281	228	9049	10.04 ng/ml	93
85)	Bis(2-ethylhexyl) phth...	15.366	149	413	59.16 ng/ml	83
87)	Di-n-octyl phthalate	16.955	149	87	74.23 ng/ml#	11
88)	Benzo(b)fluoranthene	17.832	252	6532	18.14 ng/ml	83
89)	Benzo(k)fluoranthene	17.832	252	8507	20.82 ng/ml	85
90)	Benzo(b+k)fluoranthene	17.832	252	11002	32.02 ng/ml	85
91)	Benzo(e)pyrene	18.468	252	5861	15.50 ng/ml	89
92)	Benzo(a)pyrene	18.597	252	5976	21.45 ng/ml	97
93)	Perylene	18.789	252	3824	5.25 ng/ml	94
95)	Indeno(1,2,3-cd)pyrene	21.137	276	7689	10.72 ng/ml	46
96)	Dibenz(a,h)anthracene	21.191	278	1024	N.D.	
97)	Benzo(g,h,i)perylene	21.683	276	6493	9.42 ng/ml	88

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141914.D
Acq On : 14 Nov 2019 3:49 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-08@40
Misc : 40x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 16:20:11 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTT 11/14/19 DTT 11/14/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	270775	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1331978	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	830427	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1735217	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	1647837	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.747	264	1567252	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1219569	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	74728	472.04 ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	85136	433.46 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	75027	479.30 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	307795	494.79 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	30683	417.14 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	464727	624.85 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.295	74	71	N.D.	
3) Pyridine	4.311	79	135	N.D.	
6) Phenol	6.418	94	273	N.D.	
7) Aniline	6.429	93	199	N.D.	
8) Bis(2-chloroethyl) ether	6.487	93	244	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	6.760	146	62	N.D.	
11) 1,4-Dichlorobenzene	6.760	146	62	N.D.	
12) Benzyl alcohol	6.921	108	92	35.75 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.022	107	98	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	7.124	70	82	N.D.	
17) 3+4-Methylphenol	7.220	107	62	N.D.	
18) Hexachloroethane	7.268	117	102	N.D.	
20) Nitrobenzene	7.295	77	509	3.17 ng/ml#	34
22) Isophorone	7.536	82	422	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	7.755	105	85	820.49 ng/ml#	43
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	25828	36.47 ng/ml	100
30) 4-Chloroaniline	8.028	127	3336	23.26 ng/ml#	36
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.541	107	57	65.22 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	5086	10.66 ng/ml	94
34) 1-Methylnaphthalene	8.830	142	2234	4.93 ng/ml	98
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	9.199	154	2704	3.84 ng/ml	80
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.242	138	167	31.01 ng/ml	85

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.370	156	1364	2.68 ng/ml	88
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.493	163	91	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.547	165	63	31.02 ng/ml#	34
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	36091	44.96 ng/ml	98
50) 3-Nitroaniline	9.782	138	208	N.D.	
51) Acenaphthene	9.820	153	1425	2.58 ng/ml	76
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.900	139	78	84.27 ng/ml#	1
54) 2,4-Dinitrotoluene	9.948	165	609	64.49 ng/ml#	63
55) Dibenzofuran	10.002	168	758	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	10.205	149	519	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	565	N.D.	
60) Fluorene	10.360	166	2020	3.45 ng/ml	84
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.365	138	192	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.456	169	583	N.D.	
66) Azobenzene (1,2-DPH)	10.504	77	107	N.D.	
68) 4-Bromophenyl phenyl e...	10.831	248	101	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.328	178	20107	20.37 ng/ml	99
72) Anthracene	11.382	178	10286	10.90 ng/ml	96
73) Carbazole	11.547	167	1767	N.D.	
74) Di-n-butyl phthalate	11.874	149	1714	N.D.	
75) Fluoranthene	12.633	202	60874	64.19 ng/ml	100
76) Benzidine	12.815	184	103	152.56 ng/ml#	1
77) Pyrene	12.938	202	97943	100.37 ng/ml	98
80) Butyl benzyl phthalate	14.002	149	962	35.06 ng/ml#	54
81) Bis(2-ethylhexyl) adipate	14.173	129	1790	58.13 ng/ml	87
82) 3,3-Dichlorobenzidine	15.200	252	184	25.62 ng/ml#	1
83) Benz(a)anthracene	15.211	228	53185	60.00 ng/ml#	54
84) Chrysene	15.286	228	74132	83.73 ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.361	149	6225	68.48 ng/ml	99
87) Di-n-octyl phthalate	17.035	149	98	74.24 ng/ml#	1
88) Benzo(b)fluoranthene	17.827	252	129074	165.13 ng/ml	98
89) Benzo(k)fluoranthene	17.827	252	156895	192.81 ng/ml	96
90) Benzo(b+k)fluoranthene	17.827	252	193280	240.06 ng/ml	96
91) Benzo(e)pyrene	18.474	252	106387	134.16 ng/ml	99
92) Benzo(a)pyrene	18.597	252	128775	185.77 ng/ml	98
93) Perylene	18.800	252	47931	64.15 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.143	276	156992	211.55 ng/ml	98
96) Dibenz(a,h)anthracene	21.186	278	15135	22.14 ng/ml#	70
97) Benzo(g,h,i)perylene	21.678	276	206806	290.13 ng/ml	96

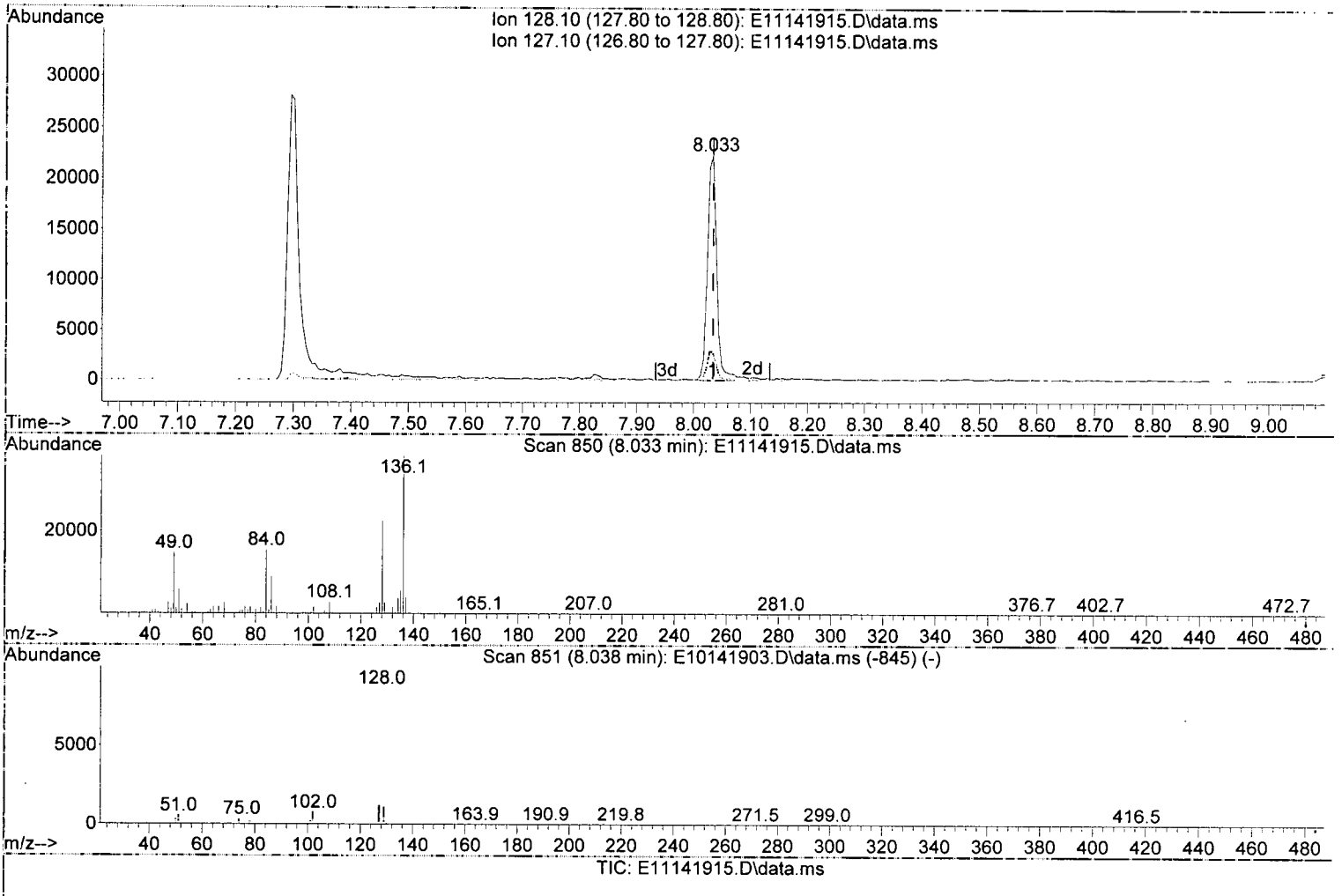
mi Hit MDS

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(29) Naphthalene (T)

8.033min (-0.000) 36.47 ng/ml J

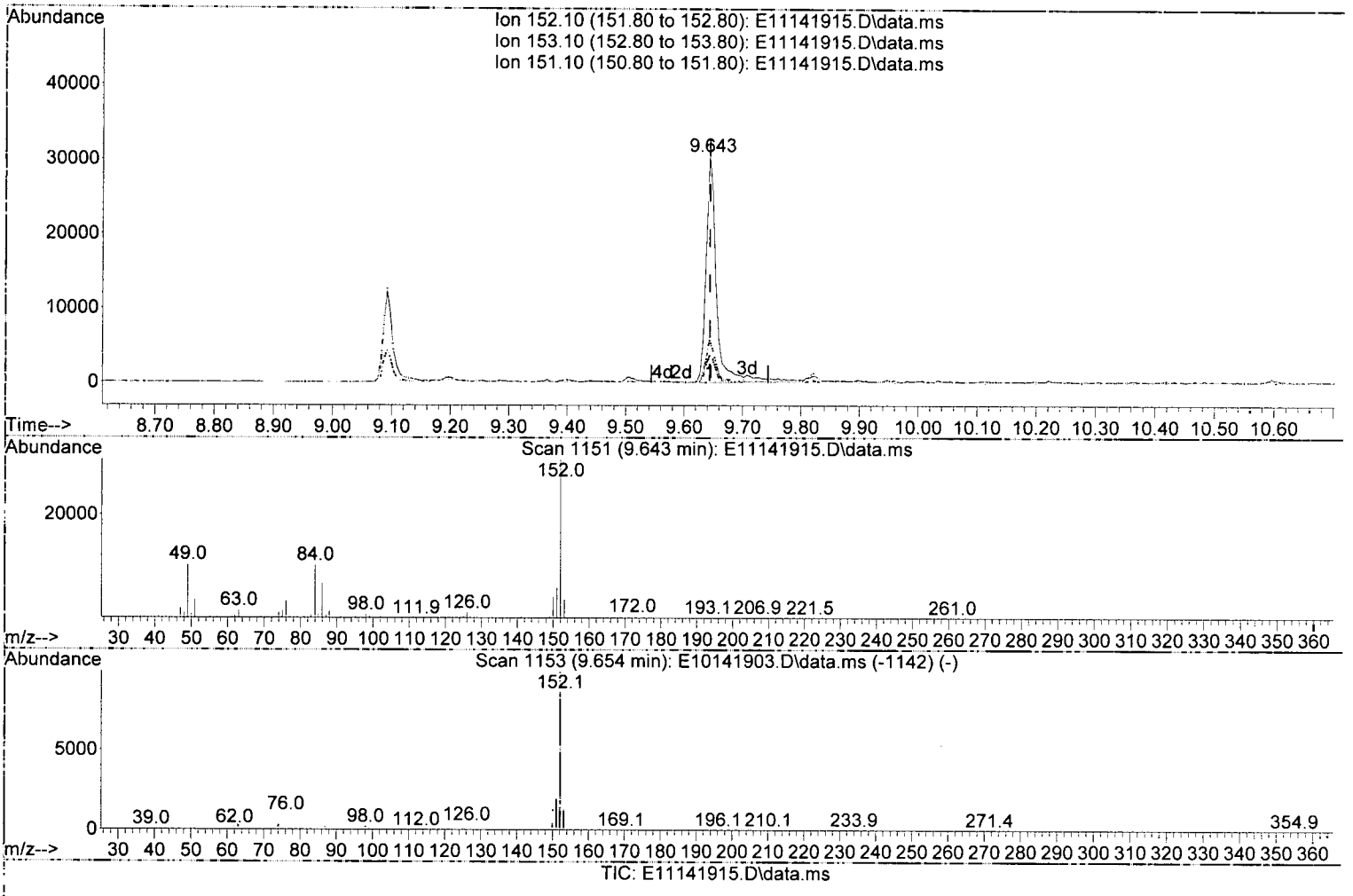
response 25828

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	12.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(49) Acenaphthylene (T)

9.643min (-0.000) 44.96 ng/ml

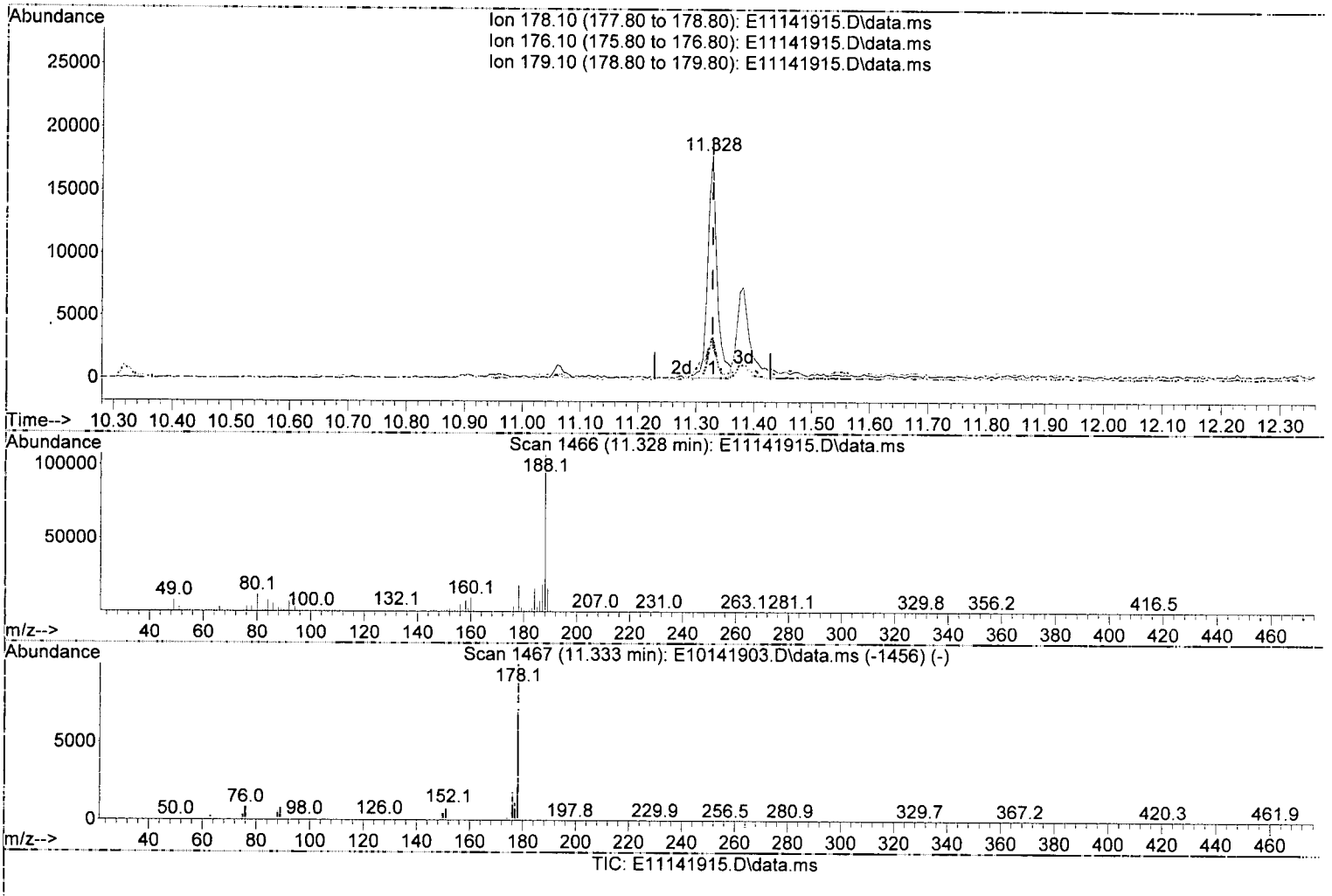
response 36091

Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.10	12.20
151.10	19.80	19.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(71) Phenanthrene (T)

11.328min (-0.000) 20.37 ng/ml

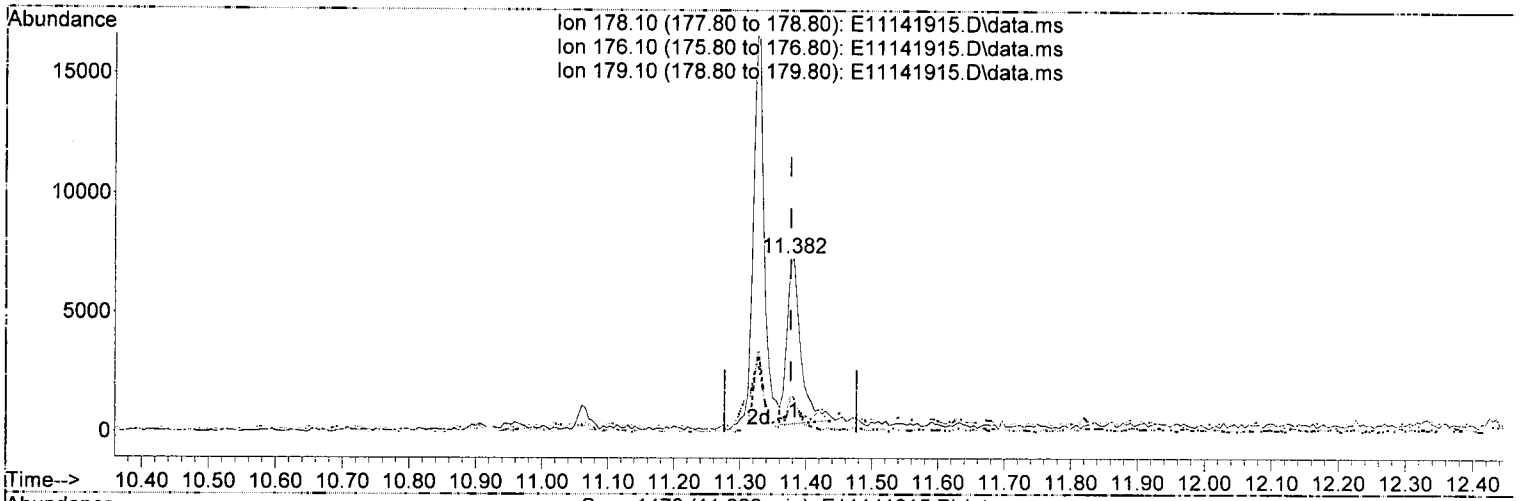
response 20107

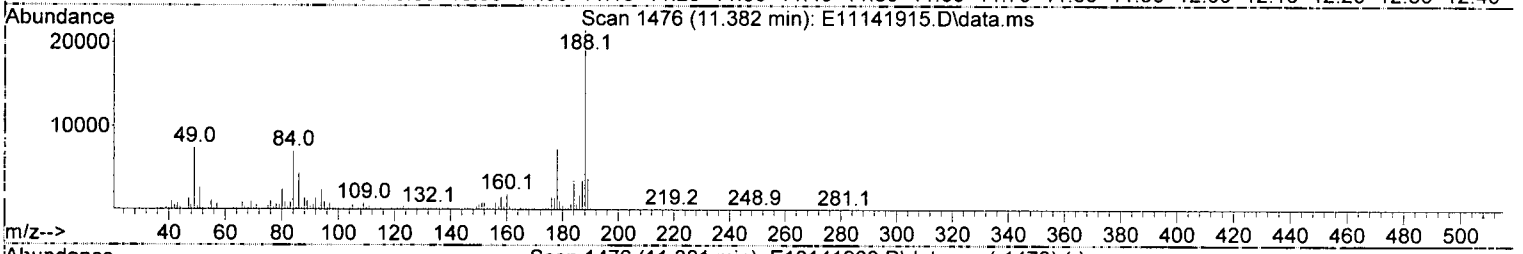
Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.60	18.84
179.10	15.20	15.82
0.00	0.00	0.00

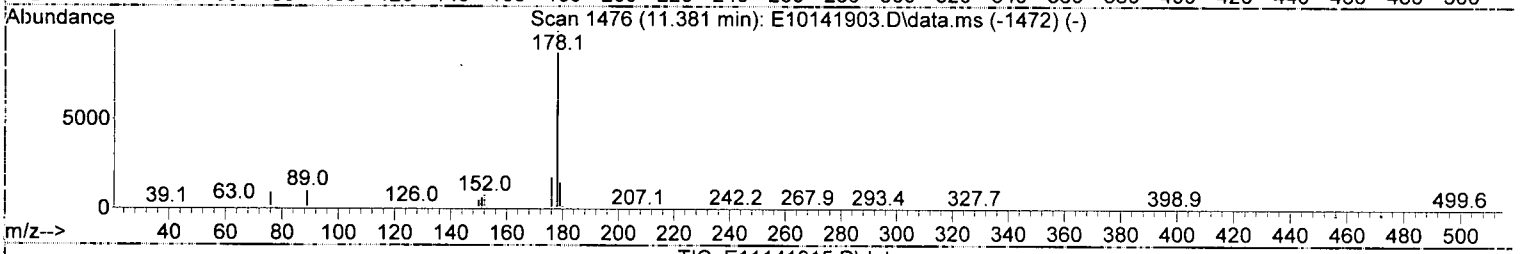
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E11141915.D\data.ms

(72) Anthracene (T)

11.382min (+ 0.005) 10.90 ng/ml J

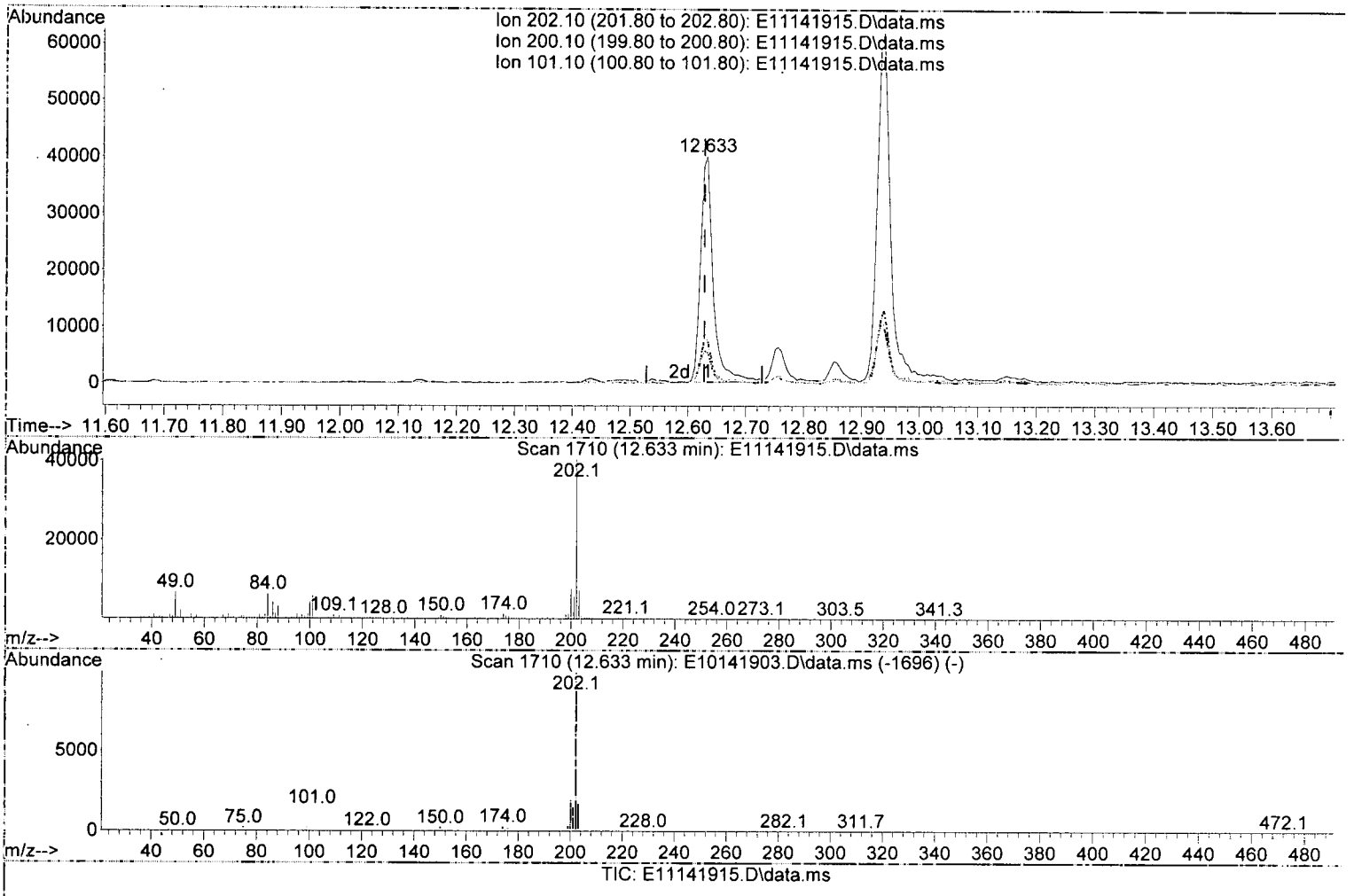
response 10286

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.10	19.95
179.10	15.50	13.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(75) Fluoranthene (T)

12.633min (+ 0.005) 64.19 ng/ml

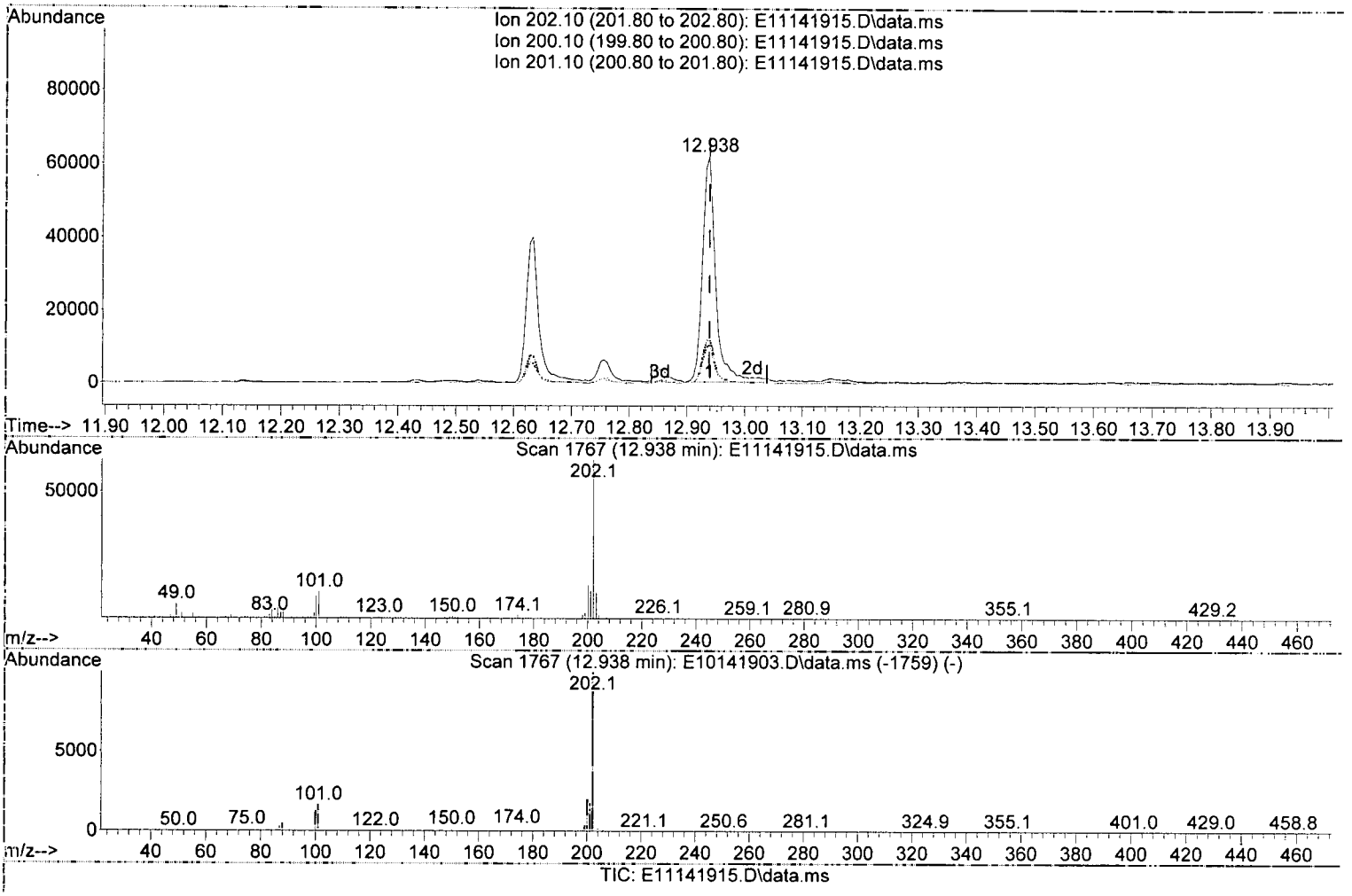
response 60874

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	19.70	19.50
101.10	14.50	14.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(77) Pyrene (T)

12.938min (-0.000) 100.37 ng/ml

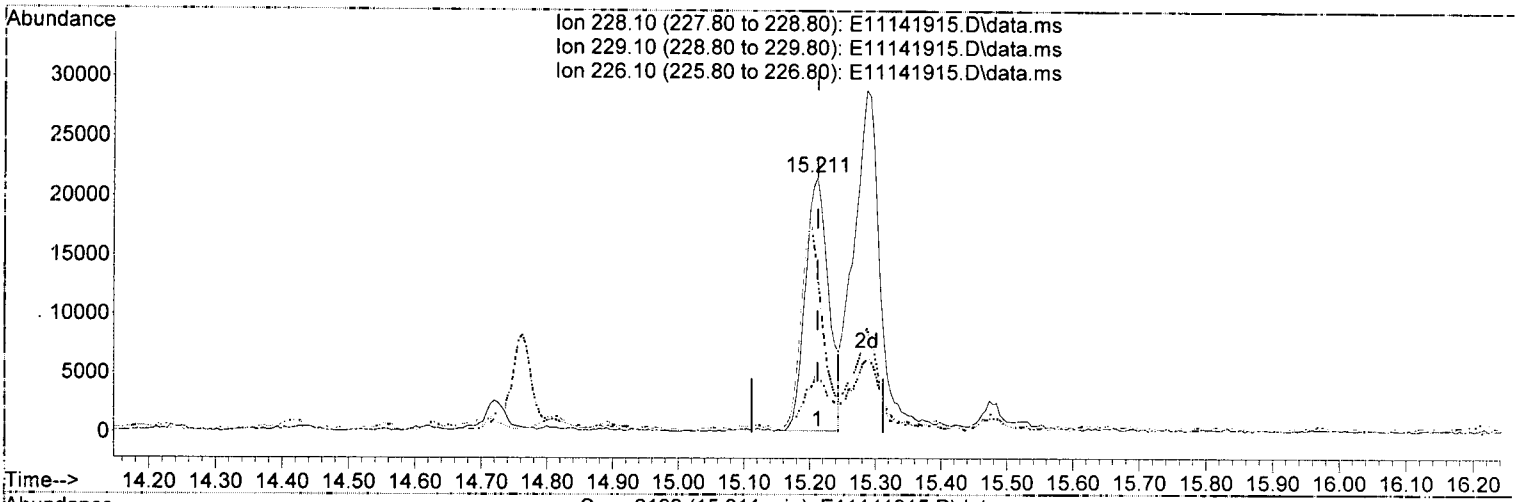
response 97943

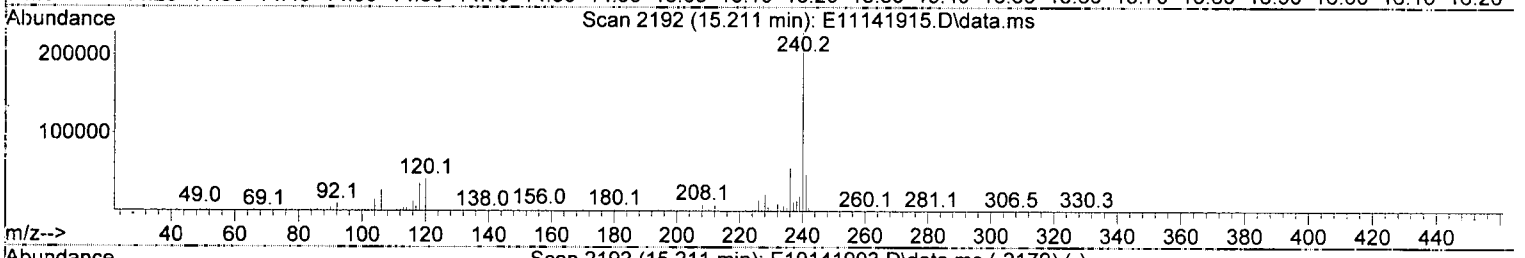
Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.30	20.85
201.10	16.80	17.69
0.00	0.00	0.00

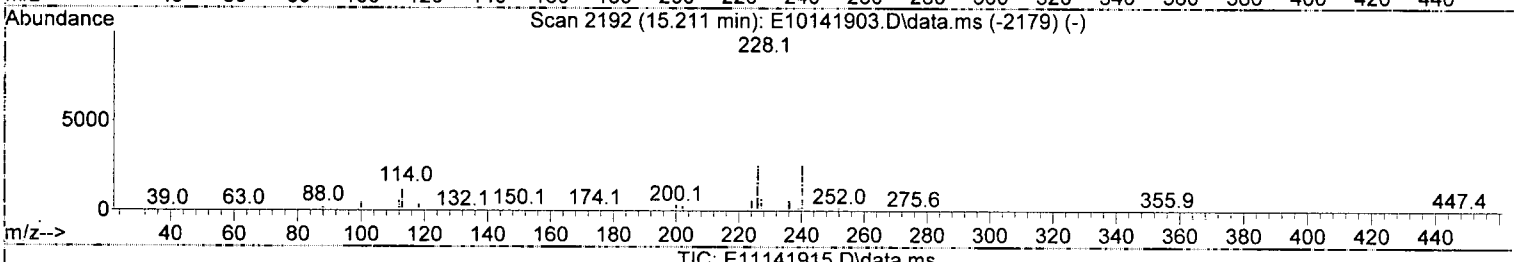
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E11141915.D\data.ms

(83) Benz(a)anthracene (T)

15.211min (-0.000) 60.00 ng/ml

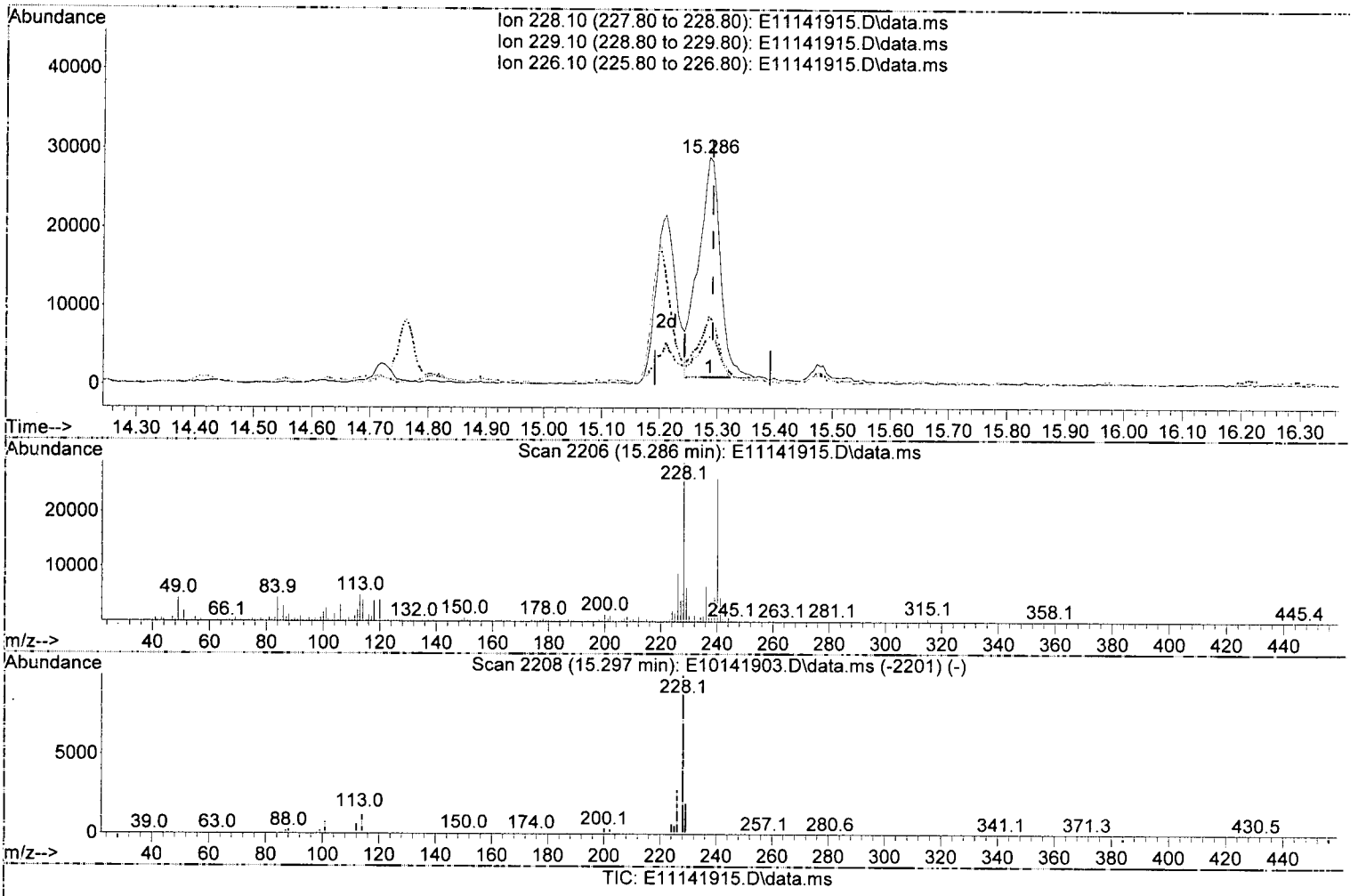
response 53185

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	25.26
226.10	25.90	62.56#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(84) Chrysene (T)

15.286min (-0.005) 83.73 ng/ml

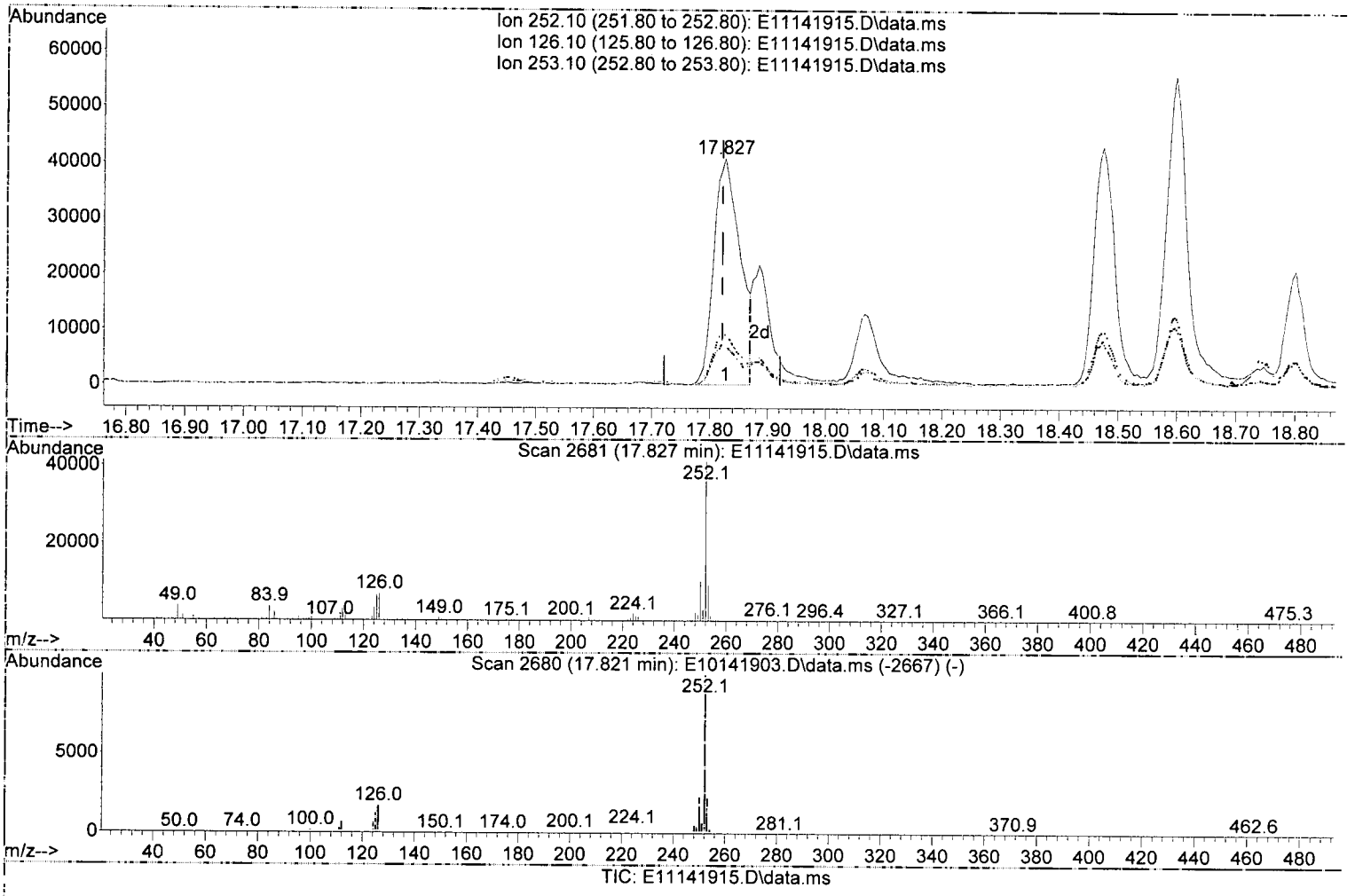
response 74132

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	21.32
226.10	29.30	30.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.827min (+ 0.005) 165.13 ng/ml

response 129074

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	17.38
253.10	21.80	22.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
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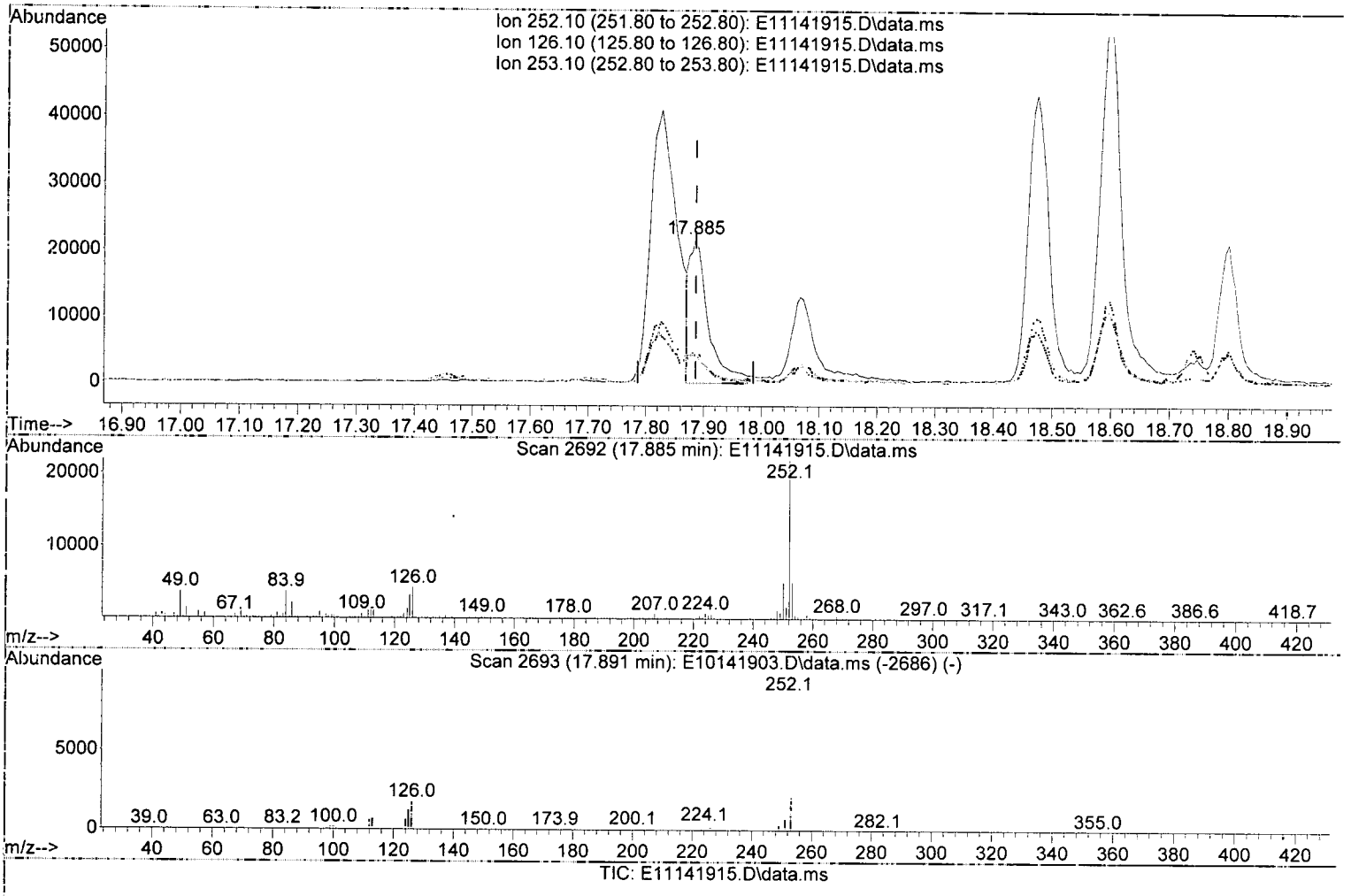
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.885min (-0.000) 68.44 ng/ml (m) MOS DTH 11/14/19

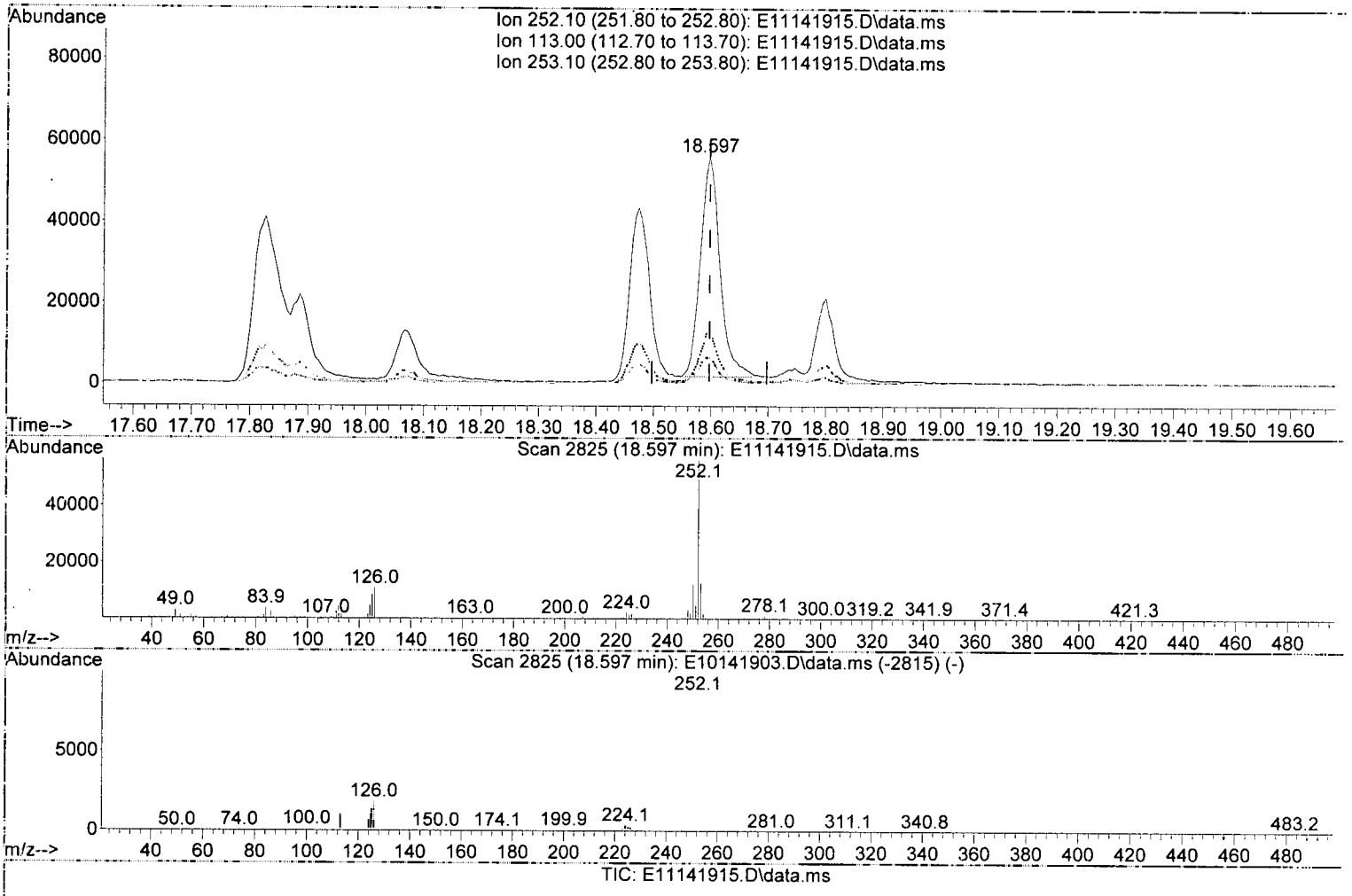
response 49733

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	19.56
253.10	22.00	23.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(92) Benzo(a)pyrene (T)

18.597min (-0.000) 185.77 ng/ml

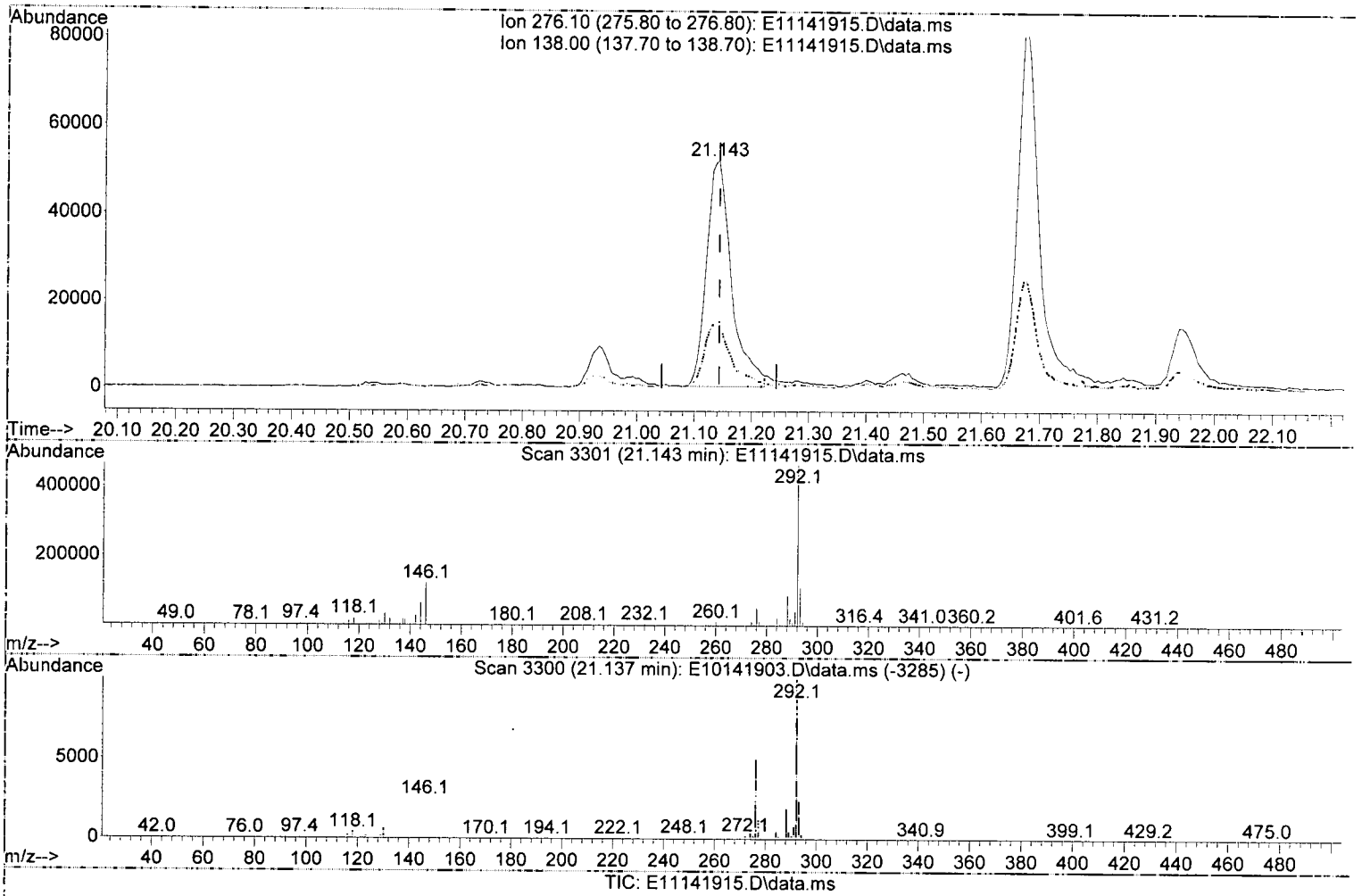
response 128775

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	11.65
253.10	21.70	22.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.143min (-0.000) 211.55 ng/ml

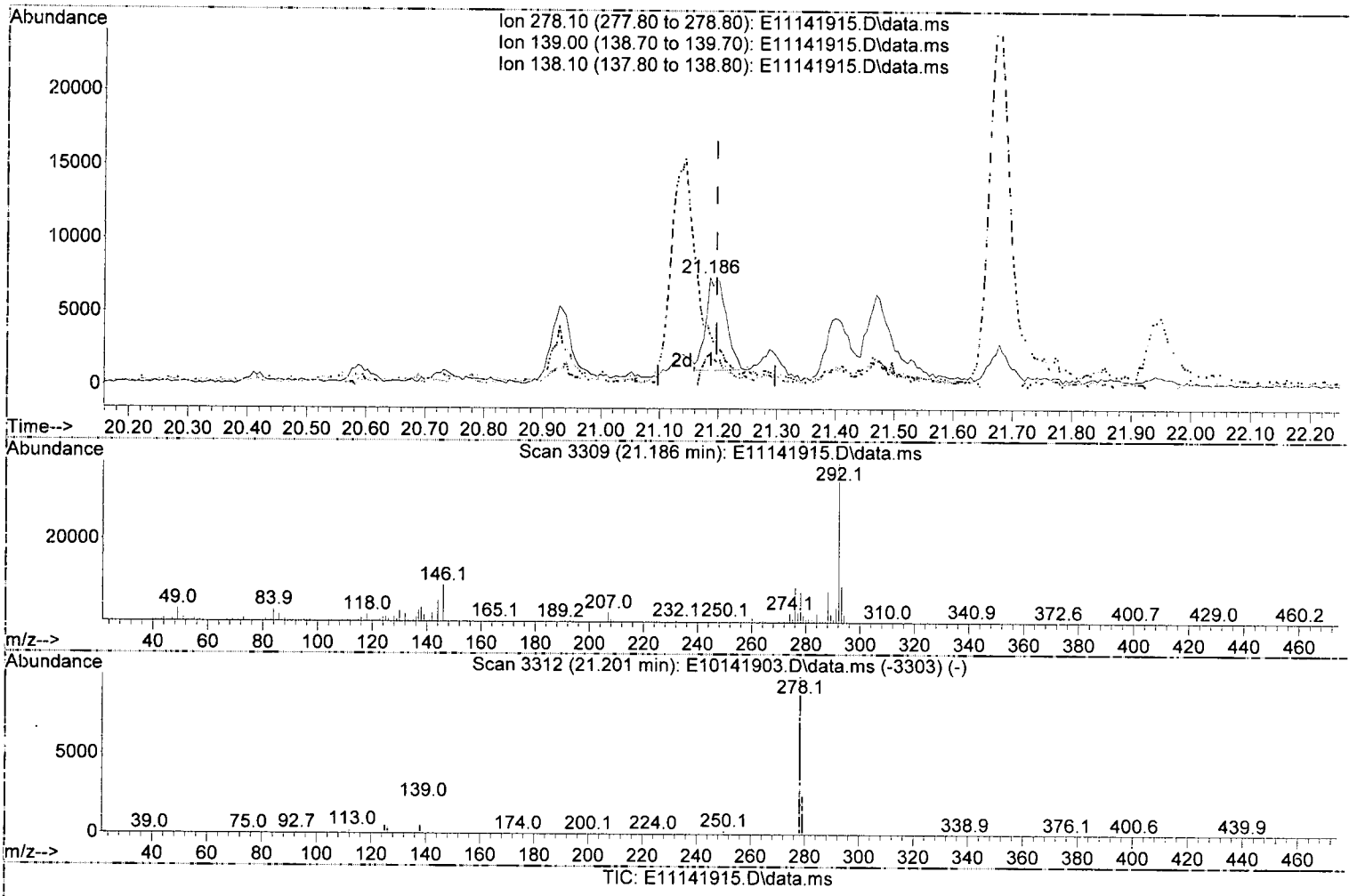
response 156992

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.40	29.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(96) Dibenz(a,h)anthracene (T)

21.186min (-0.011) 22.14 ng/ml

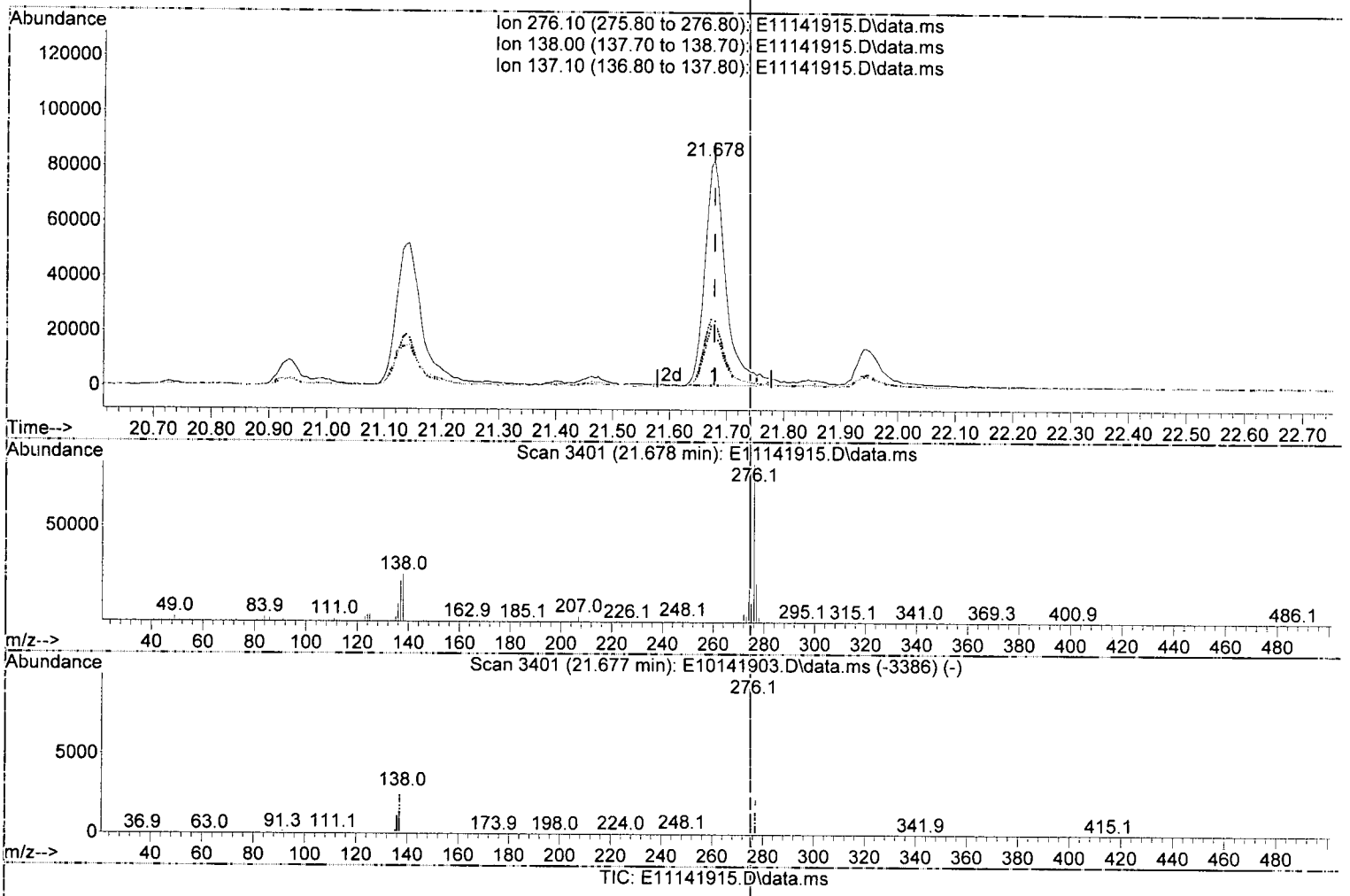
response 15135

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	23.10	23.80
138.10	17.40	47.49#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E11141915.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.678min (-0.000) 290.13 ng/ml

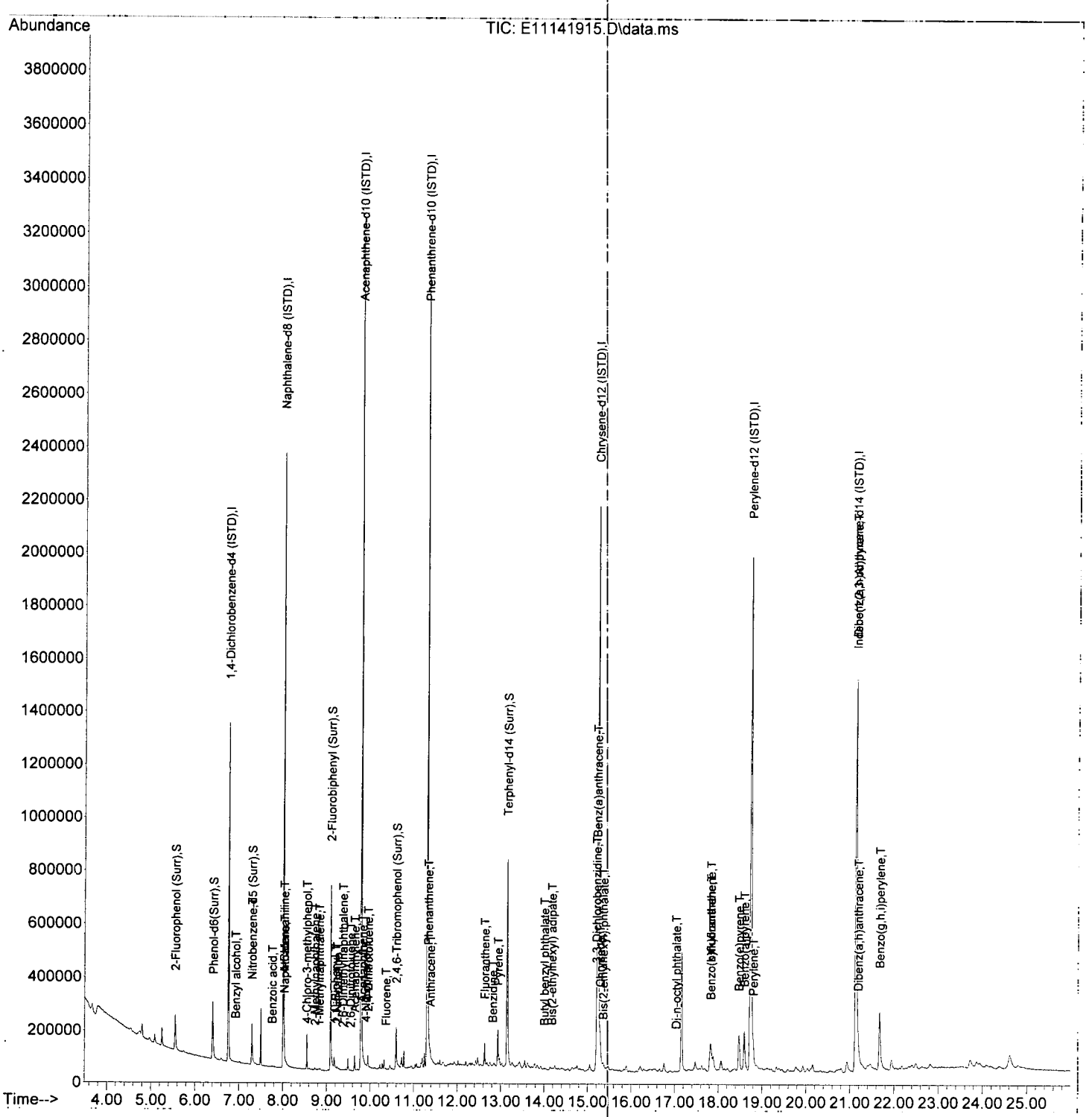
response 206806

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	32.50	30.06
137.10	27.70	26.17
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141915.D
Acq On : 14 Nov 2019 4:28 pm
Operator : JK/ AMS /DTH
Sample : A9K0332-09RE1@4
Misc : 4x, 8270D LL PAH/BEHP/2,4,5-TRICP/PCP
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:28:37 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141916.D
Acq On : 14 Nov 2019 5:04 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

A-01
Misinjection
Reanalyze
Q06
DTH 11/19/19

Quant Time: Nov 14 17:41:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	215486	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1276431	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.788	162	866372	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1877603	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	1789270	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1661270	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1269924	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	224346	1780.74 ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	340577	2178.91 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	317003	2544.73 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1142373	1760.20 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	154348	1760.12 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	1913427	2369.34 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.289	74	267	3.16 ng/ml#	1
3) Pyridine	4.311	79	102	N.D.	
6) Phenol	6.423	94	344	N.D.	
7) Aniline	6.439	93	112	N.D.	
8) Bis(2-chloroethyl) ether	6.493	93	368	2.55 ng/ml#	56
9) 2-Chlorophenol	6.573	128	75	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	6.931	107	105	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.017	45	73	N.D.	
16) N-Nitrosodi-n-propylamine	7.124	70	110	N.D.	
17) 3+4-Methylphenol	7.161	107	51	N.D.	
18) Hexachloroethane	7.258	117	104	N.D.	
20) Nitrobenzene	7.295	77	1104	8.65 ng/ml#	32
22) Isophorone	7.546	82	351	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.771	93	54	N.D.	
26) Benzoic acid	7.712	105	53	820.12 ng/ml#	1
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	1510	N.D.	
30) 4-Chloroaniline	8.028	127	214	11.53 ng/ml#	11
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.493	107	64	65.28 ng/ml#	1
33) 2-Methylnaphthalene	8.739	142	386	N.D.	
34) 1-Methylnaphthalene	8.841	142	240	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	9.199	154	2108	2.87 ng/ml	88
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.242	138	214	31.28 ng/ml#	32

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141916.D
Acq On : 14 Nov 2019 5:04 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:41:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

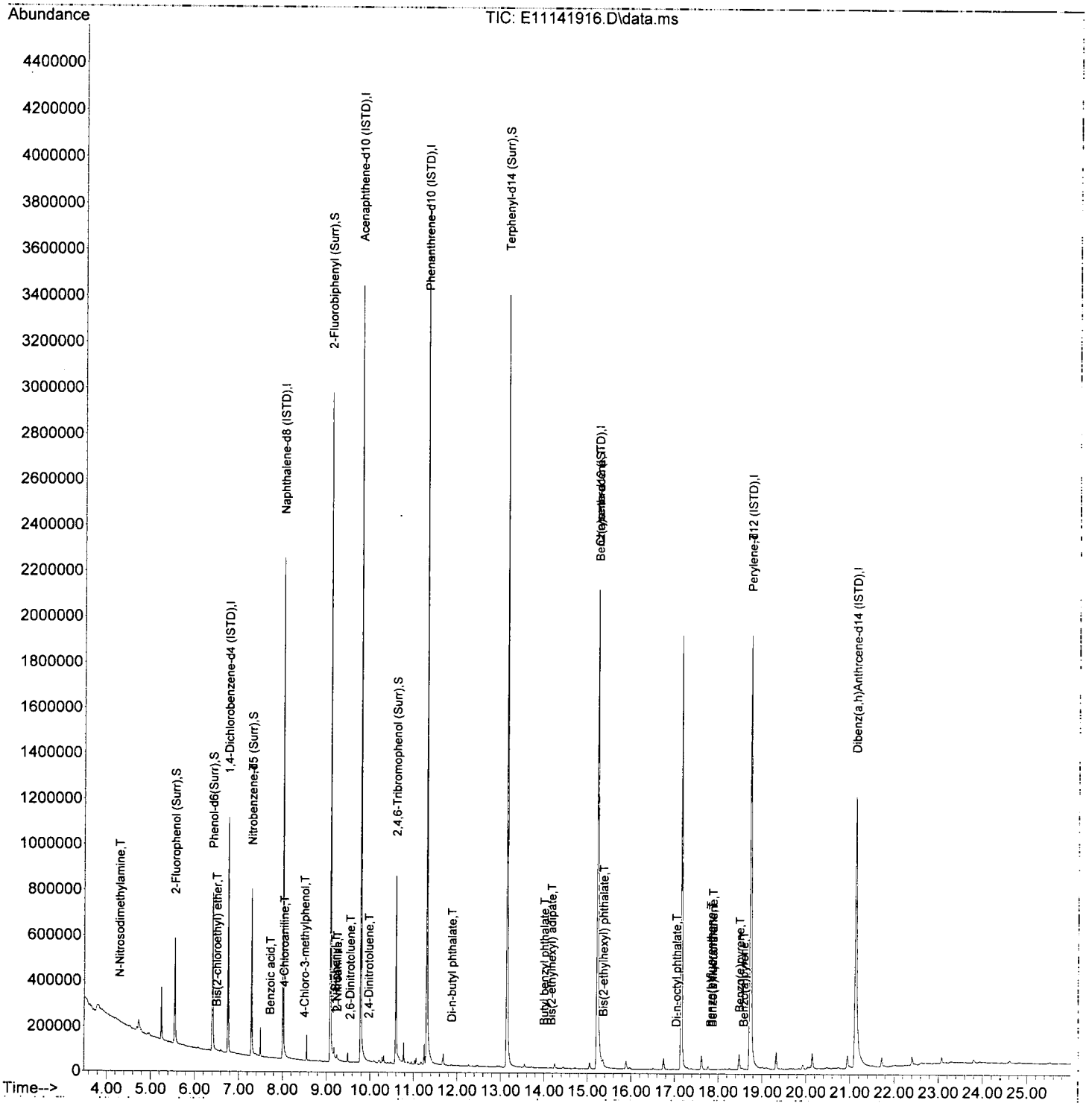
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.370	156	137	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.499	163	170	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.536	165	56	30.94 ng/ml#	22
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.654	152	357	N.D.	
50) 3-Nitroaniline	9.788	138	188	N.D.	
51) Acenaphthene	9.825	153	293	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.964	165	181	61.78 ng/ml#	38
55) Dibenzofuran	9.996	168	82	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	10.205	149	458	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	403	N.D.	
60) Fluorene	10.344	166	188	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.306	138	58	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.504	169	63	N.D.	
66) Azobenzene (1,2-DPH)	10.494	77	199	N.D.	
68) 4-Bromophenyl phenyl e...	10.809	248	52	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.328	178	1837	N.D.	
72) Anthracene	11.381	178	220	N.D.	
73) Carbazole	11.542	167	148	N.D.	
74) Di-n-butyl phthalate	11.874	149	2966	2.81 ng/ml	98
75) Fluoranthene	12.638	202	649	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.938	202	1108	N.D.	
80) Butyl benzyl phthalate	13.997	149	355	33.41 ng/ml#	51
81) Bis(2-ethylhexyl) adipate	14.163	129	873	55.41 ng/ml	92
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.232	228	4252	4.42 ng/ml	71
84) Chrysene	15.281	228	348	N.D.	
85) Bis(2-ethylhexyl) phth...	15.361	149	14288	79.59 ng/ml	98
87) Di-n-octyl phthalate	17.035	149	387	74.56 ng/ml#	23
88) Benzo(b)fluoranthene	17.821	252	242	10.34 ng/ml	56
89) Benzo(k)fluoranthene	17.869	252	190	10.89 ng/ml	55
90) Benzo(b+k)fluoranthene	17.869	252	190	19.32 ng/ml	55
91) Benzo(e)pyrene	18.484	252	216	8.63 ng/ml#	1
92) Benzo(a)pyrene	18.581	252	81	13.31 ng/ml	60
93) Perylene	18.741	252	5440	6.87 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	21.137	276	752	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	387	N.D.	
97) Benzo(g,h,i)perylene	21.662	276	87	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141916.D
Acq On : 14 Nov 2019 5:04 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 17:41:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141917.D
Acq On : 14 Nov 2019 5:40 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BS1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 18:11:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DTH 11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.760	152	285345	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1461759	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	945635	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.307	188	1806514	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	1754524	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.752	264	1617205	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	21.154	292	1272876	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.552	112	373190	2236.97	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	543923	2627.91	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	475380	2881.83	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1495995	2111.87	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	231401	2654.14	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	1948946	2461.11	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.273	74	356433	3187.30	ng/ml	96
3) Pyridine	4.295	79	448218	2444.18	ng/ml	96
6) Phenol	6.423	94	974133	4530.85	ng/ml	99
7) Aniline	6.445	93	1071812	3915.74	ng/ml	100
8) Bis(2-chloroethyl) ether	6.498	93	696984	3649.08	ng/ml	97
9) 2-Chlorophenol	6.568	128	741023	4004.76	ng/ml	97
10) 1,3-Dichlorobenzene	6.707	146	708715	3179.79	ng/ml	100
11) 1,4-Dichlorobenzene	6.776	146	726567	3223.12	ng/ml	99
12) Benzyl alcohol	6.889	108	538926	4779.85	ng/ml	97
13) 1,2-Dichlorobenzene	6.926	146	729236	3399.02	ng/ml	98
14) 2-Methylphenol	6.996	107	654845	4659.30	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	741956	3412.96	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.140	70	576083	4706.62	ng/ml	96
17) 3+4-Methylphenol	7.145	107	885606	5109.17	ng/ml	97
18) Hexachloroethane	7.252	117	256146	3338.17	ng/ml	100
20) Nitrobenzene	7.317	77	736223	4355.37	ng/ml	93
22) Isophorone	7.547	82	1724286	3981.68	ng/ml	98
23) 2-Nitrophenol	7.627	139	480167	3795.48	ng/ml	99
24) 2,4-Dimethylphenol	7.664	122	822507	4132.03	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.750	93	1077173	3709.90	ng/ml	99
26) Benzoic acid	7.819	105	1040298	8893.23	ng/ml	98
27) 2,4-Dichlorophenol	7.873	162	769390	4146.39	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.953	180	748680	3205.89	ng/ml	99
29) Naphthalene	8.033	128	2589362	3331.71	ng/ml	99
30) 4-Chloroaniline	8.076	127	906612	3076.23	ng/ml	99
31) Hexachlorobutadiene	8.156	225	371187	3112.45	ng/ml	99
32) 4-Chloro-3-methylphenol	8.563	107	871633	4697.35	ng/ml	97
33) 2-Methylnaphthalene	8.729	142	2047830	3909.98	ng/ml	100
34) 1-Methylnaphthalene	8.830	142	1957632	3938.39	ng/ml	100
36) Hexachlorocyclopentadiene	8.894	237	443402	3170.81	ng/ml	98
37) 2,4,6-Trichlorophenol	9.012	196	639877	3754.98	ng/ml	98
38) 2,4,5-Trichlorophenol	9.055	196	692648	4005.68	ng/ml	100
39) 1,1'-Biphenyl	9.199	154	2629675	3282.98	ng/ml	99
41) 2-Chloronaphthalene	9.221	162	1975858	3269.93	ng/ml	99
42) 2-Nitroaniline	9.322	138	744404	3953.91	ng/ml	93

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141917.D
Acq On : 14 Nov 2019 5:40 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BS1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 18:11:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

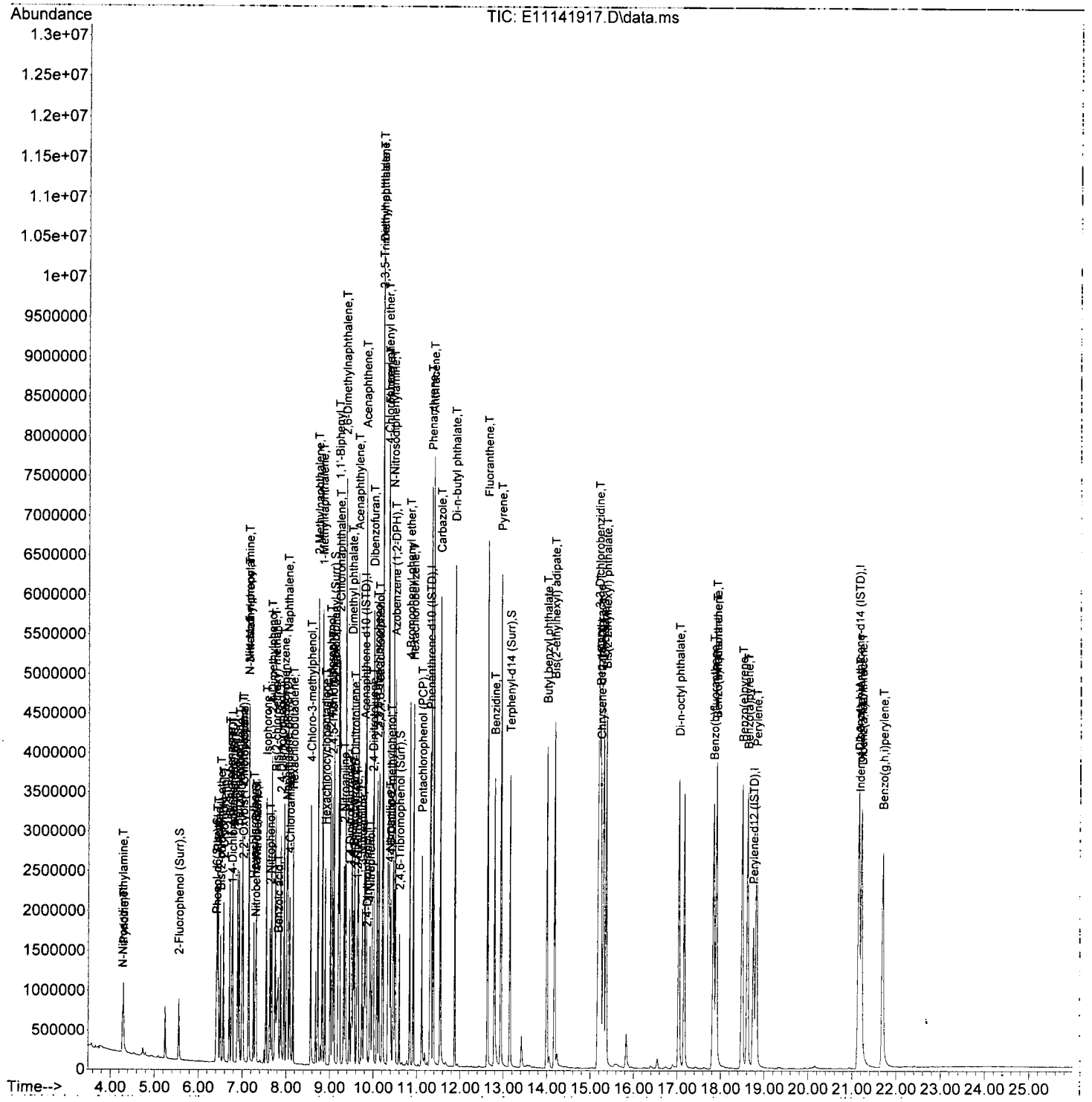
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	1969810	3400.72	ng/ml	99
44) 1,4-Dinitrobenzene	9.451	168	372710	4169.93	ng/ml	94
45) Dimethyl phthalate	9.504	163	2441361	3771.62	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	422680	4003.20	ng/ml	93
47) 2,6-Dinitrotoluene	9.563	165	597352	3909.39	ng/ml	95
48) 1,2-Dinitrobenzene	9.627	168	276214	3969.21	ng/ml	89
49) Acenaphthylene	9.649	152	3275220	3582.99	ng/ml	100
50) 3-Nitroaniline	9.740	138	506406	3363.76	ng/ml	96
51) Acenaphthene	9.825	153	2126574	3382.59	ng/ml	99
52) 2,4-Dinitrophenol	9.847	184	260472	4360.20	ng/ml	90
53) 4-Nitrophenol	9.921	139	451872	3907.92	ng/ml	93
54) 2,4-Dinitrotoluene	9.980	165	774080	4036.18	ng/ml	92
55) Dibenzofuran	9.996	168	2961257	3527.72	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	10.082	232	576467	4029.99	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.125	232	591729	3906.51	ng/ml	99
58) Diethyl phthalate	10.216	149	2270097	3647.73	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.210	170	1859208	3486.33	ng/ml	100
60) Fluorene	10.349	166	2386099	3578.15	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.339	204	1167282	3676.69	ng/ml	99
62) 4-Nitroaniline	10.371	138	629837	4125.00	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.397	198	408250	4471.80	ng/ml	92
65) N-Nitrosodiphenylamine	10.462	169	2155326	3815.39	ng/ml	99
66) Azobenzene (1,2-DPH)	10.499	77	2036988	3466.32	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.836	248	710393	3811.60	ng/ml	98
69) Hexachlorobenzene	10.922	284	760588	3627.54	ng/ml	97
70) Pentachlorophenol (PCP)	11.114	266	397486	3711.67	ng/ml	99
71) Phenanthrene	11.333	178	3514182	3419.52	ng/ml	99
72) Anthracene	11.382	178	3675134	3742.42	ng/ml	99
73) Carbazole	11.542	167	3273393	4042.12	ng/ml	99
74) Di-n-butyl phthalate	11.879	149	3973679	3906.88	ng/ml	99
75) Fluoranthene	12.633	202	3861337	3911.18	ng/ml	99
76) Benzidine	12.794	184	2451543	5173.60	ng/ml	98
77) Pyrene	12.943	202	3958051	3896.19	ng/ml	98
80) Butyl benzyl phthalate	14.002	149	1746924	3774.97	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.179	129	1593729	3860.09	ng/ml	99
82) 3,3-Dichlorobenzidine	15.190	252	2273283	8148.34	ng/ml	99
83) Benz(a)anthracene	15.222	228	3650452	3867.79	ng/ml	99
84) Chrysene	15.307	228	3425576	3633.90	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.366	149	2585287	3798.38	ng/ml	97
87) Di-n-octyl phthalate	17.046	149	4225216	4127.09	ng/ml	98
88) Benzo(b)fluoranthene	17.837	252	3399442	3621.75	ng/ml	100
89) Benzo(k)fluoranthene	17.907	252	3357581	3749.42	ng/ml	99
90) Benzo(b+k)fluoranthene	17.907	252	6978632	7387.37	ng/ml	99
91) Benzo(e)pyrene	18.501	252	3280921	3627.75	ng/ml	99
92) Benzo(a)pyrene	18.624	252	2969332	3547.12	ng/ml	100
93) Perylene	18.827	252	3150707	4086.41	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.170	276	2793171	3606.25	ng/ml	98
96) Dibenz(a,h)anthracene	21.223	278	2760986	3870.28	ng/ml	99
97) Benzo(g,h,i)perylene	21.704	276	2738368	3680.76	ng/ml	95

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141917.D
Acq On : 14 Nov 2019 5:40 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BS1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 14 18:11:16 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141918.D
Acq On : 14 Nov 2019 6:16 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK2
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AOI
Bad injection
Q-06
Reanalyze DTH 11/15/19

Quant Time: Nov 15 10:31:31 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.760	152	221029	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.006	136	1095930	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.787	162	796915	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.301	188	1841320	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1777607	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	1654930	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1268988	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	238701	1847.16 ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	320967	2001.95 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	282272	2209.11 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.092	172	1023754	1714.92 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	150580	1751.59 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.146	244	1910505	2381.24 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.294	74	65	N.D.	
3) Pyridine	4.321	79	189	N.D.	
6) Phenol	6.423	94	570	3.42 ng/ml#	1
7) Aniline	6.450	93	107	N.D.	
8) Bis(2-chloroethyl) ether	6.482	93	343	N.D.	
9) 2-Chlorophenol	6.573	128	88	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.921	108	451	40.71 ng/ml#	55
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.985	107	215	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.022	45	97	N.D.	
16) N-Nitrosodi-n-propylamine	7.135	70	183	N.D.	
17) 3+4-Methylphenol	7.156	107	175	N.D.	
18) Hexachloroethane	7.274	117	154	2.59 ng/ml#	12
20) Nitrobenzene	7.295	77	852	6.51 ng/ml#	28
22) Isophorone	7.546	82	354	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.685	122	134	11.22 ng/ml#	24
25) Bis(2-chloroethoxy) me...	7.744	93	57	N.D.	
26) Benzoic acid	7.707	105	117	821.19 ng/ml#	72
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.028	128	1208	N.D.	
30) 4-Chloroaniline	8.028	127	167	11.45 ng/ml#	2
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.589	107	194	66.33 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	465	N.D.	
34) 1-Methylnaphthalene	8.830	142	247	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	9.194	154	2107	3.12 ng/ml	83
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.247	138	176	31.13 ng/ml#	63

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141918.D
Acq On : 14 Nov 2019 6:16 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK2
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 15 10:31:31 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5

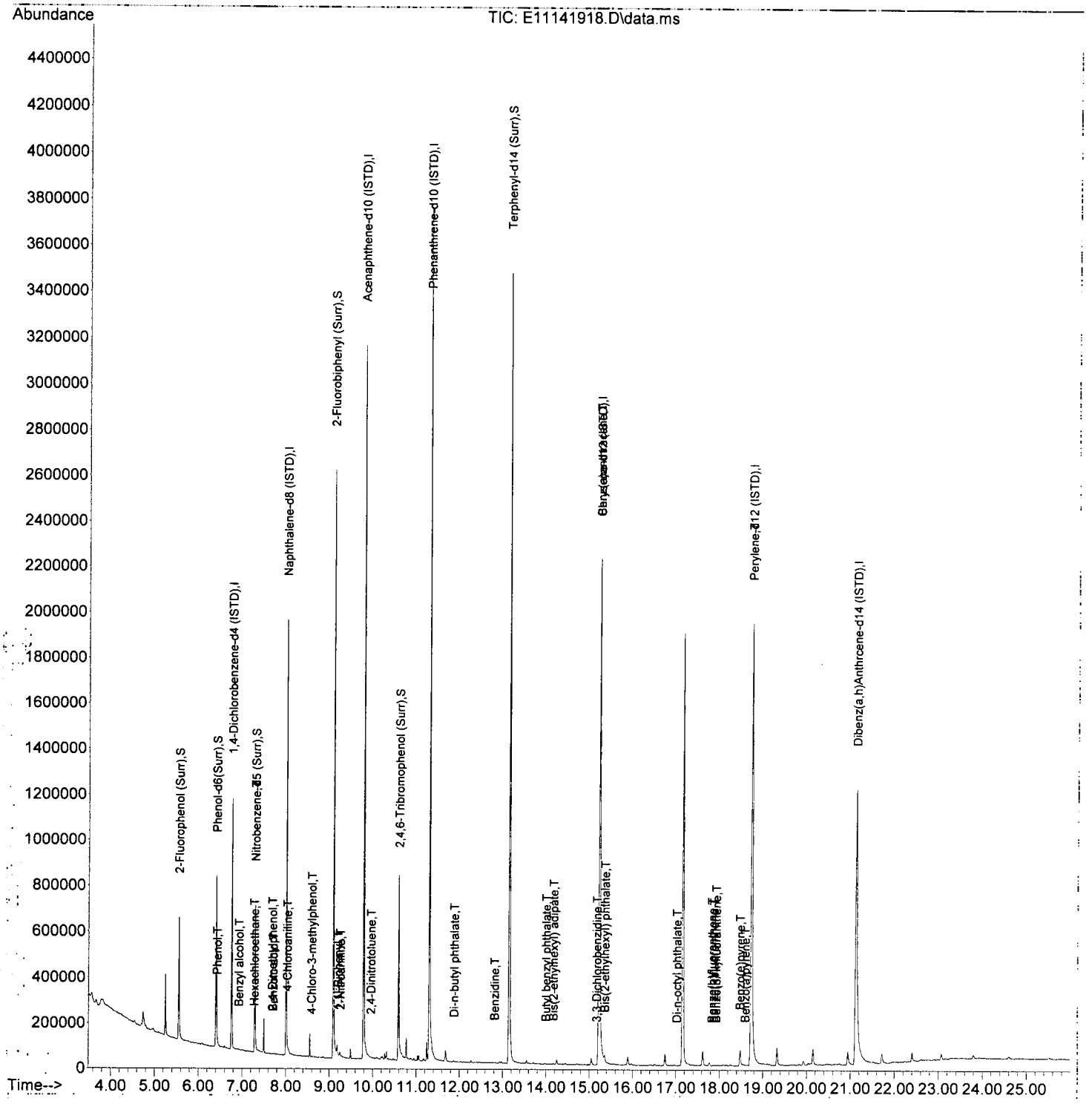
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.360	156	65	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.499	163	345	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	163	N.D.	
50) 3-Nitroaniline	9.787	138	146	N.D.	
51) Acenaphthene	9.814	153	295	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.953	165	255	62.35 ng/ml#	36
55) Dibenzofuran	9.996	168	205	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	10.205	149	735	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.221	170	387	N.D.	
60) Fluorene	10.344	166	145	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	10.461	169	85	N.D.	
66) Azobenzene (1,2-DPH)	10.510	77	260	N.D.	
68) 4-Bromophenyl phenyl e...	10.863	248	74	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.323	178	1210	N.D.	
72) Anthracene	11.381	178	288	N.D.	
73) Carbazole	11.536	167	132	N.D.	
74) Di-n-butyl phthalate	11.873	149	3185	3.07 ng/ml	99
75) Fluoranthene	12.638	202	762	N.D.	
76) Benzidine	12.809	184	252	152.87 ng/ml	72
77) Pyrene	12.943	202	996	N.D.	
80) Butyl benzyl phthalate	13.997	149	369	33.45 ng/ml	81
81) Bis(2-ethylhexyl) adipate	14.168	129	1016	55.79 ng/ml	84
82) 3,3-Dichlorobenzidine	15.168	252	112	25.20 ng/ml#	27
83) Benz(a)anthracene	15.227	228	4015	4.20 ng/ml	72
84) Chrysene	15.281	228	474	N.D.	
85) Bis(2-ethylhexyl) phth...	15.355	149	14746	80.41 ng/ml	97
87) Di-n-octyl phthalate	17.019	149	287	74.45 ng/ml#	1
88) Benzo(b)fluoranthene	17.826	252	452	10.58 ng/ml	75
89) Benzo(k)fluoranthene	17.875	252	276	10.99 ng/ml	55
90) Benzo(b+k)fluoranthene	17.923	252	94	19.21 ng/ml#	30
91) Benzo(e)pyrene	18.474	252	387	8.82 ng/ml#	1
92) Benzo(a)pyrene	18.591	252	146	13.39 ng/ml#	6
93) Perylene	18.741	252	5371	6.81 ng/ml	75
95) Indeno(1,2,3-cd)pyrene	21.143	276	802	N.D.	
96) Dibenz(a,h)anthracene	21.191	278	110	N.D.	
97) Benzo(g,h,i)perylene	21.672	276	243	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-11\9K14015\
Data File : E11141918.D
Acq On : 14 Nov 2019 6:16 pm
Operator : JK/ AMS /DTH
Sample : 9110811-BLK2
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Nov 15 10:31:31 2019
Quant Method : C:\msdchem\1\METHODS\SV5_100419R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Nov 14 14:05:29 2019
Response via : Initial Calibration
InstName : SV-GCMS5



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

Semivolatile Organic Compounds by EPA 8270D
Benchsheet & Analysis Sequence Data

Sequence 9K15038 (A9K0332-05RE1,08RE1)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9K15038** Instrument: **SV-GCMS10**

Date: **11/15/19 15:29** Calibration: ~~A912603~~ A9I2905 11/19/19

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K15038-TUN1	Soil	QC	QC			A19I086	A19K083
2	9K15038-CCV1	Soil	QC	QC			A19I086	A19K216
3	9K15038-IBL1	Soil	QC	QC			A19I086	
4	9K15038-TUN2	Soil	QC	QC			A19I086	A19K083
5	9K15038-CCV2	Soil	QC	QC			A19I086	A19K216
6	9K15038-CCB1	Soil	QC	QC			A19I086	
7	9110805-BLK1	Soil	QC	QC		9110805	A19I086	
8	9110805-BS1	Soil	QC	QC		9110805	A19I086	
9	9110805-BSD1	Soil	QC	QC		9110805	A19I086	
10	A9K0232-03	Soil	1311/8270D TCLP Full List SVOC		11/12/19	9110805	A19I086	
11	A9K0332-05RE1	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	
12	A9K0332-08RE1	Soil	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/25/19	9110781	A19I086	

Data Entered By: AMS 11/18/19

Data Reviewed By: 11/19/19

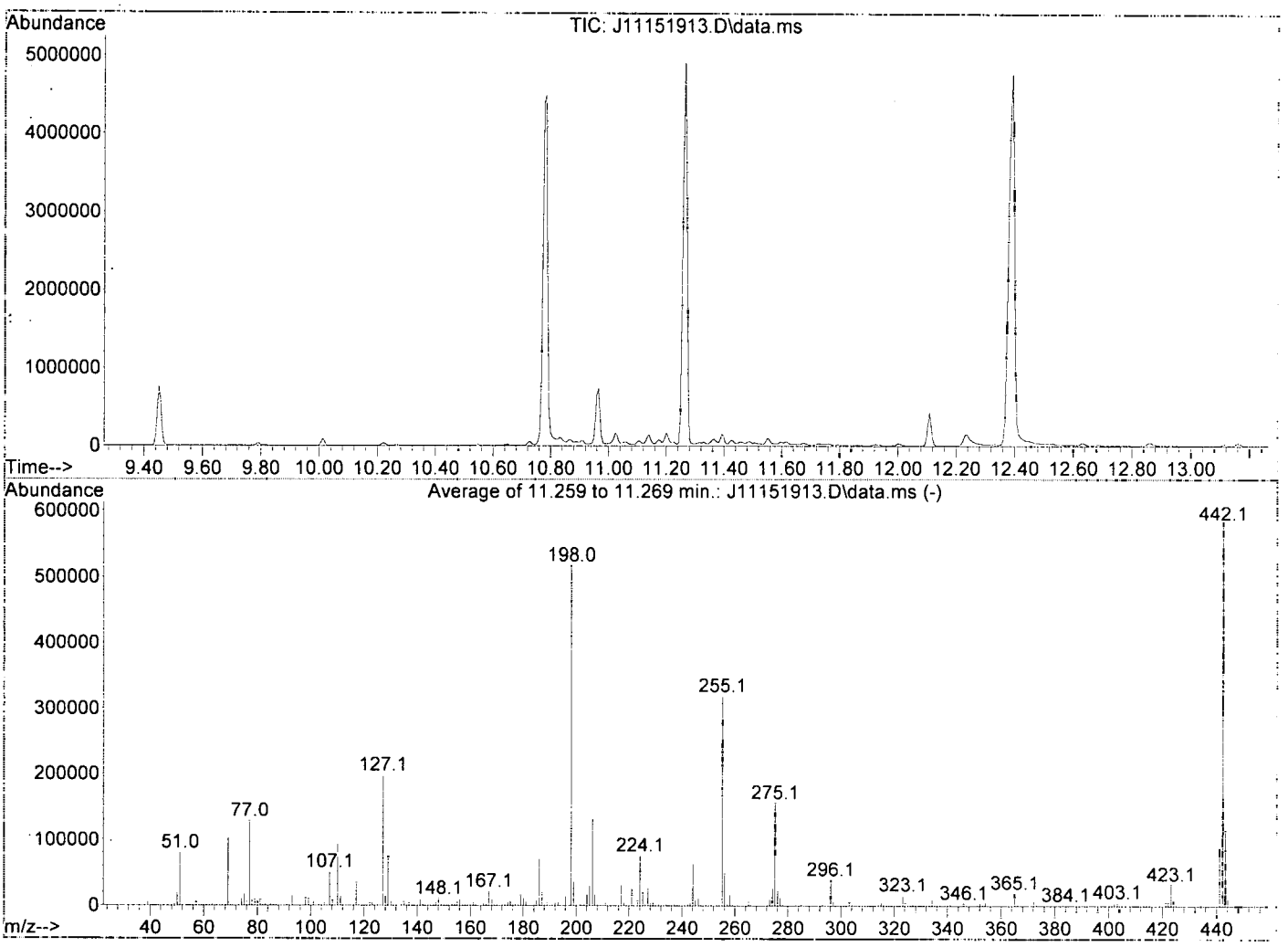
Comments:

Data Path : T:\data\2019-11\9K15038\
Data File : J11151913.D
Acq On : 15 Nov 2019 3:34 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

AMS 11/18/19 Q-14

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Nov 11 08:41:49 2019



AutoFind: Scans 1453, 1454, 1455; Background Corrected with Scan 1448

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.3	1362	PASS
69	198	0.01	100	19.9	102577	PASS
70	69	0.00	2	0.4	426	PASS
197	198	0.00	2	0.1	399	PASS
198	198	100	100	100.0	516203	PASS
199	198	5	9	6.9	35853	PASS
365	198	1	100	3.7	18888	PASS
441	443	0.01	150	75.8	87672	PASS
442	198	0.10	200	113.0	583509	PASS
443	442	15	24	19.8	115731	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151913.D
Acq On : 15 Nov 2019 3:34 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:19:58 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.413	150	115003	2.00	ug/mL	0.00
2) Naphthalene-d8	7.675	136	329614	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.451	162	173181	2.00	ug/mL	0.00
5) Phenanthrene-d10	10.964	188	296134	2.00	ug/mL	0.00
11) Chrysene-d12	14.553	240	239197	2.00	ug/mL	-0.03
12) Perylene-d12	16.896	264	2832	2.00	ug/mL	#-0.02
Target Compounds						Qvalue
4) Pentachlorophenol	10.783	266	686870	42.00	ug/mL	82
6) DFTPP	11.264	442	670174	28.03	ug/mL	87
7) Benzidine	12.392	184	2908831	27.61	ug/mL	96
8) 4,4-DDE	12.633	TIC	32863	No Calib		
9) 4,4-DDD	13.109	TIC	17105	No Calib		
10) 4,4-DDT	13.633	TIC	8960940	29.51	ug/mL	94

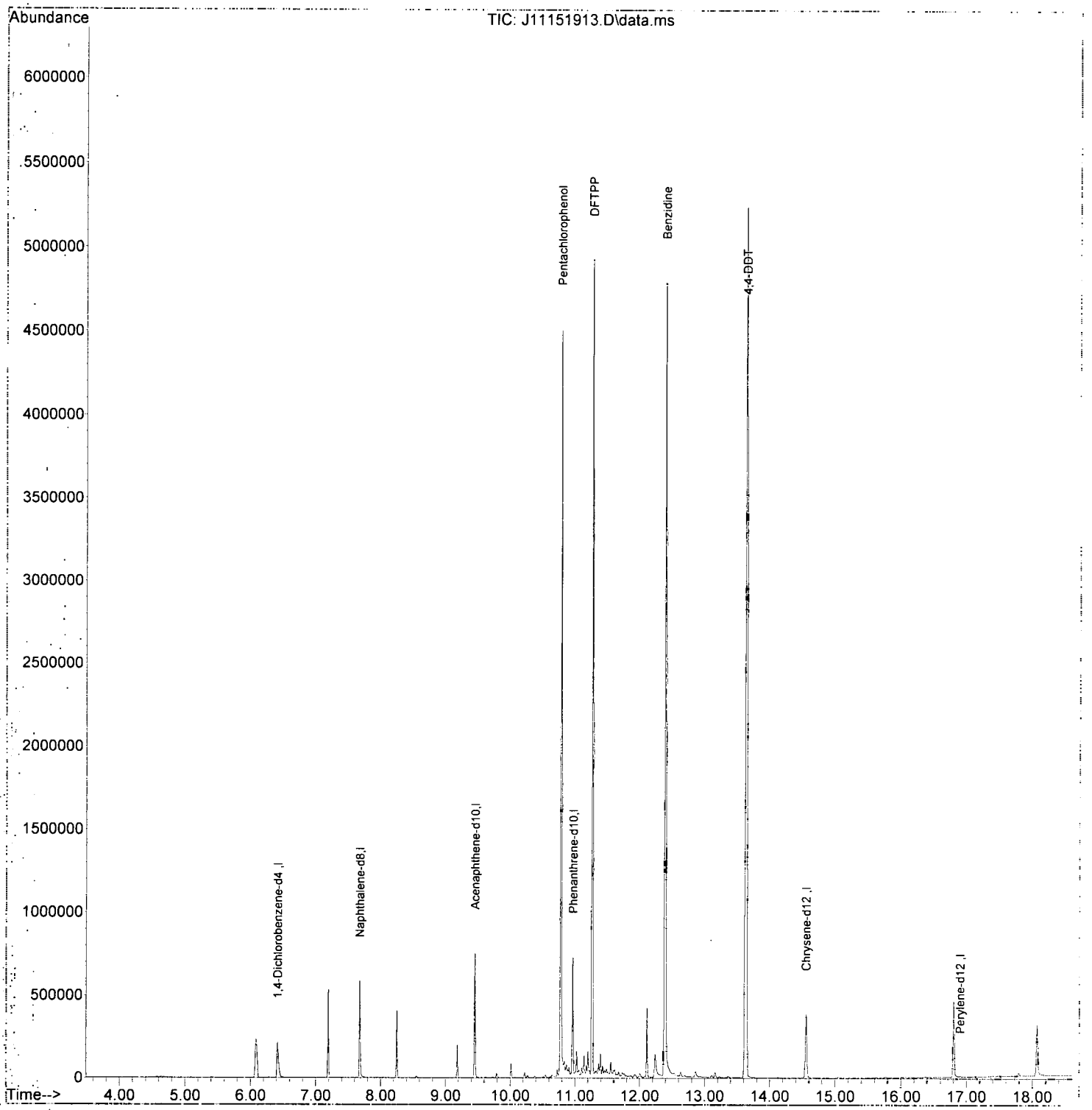
(#) = qualifier out of range (m) = manual integration (+) = signals summed

J

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151913.D
Acq On : 15 Nov 2019 3:34 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:19:58 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-11\9K15038\
Data File : J11151914.D
Acq On : 15 Nov 2019 4:03 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:20:21 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Q-14
AMS
11/14/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.386	152	324099	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1246812	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	675779	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1283304	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	1308130	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	17.960	264	1321073	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.351	292	1164015	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.124	112	191637	974.39	ng/ml	-0.03
5) Phenol-d6(Surr)	6.038	99	232788	924.72	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	184777	946.13	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.739	172	562121	1062.87	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	78445	1014.01	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.660	244	649442	1077.31	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.829	74	2980	24.14	ng/ml	80
3) Pyridine	3.899	79	1790	8.51	ng/ml	86
6) Phenol	6.049	94	244920	884.80	ng/ml	95
7) Aniline	6.065	93	113794	476.48	ng/ml	83
8) Bis(2-chloroethyl) ether	6.129	93	279758	1119.85	ng/ml	95
9) 2-Chlorophenol	6.183	128	229024	997.99	ng/ml	99
10) 1,3-Dichlorobenzene	6.332	146	259335	1005.40	ng/ml	96
11) 1,4-Dichlorobenzene	6.402	146	256776	1012.86	ng/ml	97
12) Benzyl alcohol	6.525	108	125900	928.16	ng/ml	96
13) 1,2-Dichlorobenzene	6.552	146	254214	1016.79	ng/ml	97
14) 2-Methylphenol	6.637	107	167659	1004.35	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	165598	751.14	ng/ml	81
16) N-Nitrosodi-n-propylamine	6.782	70	124806	860.49	ng/ml	91
17) 3+4-Methylphenol	6.787	107	206898	999.53	ng/ml	96
18) Hexachloroethane	6.889	201	85910	1102.89	ng/ml	90
20) Nitrobenzene	6.947	77	179443	906.88	ng/ml	92
22) Isophorone	7.183	82	368861	927.97	ng/ml	100
23) 2-Nitrophenol	7.268	139	139693	1180.16	ng/ml	83
24) 2,4-Dimethylphenol	7.311	122	168576	1008.44	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.397	93	239409	990.72	ng/ml	99
26) Benzoic acid	7.418	105	153062	2260.09	ng/ml	95
27) 2,4-Dichlorophenol	7.509	162	195006	1043.44	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.595	180	238370	1092.36	ng/ml	97
29) Naphthalene	7.669	128	687282	1047.85	ng/ml	99
30) 4-Chloroaniline	7.728	127	130452	634.57	ng/ml	95
31) Hexachlorobutadiene	7.803	225	129771	1100.51	ng/ml	99
32) 4-Chloro-3-methylphenol	8.215	107	170408	1030.02	ng/ml	91
33) 2-Methylnaphthalene	8.365	142	492243	1074.12	ng/ml	99
34) 1-Methylnaphthalene	8.466	142	470992	1061.66	ng/ml	98
36) Hexachlorocyclopentadiene	8.536	237	122391	1171.21	ng/ml	97
37) 2,4,6-Trichlorophenol	8.654	196	149308	1139.39	ng/ml	99
38) 2,4,5-Trichlorophenol	8.691	198	144608	1119.35	ng/ml	97
39) 1,1'-Biphenyl	8.835	154	602305	1036.95	ng/ml	99
41) 2-Chloronaphthalene	8.857	162	462229	1101.87	ng/ml	98
42) 2-Nitroaniline	8.959	138	146946	1167.65	ng/ml	89
43) 2,6-Dimethylnaphthalene	8.996	156	446499	1047.84	ng/ml	96

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151914.D
Acq On : 15 Nov 2019 4:03 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:20:21 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

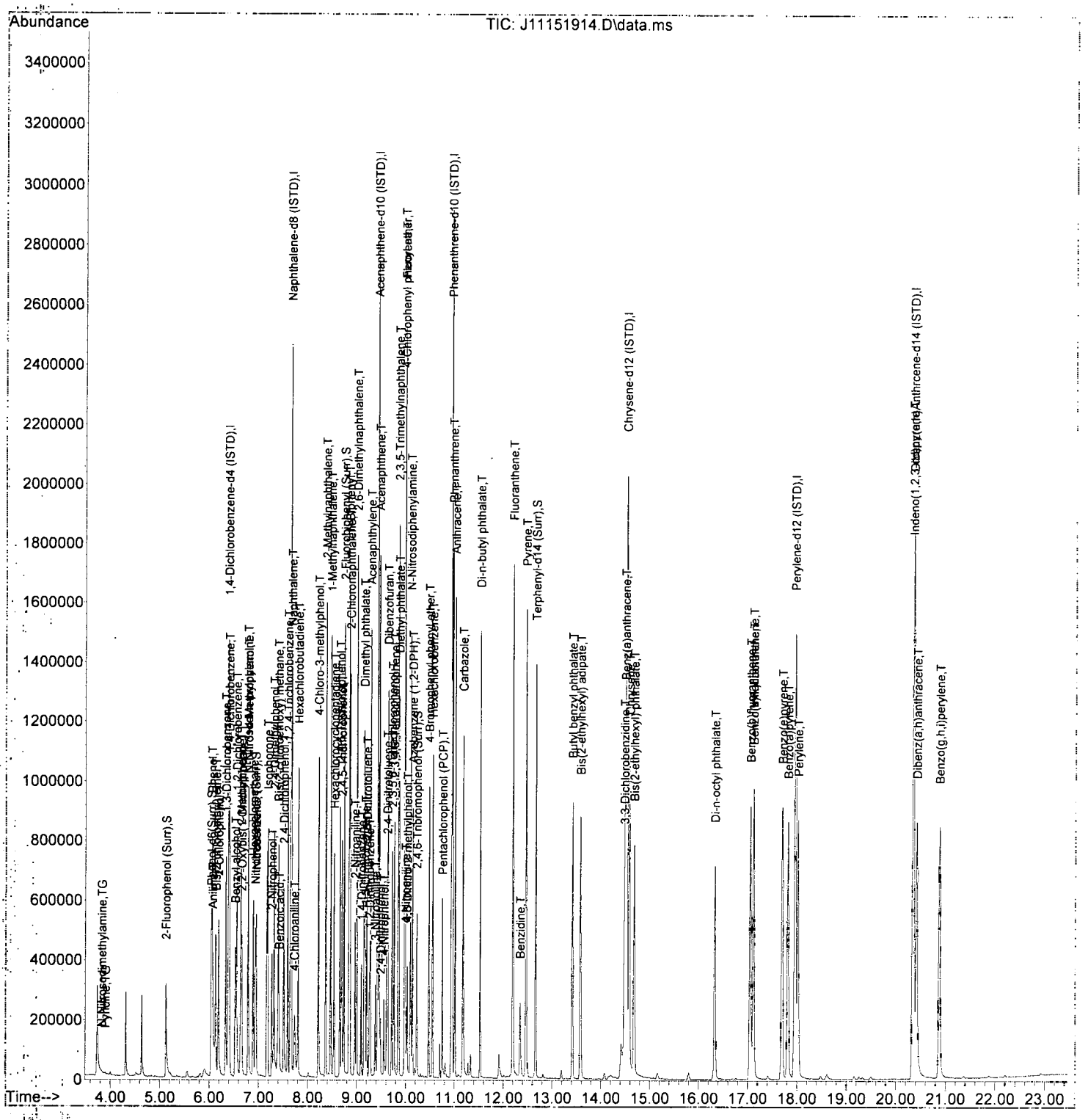
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.092	168	73467	1364.46	ng/ml	74
45)	Dimethyl phthalate	9.146	163	524838	1075.42	ng/ml	99
46)	1,3-Dinitrobenzene	9.172	168	81558	1203.88	ng/ml	84
47)	2,6-Dinitrotoluene	9.205	165	121543	1105.30	ng/ml	87
48)	1,2-Dinitrobenzene	9.258	168	57400	1160.96	ng/ml	84
49)	Acenaphthylene	9.279	152	724089	1054.04	ng/ml	99
50)	3-Nitroaniline	9.376	138	93128	1116.59	ng/ml	87
51)	Acenaphthene	9.456	153	452443	1002.97	ng/ml	99
52)	2,4-Dinitrophenol	9.483	184	40420	1403.89	ng/ml	82
53)	4-Nitrophenol	9.552	139	77750	1151.81	ng/ml	92
54)	2,4-Dinitrotoluene	9.616	165	155485	1129.88	ng/ml	81
55)	Dibenzofuran	9.632	168	654301	1088.08	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	9.718	232	120253	1156.07	ng/ml	94
57)	2,3,4,6-Tetrachlorophenol	9.761	232	125811	1106.89	ng/ml	96
58)	Diethyl phthalate	9.862	149	490381	1091.59	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	9.846	170	419759	1096.19	ng/ml	94
60)	Fluorene	9.980	166	495631	1047.34	ng/ml	97
61)	4-Chlorophenyl phenyl ...	9.975	204	249079	1079.64	ng/ml	94
62)	4-Nitroaniline	9.996	138	101989	1404.39	ng/ml	92
63)	4,6-Dinitro-2-methylph...	10.028	198	68965	1355.19	ng/ml	93
65)	N-Nitrosodiphenylamine	10.098	169	433101	1094.56	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.141	77	354062	884.22	ng/ml	84
68)	4-Bromophenyl phenyl e...	10.472	248	157219	1085.72	ng/ml	98
69)	Hexachlorobenzene	10.552	284	178110	1025.28	ng/ml	97
70)	Pentachlorophenol (PCP)	10.750	266	83653	965.38	ng/ml	98
71)	Phenanthrene	10.959	178	736576	1023.11	ng/ml	99
72)	Anthracene	11.007	178	734223	1060.96	ng/ml	99
73)	Carbazole	11.173	167	638147	1275.34	ng/ml	99
74)	Di-n-butyl phthalate	11.526	149	804746	1060.36	ng/ml	99
75)	Fluoranthene	12.194	202	827681	1121.70	ng/ml	98
76)	Benzidine	12.344	184	166108	1000.71	ng/ml	98
77)	Pyrene	12.462	202	841581	1120.75	ng/ml	100
80)	Butyl benzyl phthalate	13.414	149	363067	1080.44	ng/ml	90
81)	Bis(2-ethylhexyl) adipate	13.580	129	322738	1063.74	ng/ml	98
82)	3,3-Dichlorobenzidine	14.478	252	176916	1660.52	ng/ml	97
83)	Benz(a)anthracene	14.494	228	757085	1036.59	ng/ml	98
84)	Chrysene	14.580	228	722549	1055.68	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	14.676	149	495961	1054.01	ng/ml	97
87)	Di-n-octyl phthalate	16.329	149	798335	1050.34	ng/ml	98
88)	Benzo(b)fluoranthene	17.051	252	786591	1078.83	ng/ml	98
89)	Benzo(k)fluoranthene	17.115	252	778271	1060.75	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.115	252	1597329	2134.48	ng/ml	99
91)	Benzo(e)pyrene	17.698	252	767707	1130.65	ng/ml	99
92)	Benzo(a)pyrene	17.816	252	728312	1100.13	ng/ml	98
93)	Perylene	18.019	252	654800	1099.06	ng/ml	98
95)	Indeno(1,2,3-cd)pyrene	20.340	276	693275	1007.19	ng/ml	99
96)	Dibenz(a,h)anthracene	20.421	278	679048	1074.49	ng/ml	98
97)	Benzo(g,h,i)perylene	20.875	276	727086	1099.72	ng/ml	98

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151914.D
Acq On : 15 Nov 2019 4:03 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:20:21 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



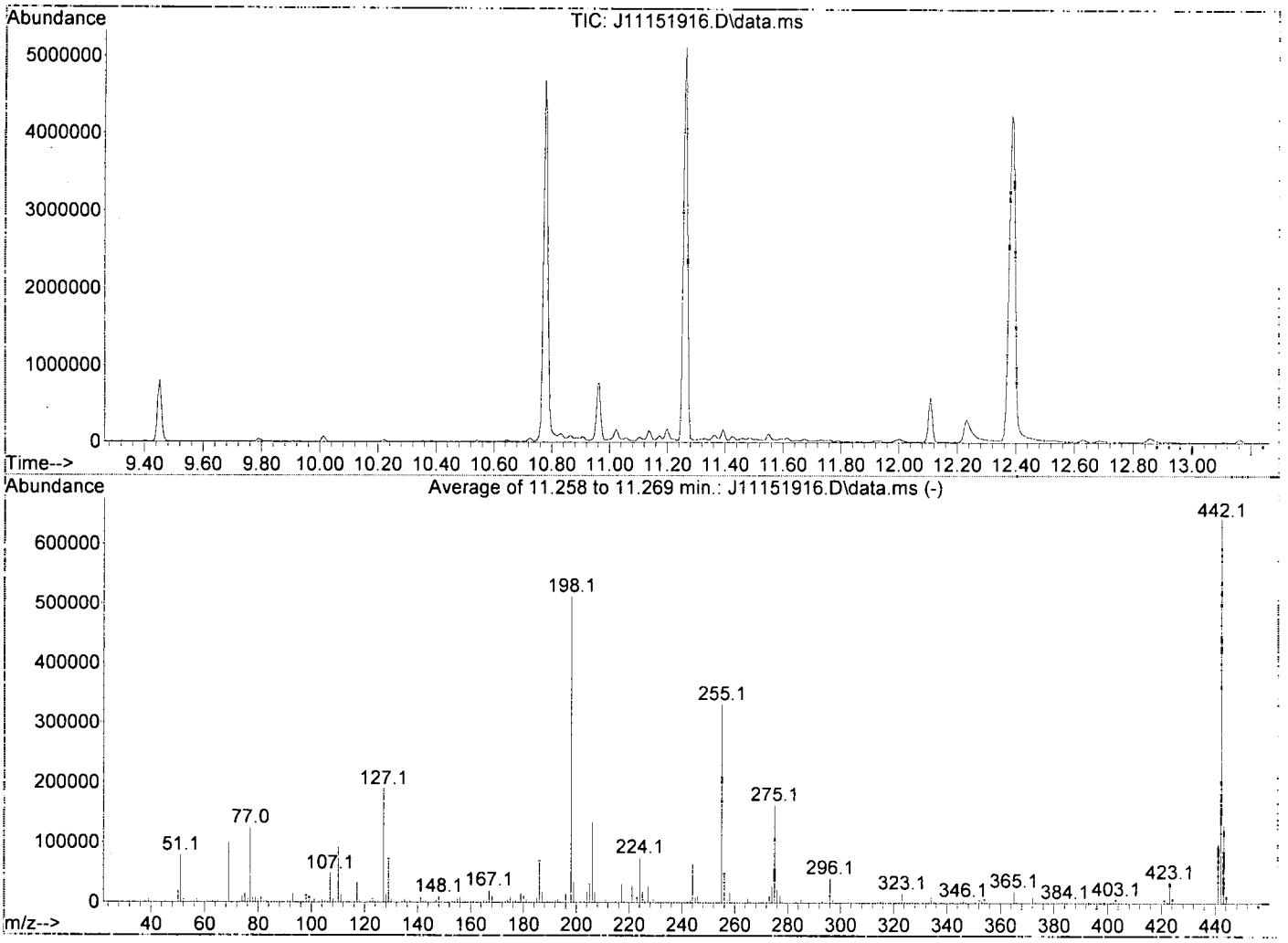
Data Path : T:\data\2019-11\9K15038\
Data File : J11151916.D
Acq On : 15 Nov 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Nov 11 08:41:49 2019

Replaced liner

AMS 11/18/19



AutoFind: Scans 1453, 1454, 1455; Background Corrected with Scan 1448

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.2	1230	PASS
69	198	0.01	100	19.6	100289	PASS
70	69	0.00	2	0.5	484	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	512107	PASS
199	198	5	9	6.8	34995	PASS
365	198	1	100	3.8	19413	PASS
441	443	0.01	150	76.5	98045	PASS
442	198	0.10	200	125.6	643371	PASS
443	442	15	24	19.9	128189	PASS

J

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151916.D
Acq On : 15 Nov 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:20:50 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10

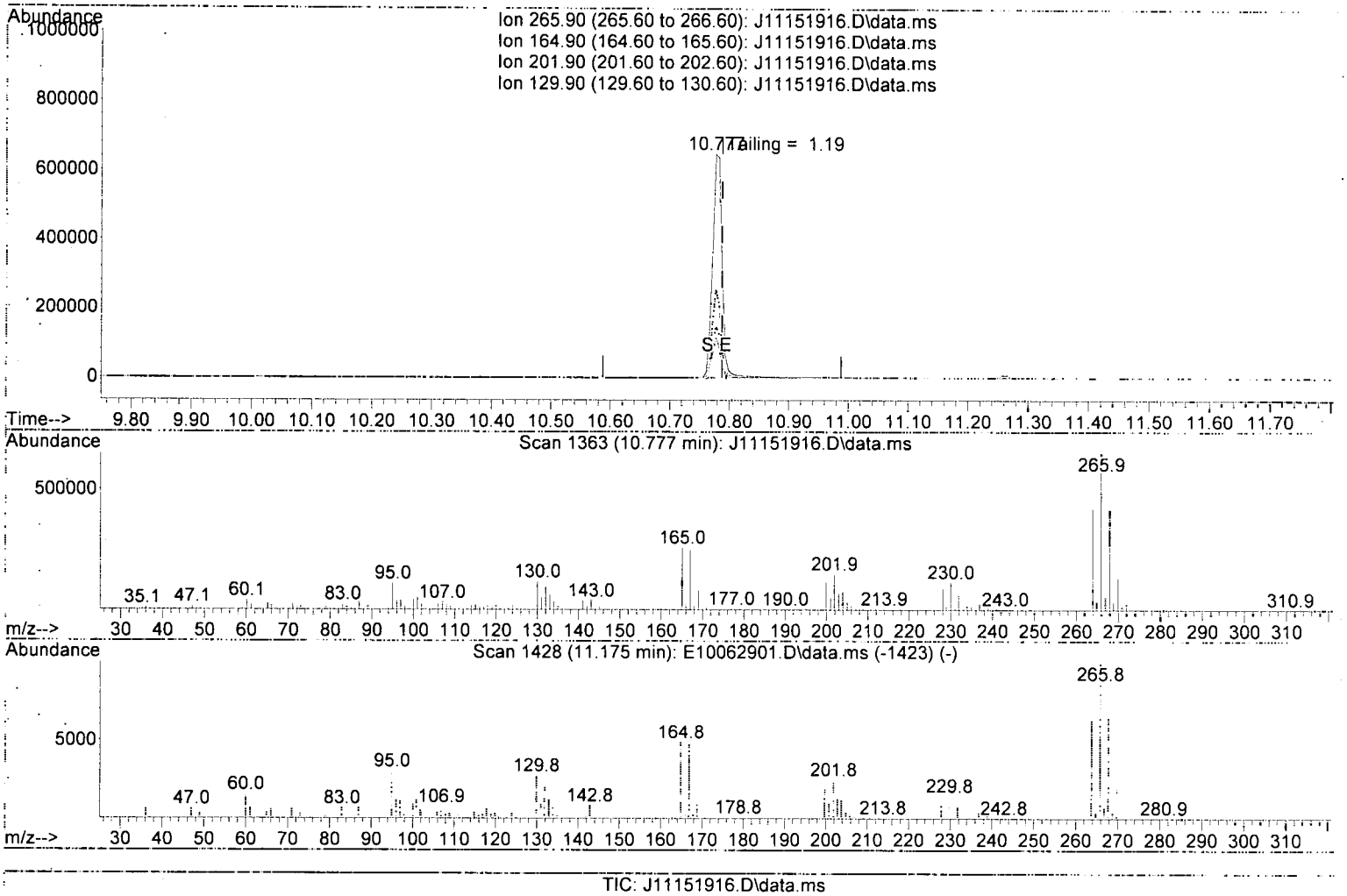
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.412	150	148135	2.00	ug/mL	0.00
2) Naphthalene-d8	7.675	136	359274	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.451	162	187658	2.00	ug/mL	0.00
5) Phenanthrene-d10	10.964	188	319830	2.00	ug/mL	0.00
11) Chrysene-d12	14.553	240	258898	2.00	ug/mL	-0.03
12) Perylene-d12	16.923	264	1425	2.00	ug/mL	# 0.01
Target Compounds						Qvalue
4) Pentachlorophenol	10.777	266	708928	40.01	ug/mL	86
6) DFTPP	11.264	442	720433	27.90	ug/mL	78
7) Benzidine	12.387	184	2846063	25.01	ug/mL	96
8) 4,4-DDE	12.633	TIC	38983	No Calib		
9) 4,4-DDD	13.109	TIC	14196	No Calib		
10) 4,4-DDT	13.633	TIC	9671665	29.49	ug/mL	95

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151916.D
Acq On : 15 Nov 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:20:50 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151916.D\data.ms

(4) Pentachlorophenol

10.777min (-0.011) 40.01 ug/mL

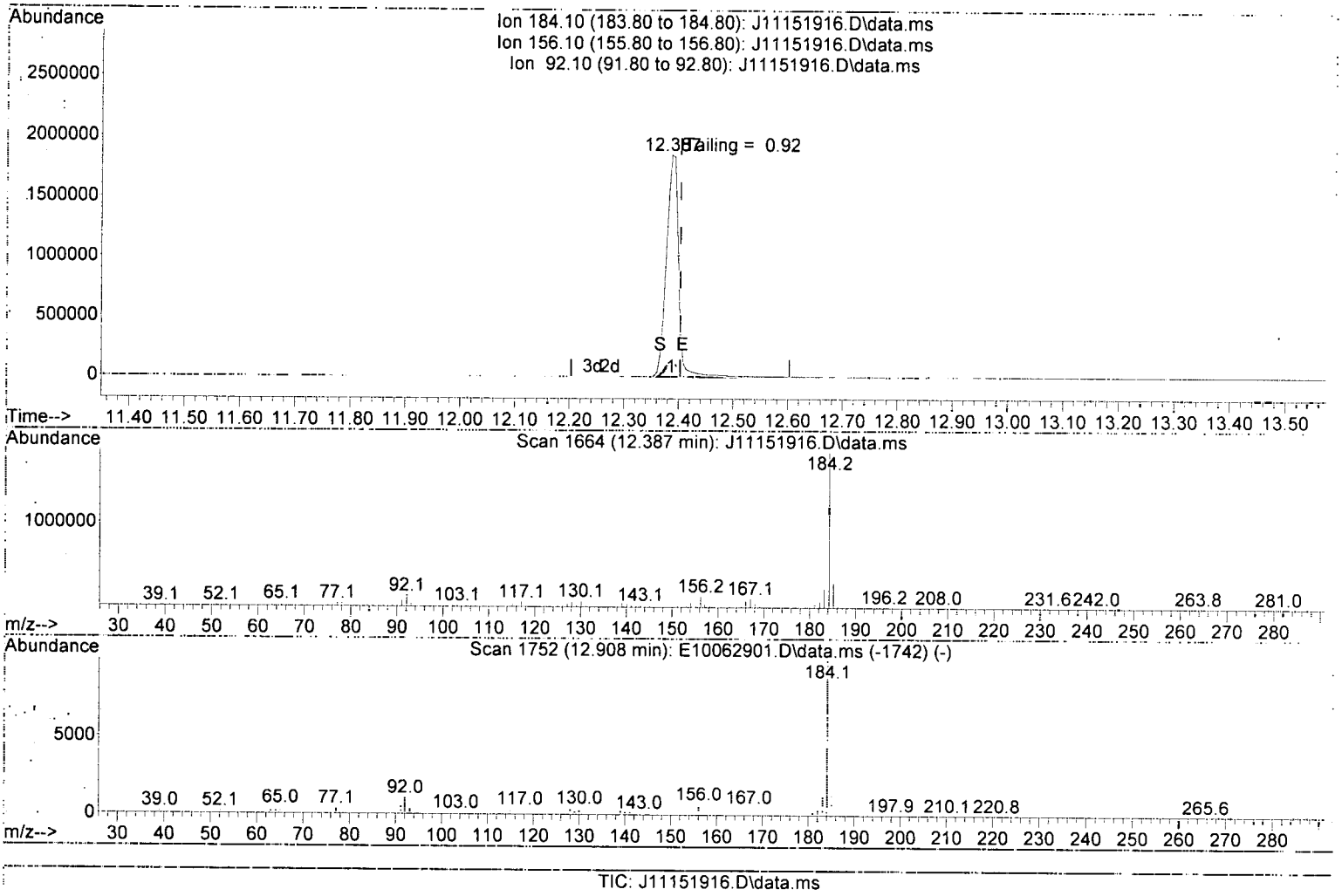
response 708928

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	39.64
201.90	25.80	22.55
129.90	27.30	17.76

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151916.D
Acq On : 15 Nov 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:20:50 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151916.D\data.ms

(7) Benzidine

12.387min (-0.016) 25.01 ug/mL

response 2846063

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.00
92.10	8.20	7.10
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
9K15038-TUN2
SV-GCMS10

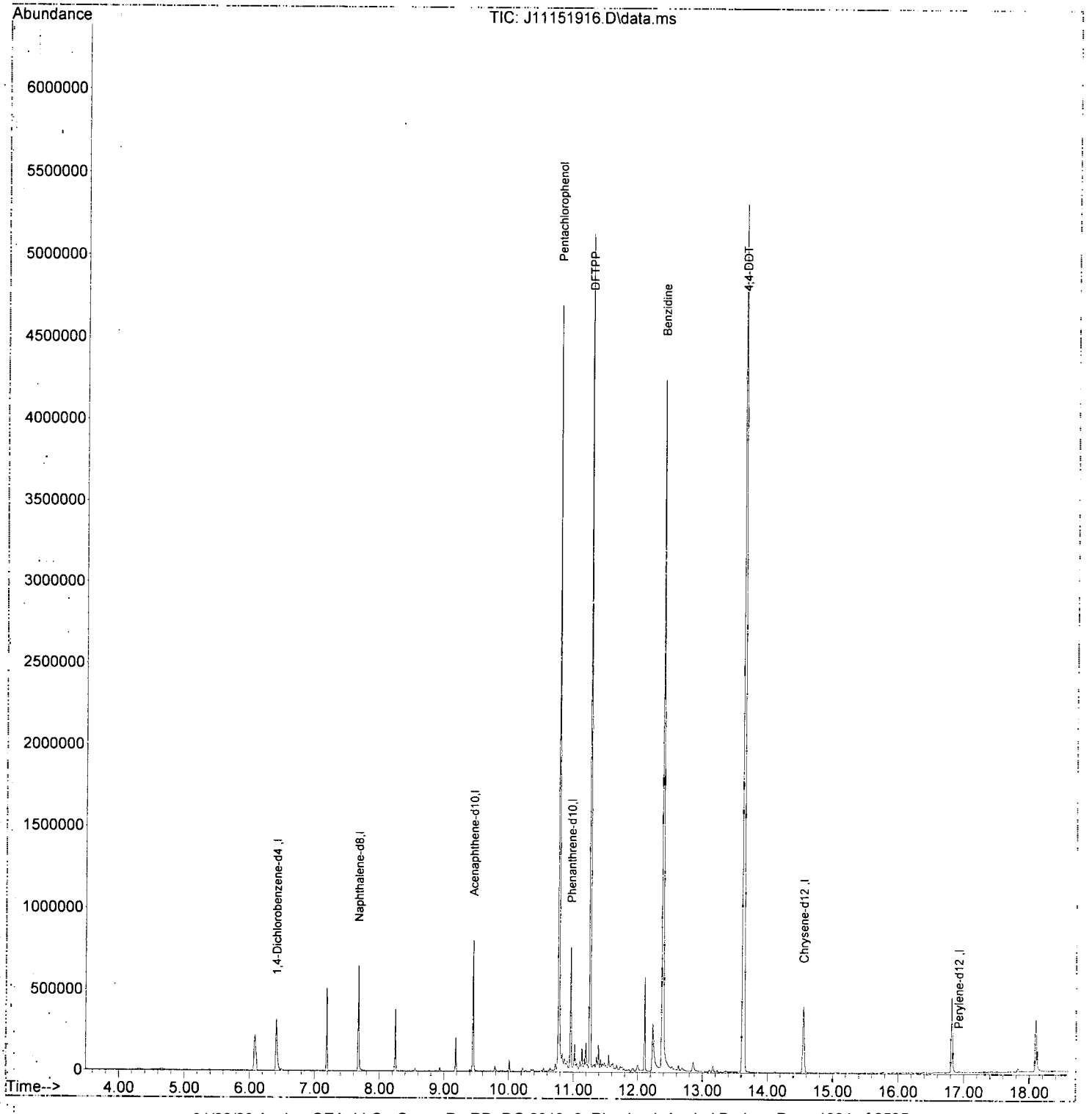
First Column Area Counts		Percent Breakdown	
DDE	38983		
DDD	14196		
DDT	967665	0.55	PASS

Breakdown must be less than 20% to accept sample data.

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151916.D
Acq On : 15 Nov 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 18 08:20:50 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:27:24 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

AMS 11/18/19

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	118	0.00
2	TG	N-Nitrosodimethylamine	1000.000	879.583	12.0	107	-0.10
3	TG	Pyridine	1000.000	822.332	17.8	98	-0.11
4	S	2-Fluorophenol (Surr)	1000.000	1055.682	-5.6	119	-0.03
5	S	Phenol-d6(Surr)	1000.000	919.851	8.0	100	0.00
6	T	Phenol	1000.000	903.526	9.6	99	-0.01
7	T	Aniline	1000.000	510.968	48.9#	66	-0.02
8	T	Bis(2-chloroethyl) ether	1000.000	1116.341	-11.6	121	-0.01
9	T	2-Chlorophenol	1000.000	1031.720	-3.2	114	-0.01
10	T	1,3-Dichlorobenzene	1000.000	1033.611	-3.4	119	-0.02
11	T	1,4-Dichlorobenzene	1000.000	1020.861	-2.1	116	-0.01
12	T	Benzyl alcohol	1000.000	917.888	8.2	103	0.00
13	T	1,2-Dichlorobenzene	1000.000	1044.952	-4.5	119	-0.01
14	T	2-Methylphenol	1000.000	981.640	1.8	104	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	730.142	27.0#	81	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	831.735	16.8	91	0.00
17	T	3+4-Methylphenol	1000.000	966.828	3.3	100	0.00
18	T	Hexachloroethane	1000.000	1100.766	-10.1	129	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	920.454	8.0	99	-0.01
20	T	Nitrobenzene	1000.000	907.629	9.2	98	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	110	0.00
22	T	Isophorone	1000.000	934.677	6.5	99	0.00
23	T	2-Nitrophenol	1000.000	1272.372	-27.2#	132	0.00
24	T	2,4-Dimethylphenol	1000.000	968.938	3.1	99	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	972.389	2.8	100	0.00
26	T	Benzoic acid	2000.000	1763.291	11.8	101	0.00
27	T	2,4-Dichlorophenol	1000.000	1070.915	-7.1	116	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1122.149	-12.2	119	0.00
29	T	Naphthalene	1000.000	1057.651	-5.8	109	0.00
30	T	4-Chloroaniline	1000.000	632.942	36.7#	66	-0.01
31	T	Hexachlorobutadiene	1000.000	1124.111	-12.4	117	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1002.307	-0.2	103	0.00
33	T	2-Methylnaphthalene	1000.000	1076.665	-7.7	109	0.00
34	T	1-Methylnaphthalene	1000.000	1036.358	-3.6	108	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	114	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1171.233	-17.1	121	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1134.557	-13.5	125	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1117.394	-11.7	125	0.00
39	T	1,1'-Biphenyl	1000.000	1031.082	-3.1	111	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1063.385	-6.3	115	0.00
41	T	2-Chloronaphthalene	1000.000	1113.683	-11.4	119	0.00
42	T	2-Nitroaniline	1000.000	1139.622	-14.0	125	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1042.429	-4.2	113	0.00
44	T	1,4-Dinitrobenzene	1000.000	1293.617	-29.4#	155	0.00
45	T	Dimethyl phthalate	1000.000	1039.794	-4.0	112	0.00
46	T	1,3-Dinitrobenzene	1000.000	1146.410	-14.6	133	0.00
47	T	2,6-Dinitrotoluene	1000.000	1085.159	-8.5	121	0.00
48	T	1,2-Dinitrobenzene	1000.000	1124.267	-12.4	121	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:27:24 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	1056.447	-5.6	112	0.00
50	T	3-Nitroaniline	1000.000	964.221	3.6	107	0.00
51	T	Acenaphthene	1000.000	994.246	0.6	111	0.00
52	T	2,4-Dinitrophenol	1000.000	1020.649	-2.1	142	0.00
53	T	4-Nitrophenol	1000.000	970.681	2.9	108	0.00
54	T	2,4-Dinitrotoluene	1000.000	1098.425	-9.8	128	0.00
55	T	Dibenzofuran	1000.000	1073.469	-7.3	116	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1054.479	-5.4	117	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1061.059	-6.1	118	0.00
58	T	Diethyl phthalate	1000.000	1076.148	-7.6	112	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1111.709	-11.2	118	0.00
60	T	Fluorene	1000.000	1023.511	-2.4	112	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1047.421	-4.7	114	0.00
62	T	4-Nitroaniline	1000.000	1202.293	-20.2#	137	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1135.116	-13.5	141	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	116	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1080.886	-8.1	117	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	877.866	12.2	95	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1011.407	-1.1	115	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1060.093	-6.0	117	0.00
69	T	Hexachlorobenzene	1000.000	1019.341	-1.9	112	0.00
70	T	Pentachlorophenol (PCP)	1000.000	943.458	5.7	120	0.00
71	T	Phenanthrene	1000.000	1016.023	-1.6	115	0.00
72	T	Anthracene	1000.000	1057.079	-5.7	115	0.00
73	T	Carbazole	1000.000	1169.144	-16.9	126	0.00
74	T	Di-n-butyl phthalate	1000.000	1040.459	-4.0	111	0.00
75	T	Fluoranthene	1000.000	1091.142	-9.1	116	0.00
76	T	Benzidine	2000.000	1116.129	44.2#	60	0.00
77	T	Pyrene	1000.000	1090.029	-9.0	115	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	111	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1088.551	-8.9	115	0.00
80	T	Butyl benzyl phthalate	1000.000	1083.243	-8.3	116	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1032.238	-3.2	113	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1656.430	17.2	90	0.00
83	T	Benz(a)anthracene	1000.000	1038.370	-3.8	117	0.00
84	T	Chrysene	1000.000	1062.468	-6.2	117	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1055.044	-5.5	114	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	111	0.00
87	T	Di-n-octyl phthalate	1000.000	1034.562	-3.5	116	0.00
88	T	Benzo(b)fluoranthene	1000.000	1076.024	-7.6	119	0.00
89	T	Benzo(k)fluoranthene	1000.000	1056.784	-5.7	116	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2128.782	-6.4	118	0.00
91	T	Benzo(e)pyrene	1000.000	1140.758	-14.1	118	0.00
92	T	Benzo(a)pyrene	1000.000	1084.607	-8.5	117	0.00
93	T	Perylene	1000.000	1084.733	-8.5	119	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	112	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:27:24 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	1001.665	-0.2	115	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1051.070	-5.1	115	0.00
97 T	Benzo(g,h,i)perylene	1000.000	1118.818	-11.9	117	0.00

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 11/18/19

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.386	152	333945	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1253992	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	667779	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1232241	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.521	240	1168472	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	17.966	264	1155496	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.351	292	988166	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.124	112	213933	1055.68	ng/ml	-0.03
5) Phenol-d6(Surr)	6.038	99	238597	919.85	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	185223	920.45	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.739	172	555735	1063.38	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	75127	1011.41	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.660	244	586160	1088.55	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	~~3.851~~	~~74~~	~~698m~~	~~5.49~~	~~ng/ml~~	MI
3) Pyridine	~~3.856~~	~~79~~	~~2749m~~	~~12.68~~	~~ng/ml~~	MI
6) Phenol	6.049	94	257701	903.53	ng/ml	94
7) Aniline	6.065	93	125737	510.97	ng/ml	91
8) Bis(2-chloroethyl) ether	6.124	93	287354	1116.34	ng/ml	95
9) 2-Chlorophenol	6.183	128	243957	1031.72	ng/ml	97
10) 1,3-Dichlorobenzene	6.327	146	274712	1033.61	ng/ml	98
11) 1,4-Dichlorobenzene	6.402	146	266668	1020.86	ng/ml	98
12) Benzyl alcohol	6.525	108	128236	917.89	ng/ml	96
13) 1,2-Dichlorobenzene	6.552	146	269192	1044.95	ng/ml	97
14) 2-Methylphenol	6.637	107	168847	981.64	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	165860	730.14	ng/ml	81
16) N-Nitrosodi-n-propylamine	6.782	70	124300	831.73	ng/ml	92
17) 3+4-Methylphenol	6.787	107	206208	966.83	ng/ml	96
18) Hexachloroethane	6.889	201	88349	1100.77	ng/ml	92
20) Nitrobenzene	6.948	77	185047	907.63	ng/ml	87
22) Isophorone	7.183	82	373668	934.68	ng/ml	97
23) 2-Nitrophenol	7.268	139	151921	1272.37	ng/ml	87
24) 2,4-Dimethylphenol	7.311	122	162906	968.94	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.397	93	236332	972.39	ng/ml	98
26) Benzoic acid	7.408	105	100014	1763.29	ng/ml	95
27) 2,4-Dichlorophenol	7.509	162	201355	1070.91	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.595	180	246281	1122.15	ng/ml	98
29) Naphthalene	7.670	128	697703	1057.65	ng/ml	100
30) 4-Chloroaniline	7.728	127	130866	632.94	ng/ml	94
31) Hexachlorobutadiene	7.803	225	133317	1124.11	ng/ml	99
32) 4-Chloro-3-methylphenol	8.215	107	166778	1002.31	ng/ml	89
33) 2-Methylnaphthalene	8.365	142	496250	1076.66	ng/ml	100
34) 1-Methylnaphthalene	8.467	142	462417	1036.36	ng/ml	98
36) Hexachlorocyclopentadiene	8.536	237	120945	1171.23	ng/ml	96
37) 2,4,6-Trichlorophenol	8.654	196	146898	1134.56	ng/ml	97
38) 2,4,5-Trichlorophenol	8.691	198	142642	1117.39	ng/ml	99
39) 1,1'-Biphenyl	8.836	154	591806	1031.08	ng/ml	99
41) 2-Chloronaphthalene	8.857	162	461652	1113.68	ng/ml	97
42) 2-Nitroaniline	8.959	138	141564	1139.62	ng/ml	87
43) 2,6-Dimethylnaphthalene	8.996	156	438933	1042.43	ng/ml	96

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

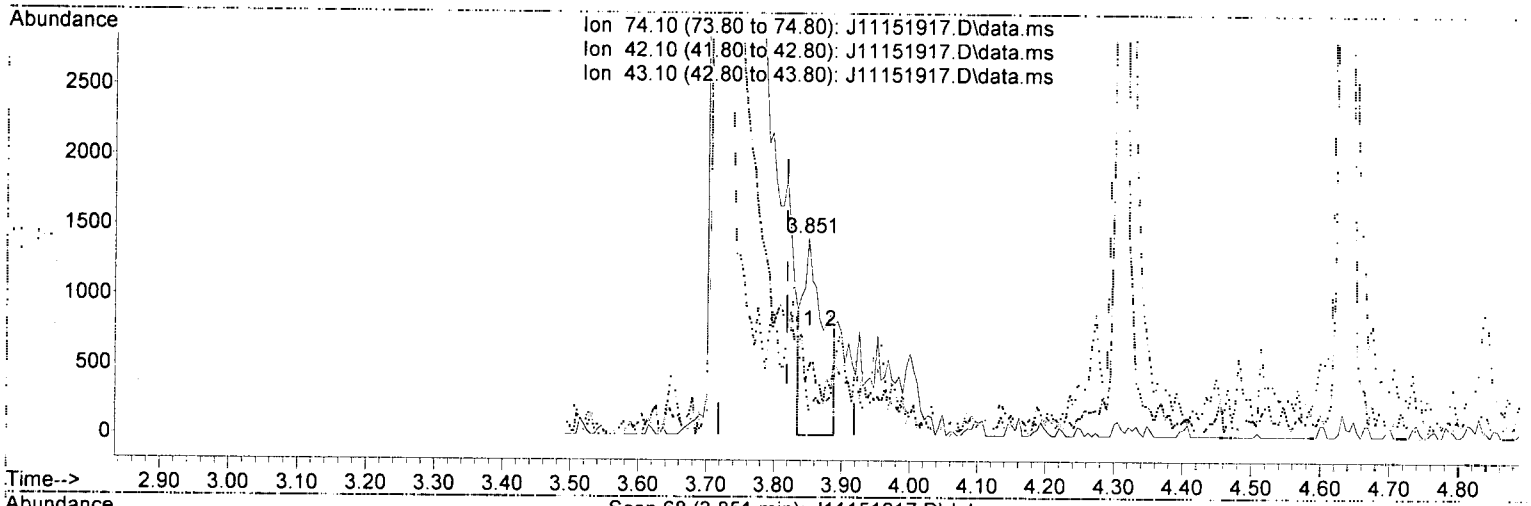
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.092	168	68402	1293.62	ng/ml	75
45) Dimethyl phthalate	9.146	163	501443	1039.79	ng/ml	98
46) 1,3-Dinitrobenzene	9.173	168	76480	1146.41	ng/ml	85
47) 2,6-Dinitrotoluene	9.205	165	117880	1085.16	ng/ml	87
48) 1,2-Dinitrobenzene	9.258	168	54928	1124.27	ng/ml	79
49) Acenaphthylene	9.280	152	717151	1056.45	ng/ml	99
50) 3-Nitroaniline	9.376	138	81741	964.22	ng/ml	91
51) Acenaphthene	9.456	153	443199	994.25	ng/ml	100
52) 2,4-Dinitrophenol	9.483	184	25582	1020.65	ng/ml	86
53) 4-Nitrophenol	9.552	139	63180	970.68	ng/ml	88
54) 2,4-Dinitrotoluene	9.611	165	149205	1098.43	ng/ml	88
55) Dibenzofuran	9.633	168	637875	1073.47	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.718	232	107936	1054.48	ng/ml	93
57) 2,3,4,6-Tetrachlorophenol	9.761	232	119051	1061.06	ng/ml	96
58) Diethyl phthalate	9.863	149	477722	1076.15	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	9.847	170	420663	1111.71	ng/ml	91
60) Fluorene	9.980	166	478622	1023.51	ng/ml	98
61) 4-Chlorophenyl phenyl ...	9.975	204	238785	1047.42	ng/ml	96
62) 4-Nitroaniline	9.996	138	86279	1202.29	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.028	198	54971	1135.12	ng/ml	91
65) N-Nitrosodiphenylamine	10.098	169	410673	1080.89	ng/ml	99
66) Azobenzene (1,2-DPH)	10.135	77	337530	877.87	ng/ml	91
68) 4-Bromophenyl phenyl e...	10.472	248	147400	1060.09	ng/ml	99
69) Hexachlorobenzene	10.547	284	170032	1019.34	ng/ml	99
70) Pentachlorophenol (PCP)	10.745	266	78349	943.46	ng/ml	97
71) Phenanthrene	10.959	178	702370	1016.02	ng/ml	99
72) Anthracene	11.007	178	702428	1057.08	ng/ml	99
73) Carbazole	11.173	167	579390	1169.14	ng/ml	99
74) Di-n-butyl phthalate	11.526	149	758224	1040.46	ng/ml	99
75) Fluoranthene	12.195	202	773097	1091.14	ng/ml	97
76) Benzidine	12.344	184	180625	1116.13	ng/ml	97
77) Pyrene	12.462	202	785942	1090.03	ng/ml	99
80) Butyl benzyl phthalate	13.414	149	325188	1083.24	ng/ml	89
81) Bis(2-ethylhexyl) adipate	13.580	129	279744	1032.24	ng/ml	99
82) 3,3-Dichlorobenzidine	14.478	252	157708	1656.43	ng/ml	93
83) Benz(a)anthracene	14.500	228	677417	1038.37	ng/ml	97
84) Chrysene	14.575	228	649560	1062.47	ng/ml	100
85) Bis(2-ethylhexyl) phth...	14.682	149	443448	1055.04	ng/ml	99
87) Di-n-octyl phthalate	16.329	149	687034	1034.56	ng/ml	98
88) Benzo(b)fluoranthene	17.051	252	686180	1076.02	ng/ml	98
89) Benzo(k)fluoranthene	17.115	252	678232	1056.78	ng/ml	99
90) Benzo(b+k)fluoranthene	17.115	252	1393396	2128.78	ng/ml	99
91) Benzo(e)pyrene	17.698	252	677492	1140.76	ng/ml	99
92) Benzo(a)pyrene	17.816	252	627960	1084.61	ng/ml	98
93) Perylene	18.025	252	565267	1084.73	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.346	276	585313	1001.66	ng/ml	97
96) Dibenz(a,h)anthracene	20.421	278	563901	1051.07	ng/ml	98
97) Benzo(g,h,i)perylene	20.881	276	627964	1118.82	ng/ml	97

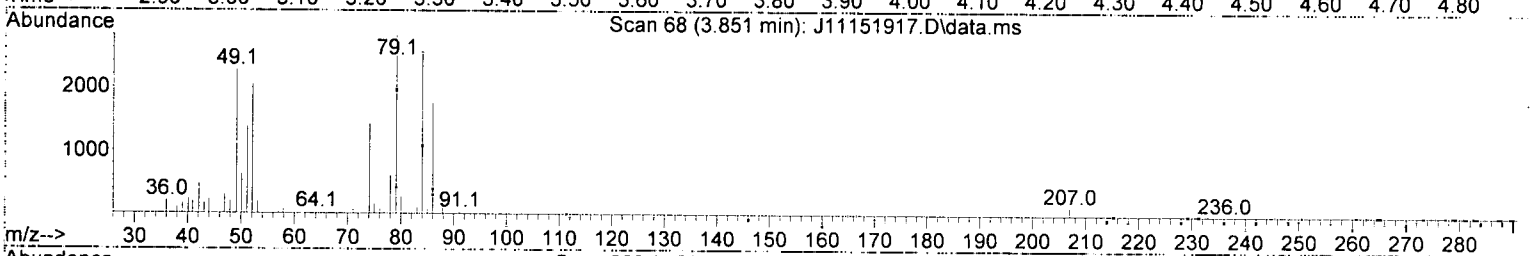
(#) = qualifier out of range (m) = manual integration (+) = signals summed

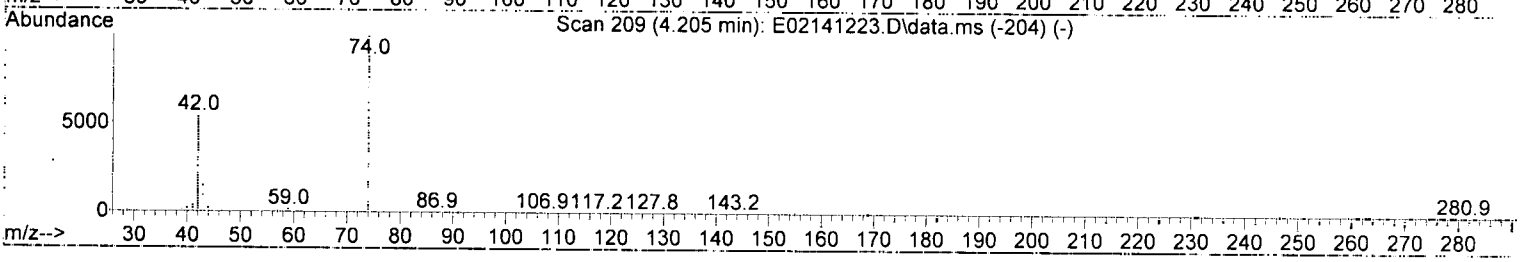
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151917.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.851min (+ 0.032) 5.49 ng/ml m

response 698

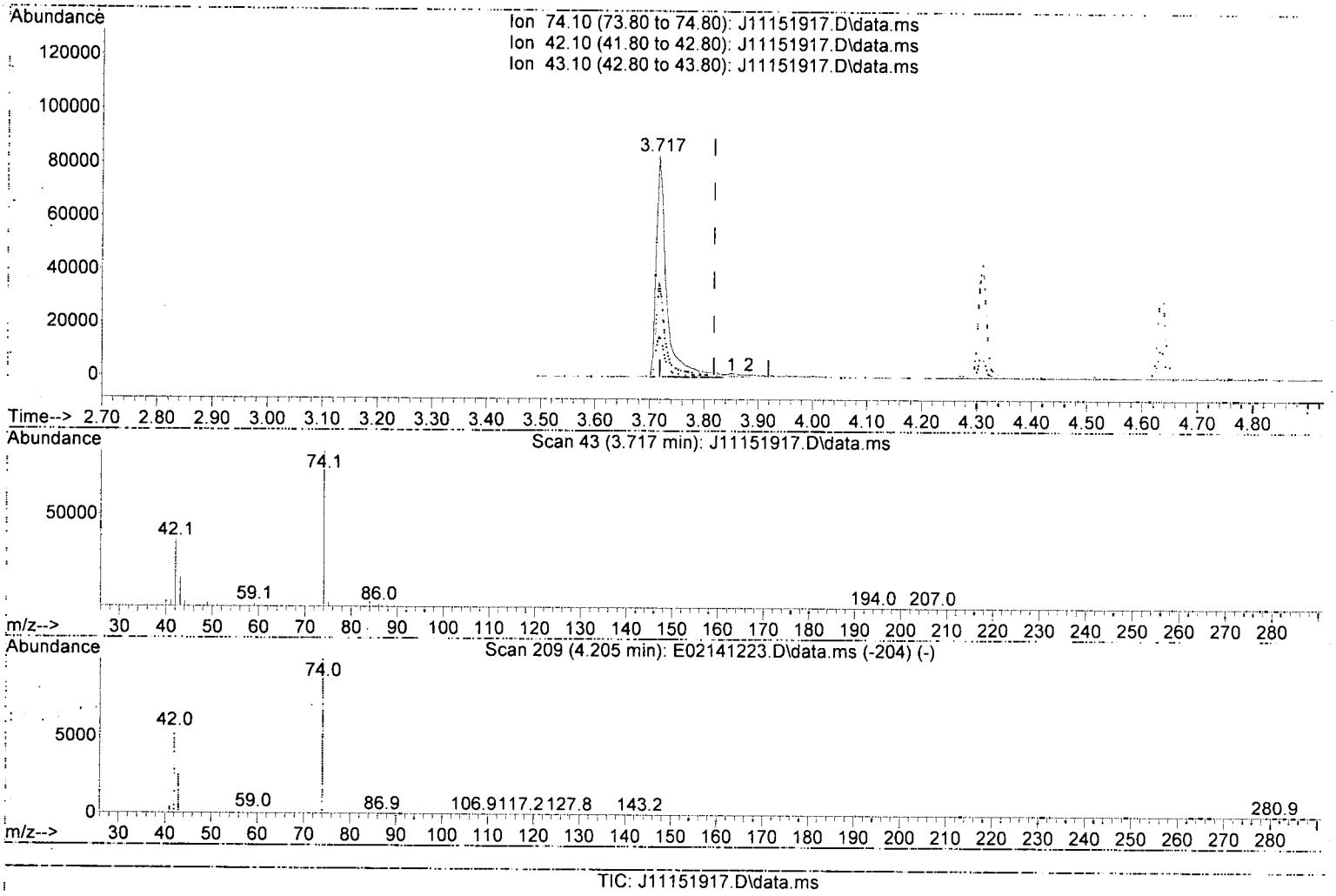
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	34.66
43.10	22.20	14.52
0.00	0.00	0.00

AMS 11/18/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151917.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.717min (-0.102) 879.58 ng/ml m

response 111885

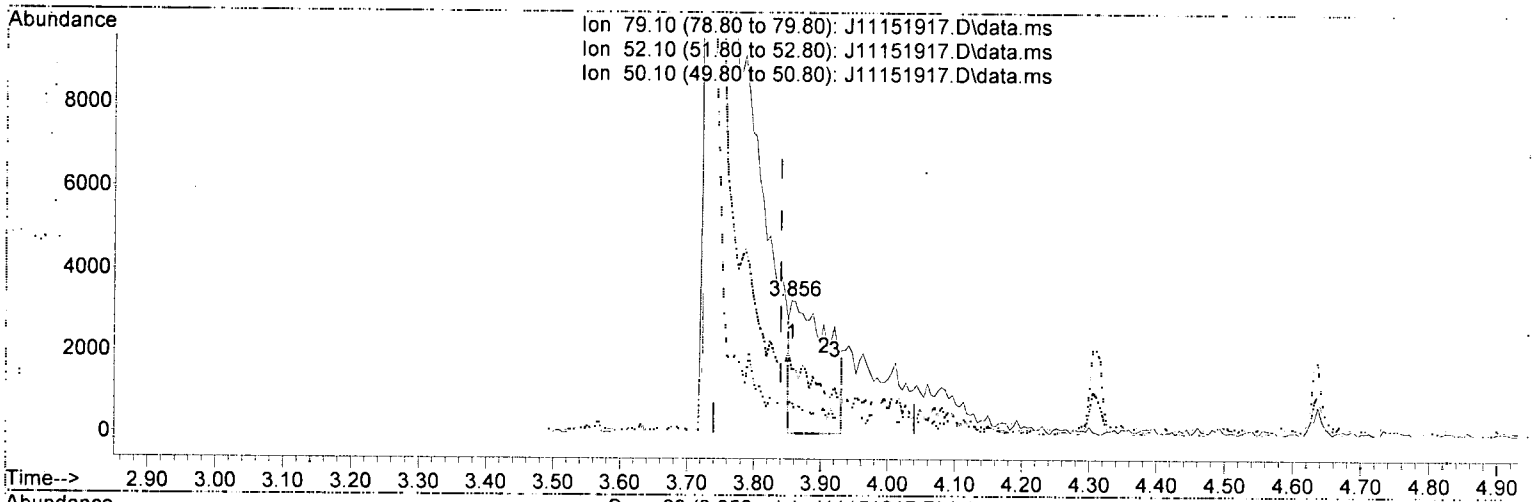
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	42.96
43.10	22.20	18.65
0.00	0.00	0.00

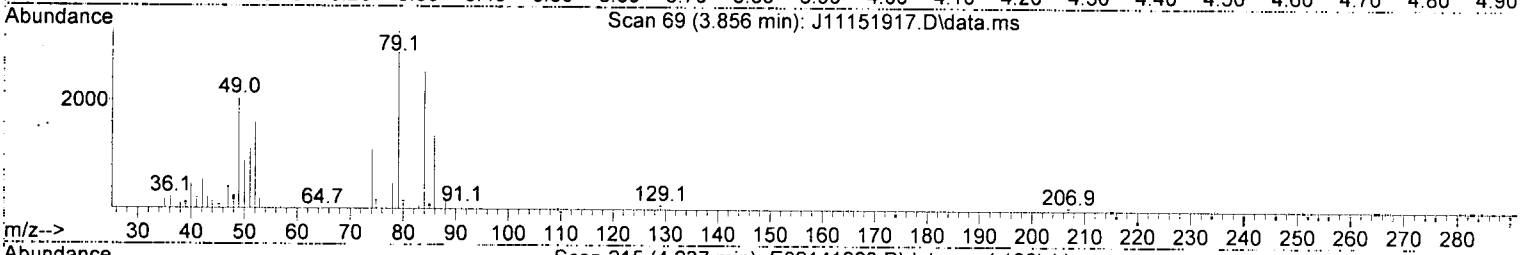
AMS 11/18/19 ✓

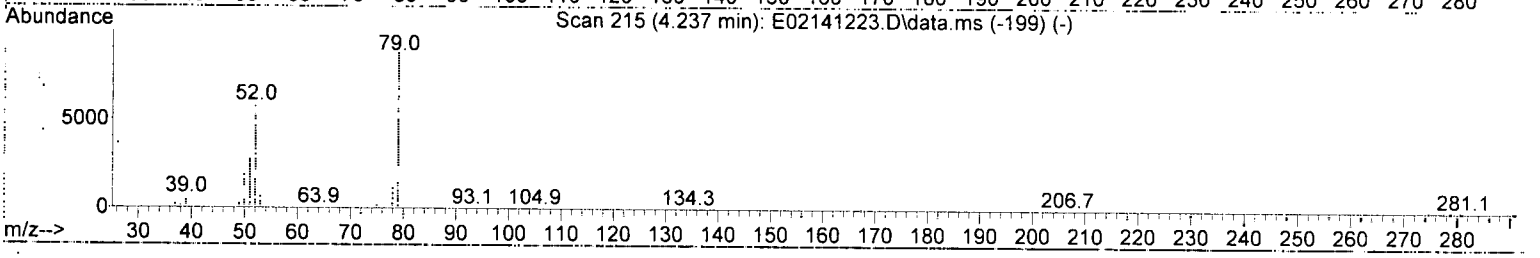
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151917.D\data.ms

(3) Pyridine (TG)

3.856min (+ 0.016) 12.68 ng/ml m

response 2749

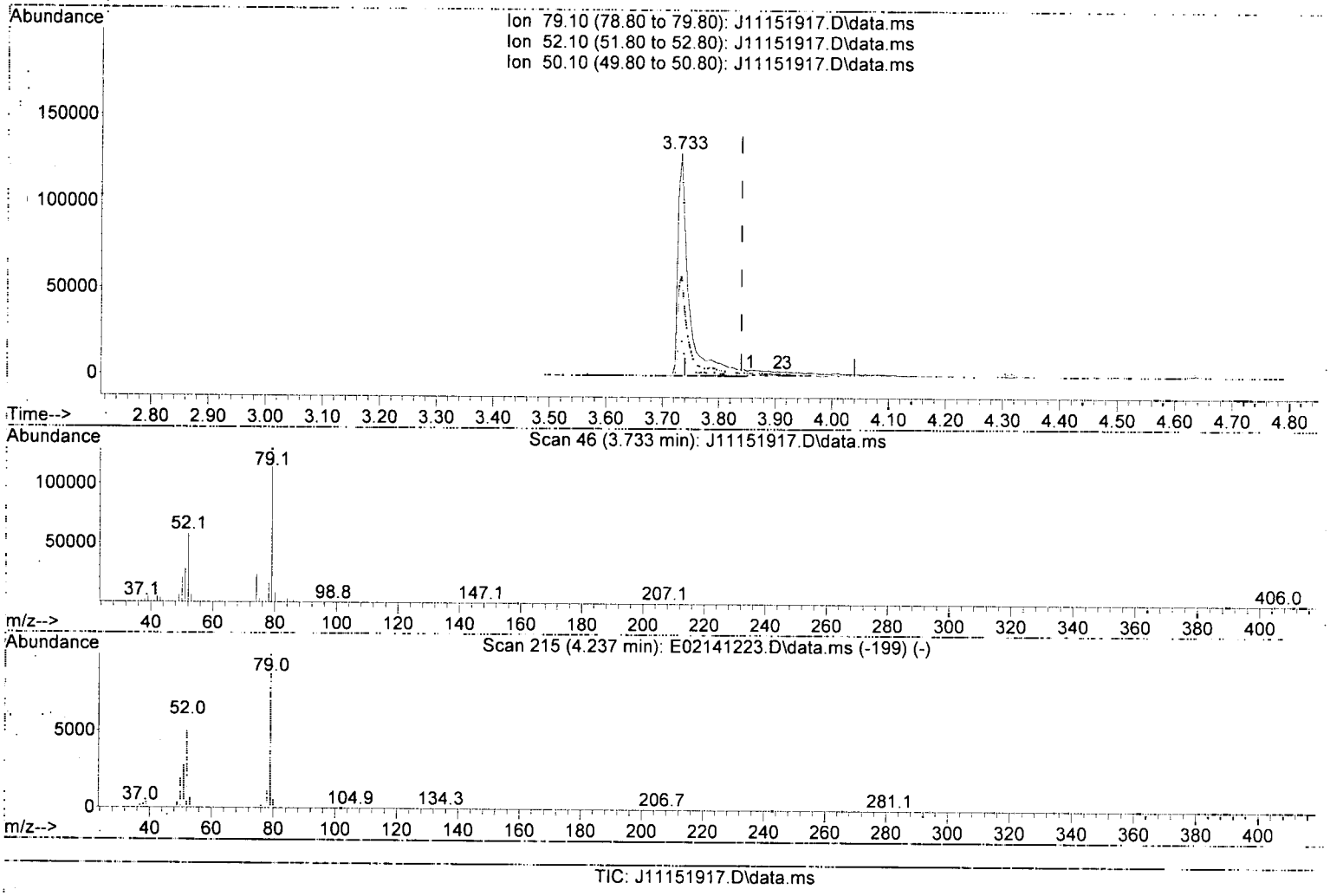
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	46.39
50.10	18.70	24.45
0.00	0.00	0.00

AMS 11/18/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151917.D\data.ms

(3) Pyridine (TG)

3.733min (-0.107) 822.33 ng/ml m

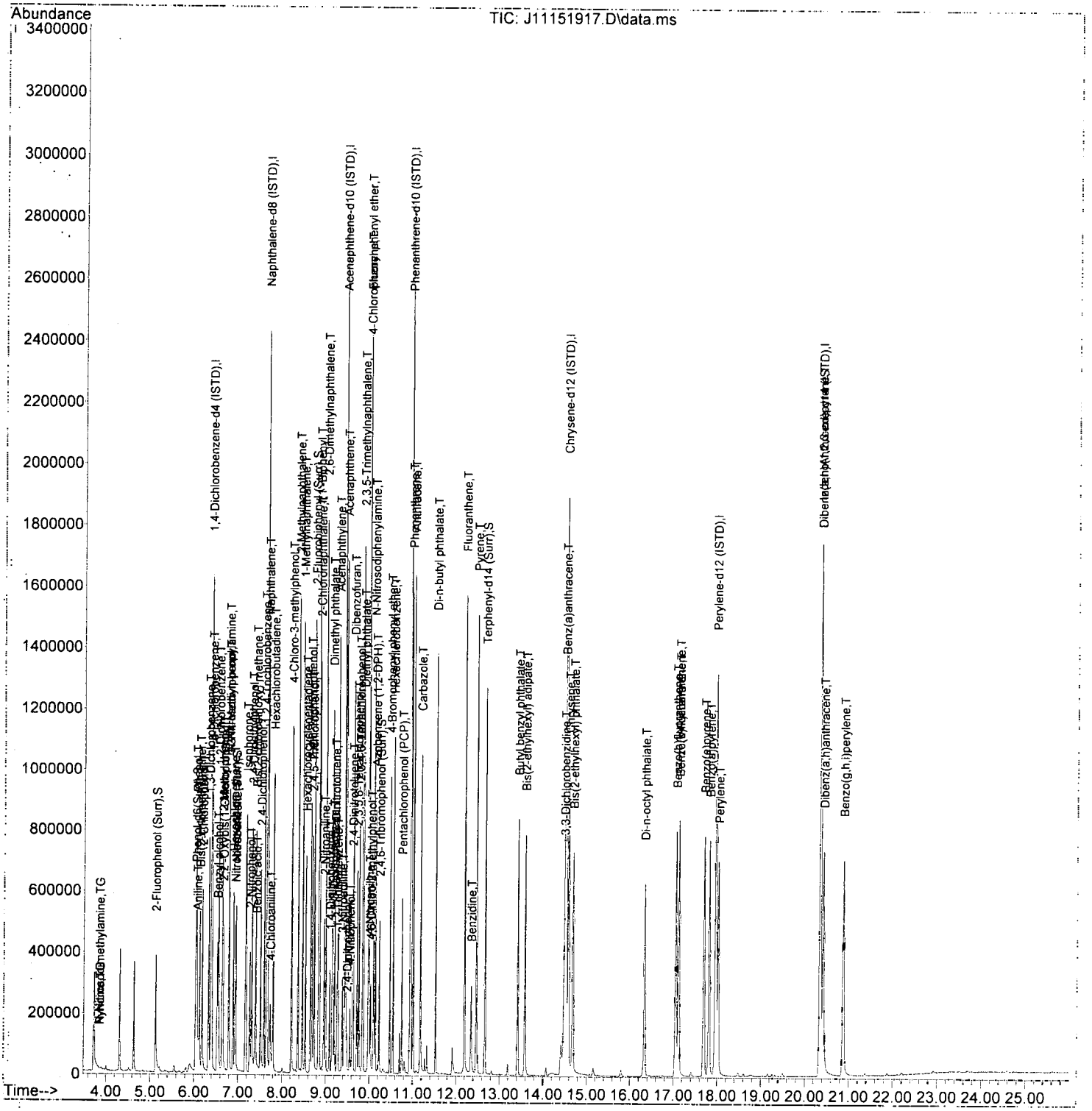
response 178329

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	45.00
50.10	18.70	15.96
0.00	0.00	0.00

AMS 11/18/19

Data Path : T:\data\2019-11\9K15038\
Data File : J11151917.D
Acq On : 15 Nov 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:26:35 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151918.D
Acq On : 15 Nov 2019 6:23 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 11/18/19

Quant Time: Nov 18 08:27:57 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	314645	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1159597	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	605269	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1020337	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.516	240	909470	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	17.955	264	898329	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.346	292	721081	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	3.776	79	82	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	6.113	93	50	N.D.	
8) Bis(2-chloroethyl) ether	6.113	93	50	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	6.611	107	64	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.718	70	56	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.980	77	56	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	7.343	105	67	806.74 ng/ml#	8
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.654	128	50	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 : T:\data\2019-11\9K15038\
Data File : J11151918.D
Acq On : 15 Nov 2019 6:23 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

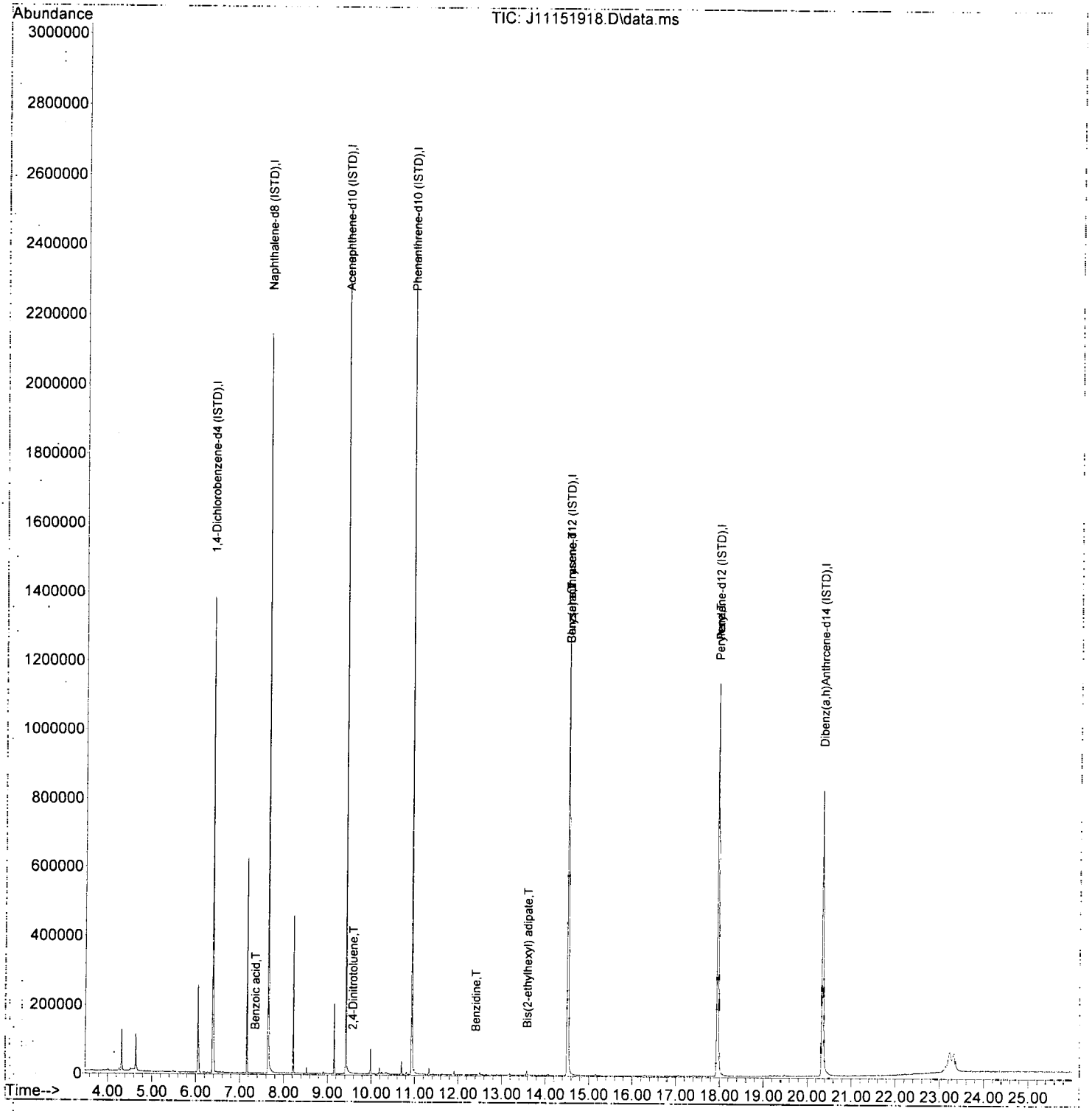
Quant Time: Nov 18 08:27:57 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.157	163	106	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	9.429	153	171	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.574	165	77	54.33 ng/ml#	27
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...	9.954	170	112	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)	10.135	77	58	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	10.932	178	416	N.D.	
72) Anthracene	10.932	178	416	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.526	149	187	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.398	184	56	123.37 ng/ml	67
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.580	129	4227	20.04 ng/ml	91
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.521	228	1954	3.85 ng/ml	62
84) Chrysene	14.521	228	1954	4.11 ng/ml	60
85) Bis(2-ethylhexyl) phth...	14.676	149	227	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	17.950	252	3125	7.71 ng/ml	76
95) Indeno(1,2,3-cd)pyrene	20.346	276	329	N.D.	
96) Dibenz(a,h)anthracene	20.335	278	140	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-11\9K15038\
Data File : J11151918.D
Acq On : 15 Nov 2019 6:23 pm
Operator : JK/ AMS/ DTH
Sample : 9K15038-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:27:57 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151919.D
Acq On : 15 Nov 2019 6:59 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:08 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

B

AMS 11/18/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	324694	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1204967	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	620853	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.937	188	950001	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	898655	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.965	264	879813	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.356	292	741866	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	133713	678.62 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	75942	301.12 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	241218	1232.87 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.734	172	629027	1294.60 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	110965	1928.54 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.670	244	942818	2276.60 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.733	74	319m	2.58 ng/ml#	
3) Pyridine	3.856	79	828m	3.93 ng/ml	
6) Phenol	6.054	94	2681	9.67 ng/ml	81
7) Aniline	6.081	93	58	N.D.	
8) Bis(2-chloroethyl) ether	6.108	93	1132	4.52 ng/ml#	58
9) 2-Chlorophenol	6.188	128	89	N.D.	
10) 1,3-Dichlorobenzene	6.327	146	75	N.D.	
11) 1,4-Dichlorobenzene	6.402	146	141	N.D.	
12) Benzyl alcohol	6.546	108	182	25.79 ng/ml	77
13) 1,2-Dichlorobenzene	6.557	146	86	N.D.	
14) 2-Methylphenol	6.637	107	104	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.664	45	231	N.D.	
16) N-Nitrosodi-n-propylamine	6.792	70	146	N.D.	
17) 3+4-Methylphenol	6.765	107	185	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.926	77	1160	5.85 ng/ml#	51
22) Isophorone	7.188	82	1243	3.24 ng/ml	62
23) 2-Nitrophenol	7.274	139	295	44.79 ng/ml	71
24) 2,4-Dimethylphenol	7.284	122	61	N.D.	
25) Bis(2-chloroethoxy) me...	7.391	93	222	N.D.	
26) Benzoic acid	7.402	105	1848	824.91 ng/ml	93
27) 2,4-Dichlorophenol	7.541	162	77	25.33 ng/ml#	39
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.669	128	22783	35.94 ng/ml	97
30) 4-Chloroaniline	7.701	127	102	13.75 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.231	107	423	2.65 ng/ml#	1
33) 2-Methylnaphthalene	8.365	142	4010	9.05 ng/ml	100
34) 1-Methylnaphthalene	8.466	142	2691	6.28 ng/ml	93
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	8.664	196	161	25.06 ng/ml#	57
38) 2,4,5-Trichlorophenol	8.659	198	183	24.28 ng/ml#	61
39) 1,1'-Biphenyl	8.835	154	3322	6.23 ng/ml	88
41) 2-Chloronaphthalene	8.846	162	62	N.D.	
42) 2-Nitroaniline	9.001	138	210	32.26 ng/ml#	69
43) 2,6-Dimethylnaphthalene	8.996	156	2530	6.46 ng/ml	89

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151919.D
Acq On : 15 Nov 2019 6:59 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:08 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

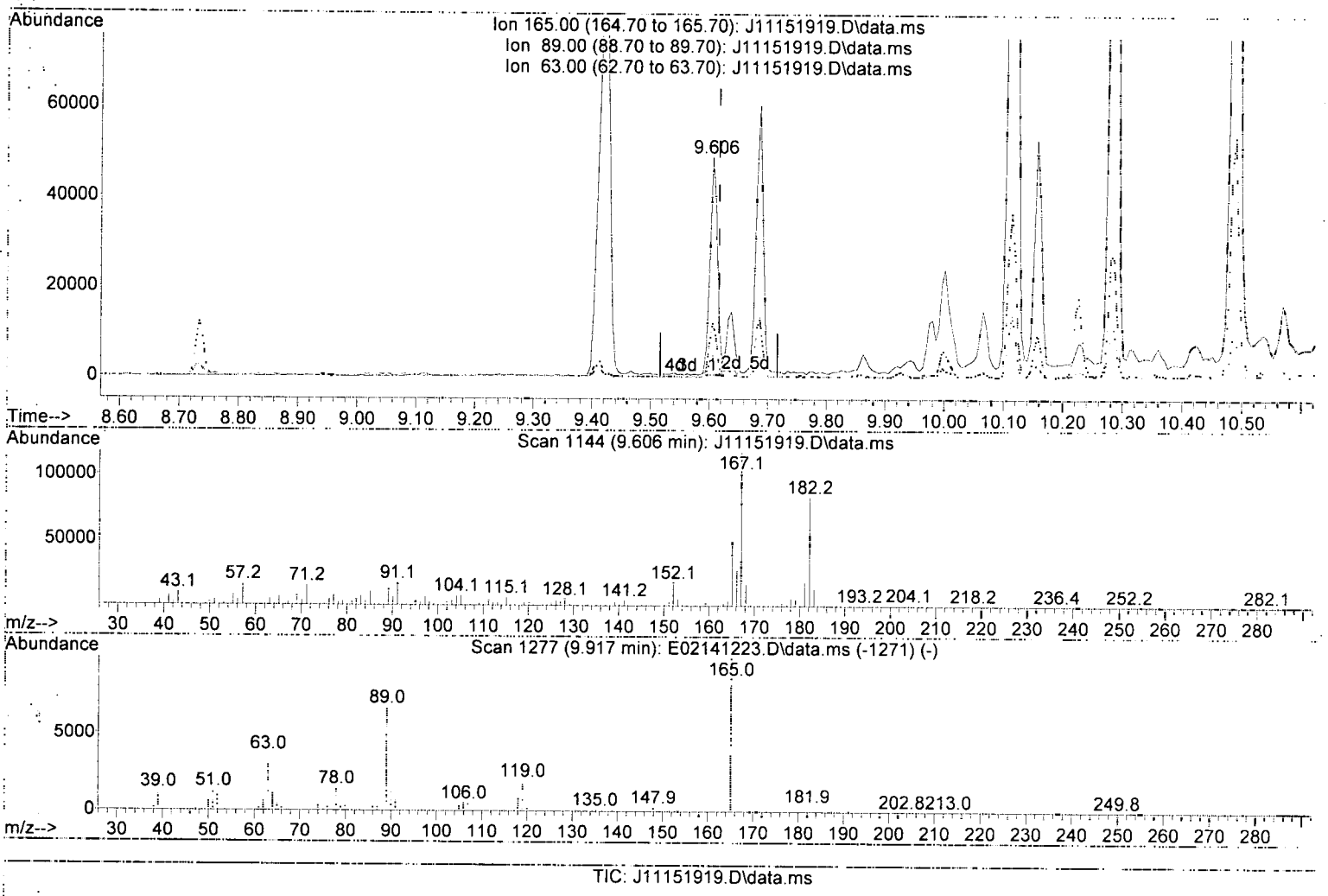
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.114	168	1709	101.27 ng/ml#	19
45) Dimethyl phthalate	9.140	163	790	N.D.	
46) 1,3-Dinitrobenzene	9.183	168	527	66.09 ng/ml#	53
47) 2,6-Dinitrotoluene	9.210	165	420	29.11 ng/ml	78
48) 1,2-Dinitrobenzene	9.263	168	74	N.D.	
49) Acenaphthylene	9.274	152	1050	N.D.	
50) 3-Nitroaniline	9.376	138	269	32.48 ng/ml#	34
51) Acenaphthene	9.456	153	3072	7.41 ng/ml	81
52) 2,4-Dinitrophenol	9.488	184	55	229.70 ng/ml#	1
53) 4-Nitrophenol	9.536	139	660	84.44 ng/ml#	1
54) 2,4-Dinitrotoluene	9.606	165	42691	↑ 372.70 ng/ml#	54 MDL=MRL
55) Dibenzofuran	9.638	168	6704	12.13 ng/ml#	48
56) 2,3,5,6-Tetrachlorophenol	9.718	232	201	37.59 ng/ml#	1
57) 2,3,4,6-Tetrachlorophenol	9.771	232	745	35.33 ng/ml#	1
58) Diethyl phthalate	9.857	149	6348	15.38 ng/ml	88
59) 2,3,5-Trimethylnaphtha...	9.841	170	6678	18.98 ng/ml	93
60) Fluorene	9.980	166	11041	25.40 ng/ml#	35
61) 4-Chlorophenyl phenyl ...	9.975	204	244	N.D.	
62) 4-Nitroaniline	9.980	138	378	5.67 ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.033	198	105	160.85 ng/ml#	1
65) N-Nitrosodiphenylamine	10.114	169	15099	51.55 ng/ml#	1
66) Azobenzene (1,2-DPH)	10.151	77	12344	41.64 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.483	248	293	2.73 ng/ml#	1
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.756	266	754	87.39 ng/ml	81
71) Phenanthrene	10.959	178	31554	59.21 ng/ml	83
72) Anthracene	11.007	178	2561	5.00 ng/ml#	1
73) Carbazole	11.178	167	5562	16.45 ng/ml#	1
74) Di-n-butyl phthalate	11.526	149	21494	38.26 ng/ml	87
75) Fluoranthene	12.200	202	9728	17.81 ng/ml#	1
76) Benzidine	12.339	184	286	125.05 ng/ml#	1
77) Pyrene	12.467	202	15973	28.73 ng/ml	97
80) Butyl benzyl phthalate	13.419	149	4664	49.42 ng/ml	83
81) Bis(2-ethylhexyl) adipate	13.585	129	8361	40.11 ng/ml	55
82) 3,3-Dichlorobenzidine	14.467	252	51	Below Cal #	1
83) Benz(a)anthracene	14.516	228	5484	10.93 ng/ml	82
84) Chrysene	14.580	228	3630	7.72 ng/ml	88
85) Bis(2-ethylhexyl) phth...	14.692	149	739167	2286.63 ng/ml	98 B
87) Di-n-octyl phthalate	16.345	149	362	58.62 ng/ml#	1
88) Benzo(b)fluoranthene	17.067	252	3848	15.90 ng/ml#	49
89) Benzo(k)fluoranthene	17.120	252	1329	11.10 ng/ml#	9
90) Benzo(b+k)fluoranthene	17.067	252	5176	25.98 ng/ml#	49
91) Benzo(e)pyrene	17.703	252	2891	6.39 ng/ml#	61
92) Benzo(a)pyrene	17.816	252	2253	14.90 ng/ml#	2
93) Perylene	17.816	252	2775	6.99 ng/ml	78
95) Indeno(1,2,3-cd)pyrene	20.356	276	2042	4.65 ng/ml#	1
96) Dibenz(a,h)anthracene	20.426	278	414	N.D.	
97) Benzo(g,h,i)perylene	20.886	276	2729	6.48 ng/ml#	9

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151919.D
Acq On : 15 Nov 2019 6:59 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:08 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151919.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.606min (-0.011) 372.70 ng/ml

response 42691

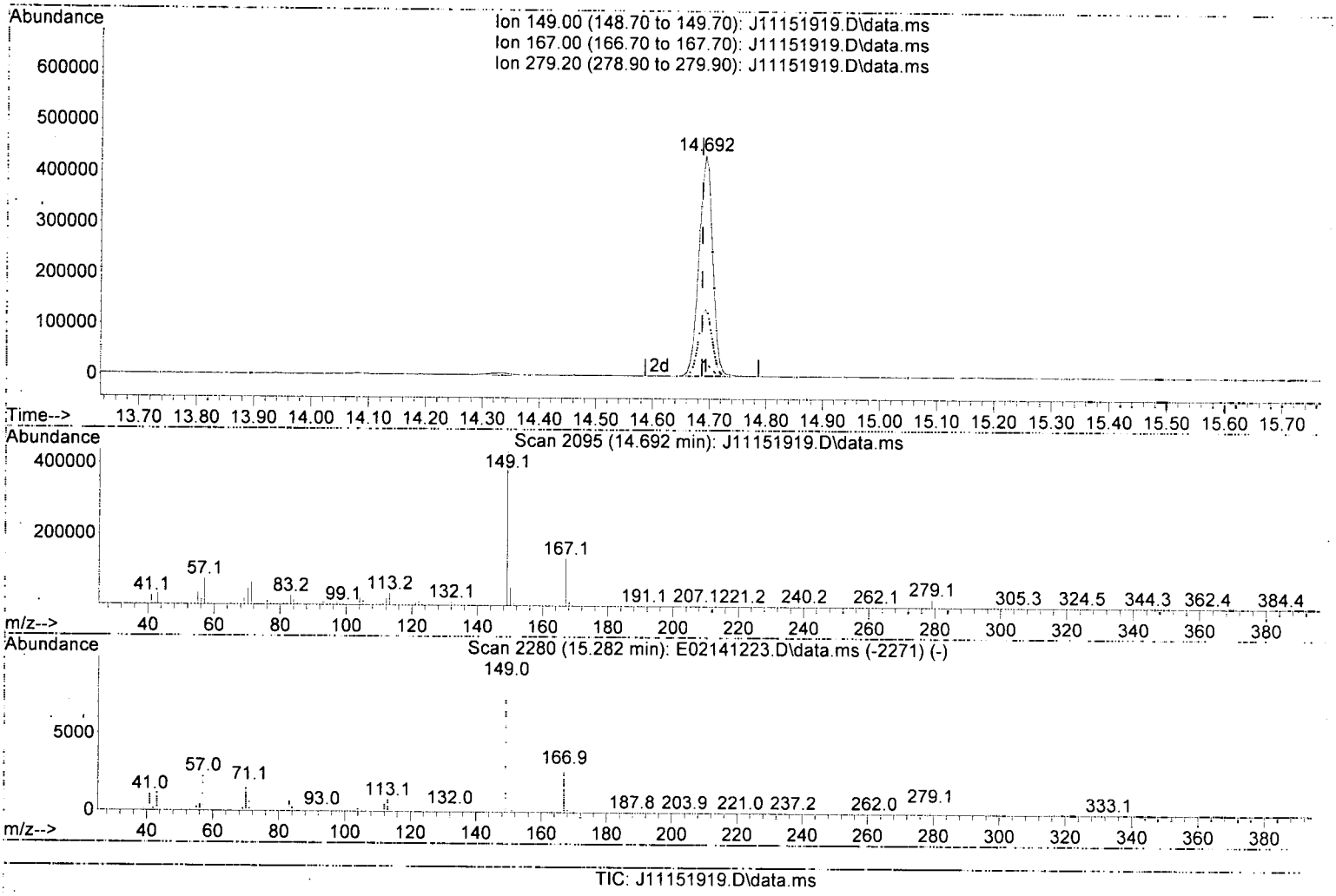
Ion	Exp%	Act%
165.00	100.00	100.00
89.00	61.80	24.65#
63.00	32.90	9.72
0.00	0.00	0.00

MDEMRL

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151919.D
Acq On : 15 Nov 2019 6:59 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:08 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151919.D\data.ms

(85) Bis(2-ethylhexyl) phthalate (T)

14.692min (+ 0.005) 2286.63 ng/ml

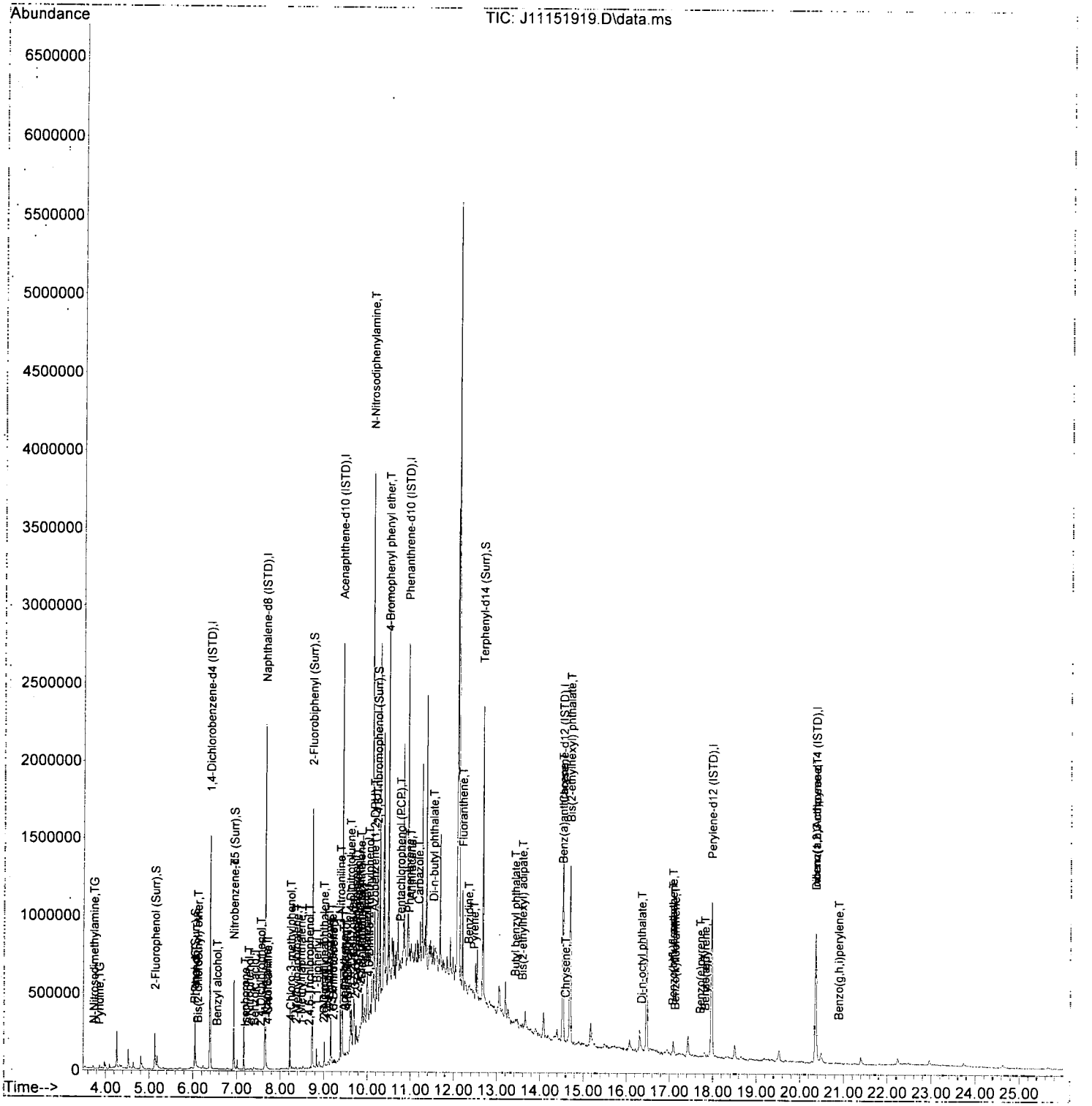
response 739167

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	29.50	30.47
279.20	4.70	5.18
0.00	0.00	0.00

B

Data Path : T:\data\2019-11\9K15038\
Data File : J11151919.D
Acq On : 15 Nov 2019 6:59 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BLK1
Misc : 1x, 8270D TCLP FULL LIST SVOC
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:08 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151920.D
Acq On : 15 Nov 2019 7:34 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BS1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 11/18/19

Quant Time: Nov 18 08:30:15 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	342253	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1235964	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	635084	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1140843	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	917697	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.971	264	876841	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.362	292	724940	2000.00 ng/ml	0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.134	112	55127	265.43 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	44106	165.91 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	88641	429.80 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.734	172	279281	561.91 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	35838	530.99 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	275478	651.39 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~3.738~~	~~74~~	~~44327m~~	~~340.02 ng/ml~~	MI
3) Pyridine	3.760	79	45317m	203.90 ng/ml	
6) Phenol	6.054	94	78415	268.26 ng/ml	93
7) Aniline	6.097	93	100270	397.58 ng/ml	90
8) Bis(2-chloroethyl) ether	6.129	93	166253	630.20 ng/ml	97
9) 2-Chlorophenol	6.188	128	174553	720.28 ng/ml	97
10) 1,3-Dichlorobenzene	6.332	146	198993	730.54 ng/ml	98
11) 1,4-Dichlorobenzene	6.402	146	195064	728.62 ng/ml	99
12) Benzyl alcohol	6.525	108	80718	575.26 ng/ml	89
13) 1,2-Dichlorobenzene	6.557	146	195293	739.69 ng/ml	96
14) 2-Methylphenol	6.637	107	114924	651.92 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	131575	565.15 ng/ml	82
16) N-Nitrosodi-n-propylamine	6.782	70	105697	690.09 ng/ml	96
17) 3+4-Methylphenol	6.787	107	128679	588.68 ng/ml	96
18) Hexachloroethane	6.889	201	62930	765.03 ng/ml	91
20) Nitrobenzene	6.947	77	139140	665.90 ng/ml	92
22) Isophorone	7.183	82	306302	777.35 ng/ml	99
23) 2-Nitrophenol	7.268	139	114844	986.45 ng/ml	85
24) 2,4-Dimethylphenol	7.311	122	122166	737.22 ng/ml	93
25) Bis(2-chloroethoxy) me...	7.397	93	193858	809.26 ng/ml	99
26) Benzoic acid	7.375	105	14489	949.87 ng/ml	97
27) 2,4-Dichlorophenol	7.509	162	153788	833.22 ng/ml	97
28) 1,2,4-Trichlorobenzene	7.595	180	182222	842.38 ng/ml	97
29) Naphthalene	7.669	128	538173	827.72 ng/ml	99
30) 4-Chloroaniline	7.734	127	96915	476.78 ng/ml	95
31) Hexachlorobutadiene	7.803	225	96945	829.35 ng/ml	97
32) 4-Chloro-3-methylphenol	8.215	107	133376	813.26 ng/ml	91
33) 2-Methylnaphthalene	8.365	142	384834	847.11 ng/ml	99
34) 1-Methylnaphthalene	8.466	142	370925	843.43 ng/ml	99
36) Hexachlorocyclopentadiene	8.536	237	81298	827.82 ng/ml	98
37) 2,4,6-Trichlorophenol	8.654	196	113471	926.74 ng/ml	98
38) 2,4,5-Trichlorophenol	8.691	198	111530	922.62 ng/ml	99
39) 1,1'-Biphenyl	8.835	154	469304	859.75 ng/ml	99
41) 2-Chloronaphthalene	8.857	162	359462	911.80 ng/ml	97
42) 2-Nitroaniline	8.958	138	107279	917.44 ng/ml	87
43) 2,6-Dimethylnaphthalene	8.996	156	350169	874.44 ng/ml	97

J

Data Path : T:\data\2019-11\9K15038\
Data File : J11151920.D
Acq On : 15 Nov 2019 7:34 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BS1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:15 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

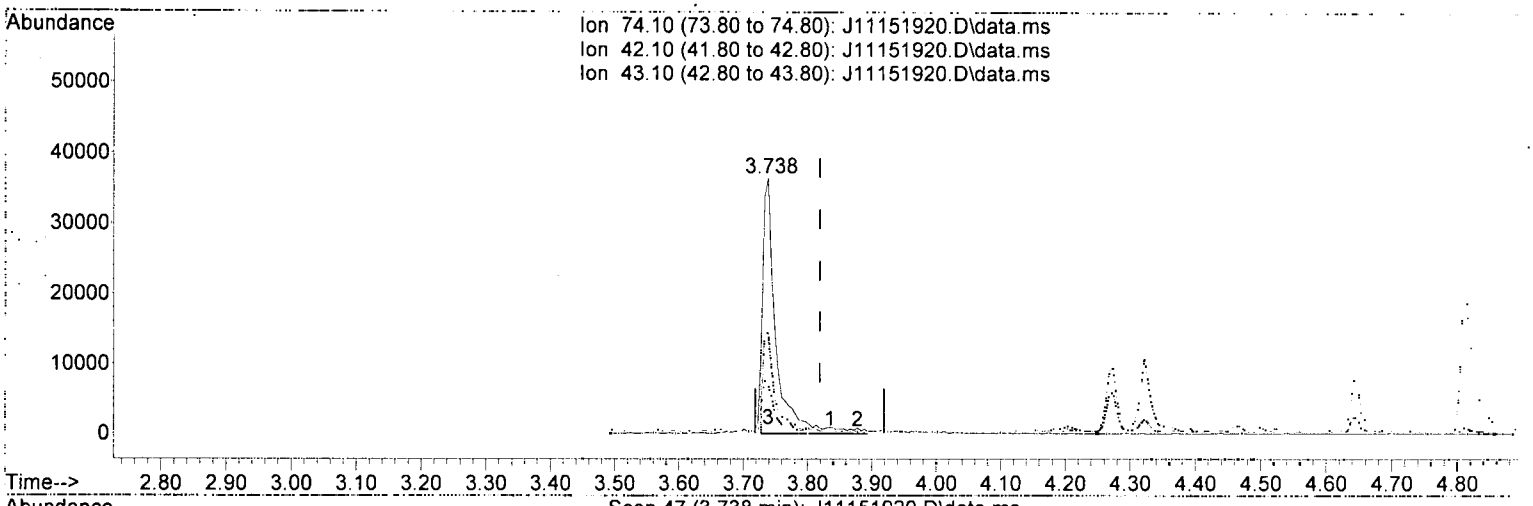
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.092	168	47839	982.59	ng/ml	75
45)	Dimethyl phthalate	9.146	163	426008	928.85	ng/ml	99
46)	1,3-Dinitrobenzene	9.172	168	57391	919.93	ng/ml	85
47)	2,6-Dinitrotoluene	9.204	165	94805	920.60	ng/ml	88
48)	1,2-Dinitrobenzene	9.258	168	41530	893.80	ng/ml	81
49)	Acenaphthylene	9.279	152	579428	897.51	ng/ml	99
50)	3-Nitroaniline	9.376	138	59334	706.32	ng/ml	90
51)	Acenaphthene	9.456	153	363778	858.09	ng/ml	99
52)	2,4-Dinitrophenol	9.483	184	10142	579.52	ng/ml	90
53)	4-Nitrophenol	9.557	139	13767	288.74	ng/ml	87
54)	2,4-Dinitrotoluene	9.611	165	113466	887.16	ng/ml	87
55)	Dibenzofuran	9.632	168	510021	902.49	ng/ml	97
56)	2,3,5,6-Tetrachlorophenol	9.718	232	81597	847.32	ng/ml	91
57)	2,3,4,6-Tetrachlorophenol	9.761	232	90817	856.32	ng/ml	97
58)	Diethyl phthalate	9.862	149	395615	937.07	ng/ml	97
59)	2,3,5-Trimethylnaphtha...	9.846	170	343906	955.65	ng/ml	95
60)	Fluorene	9.980	166	396479	891.50	ng/ml	98
61)	4-Chlorophenyl phenyl ...	9.980	204	195375	901.12	ng/ml	91
62)	4-Nitroaniline	9.996	138	58230	853.21	ng/ml	88
63)	4,6-Dinitro-2-methylph...	10.028	198	35483	832.25	ng/ml	97
65)	N-Nitrosodiphenylamine	10.098	169	310031	881.37	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.135	77	270018	758.54	ng/ml	92
68)	4-Bromophenyl phenyl e...	10.477	248	117146	910.00	ng/ml	96
69)	Hexachlorobenzene	10.552	284	140763	911.48	ng/ml	96
70)	Pentachlorophenol (PCP)	10.750	266	51343	689.62	ng/ml	95
71)	Phenanthrene	10.959	178	562999	879.66	ng/ml	99
72)	Anthracene	11.007	178	550943	895.53	ng/ml	98
73)	Carbazole	11.173	167	450920	916.88	ng/ml	98
74)	Di-n-butyl phthalate	11.526	149	606994	899.67	ng/ml	99
75)	Fluoranthene	12.194	202	604023	920.81	ng/ml	97
76)	Benzidine	12.355	184	15132	213.45	ng/ml	96
77)	Pyrene	12.467	202	617137	924.48	ng/ml	99
80)	Butyl benzyl phthalate	13.419	149	221639	946.47	ng/ml	91
81)	Bis(2-ethylhexyl) adipate	13.585	129	192306	903.51	ng/ml	98
82)	3,3-Dichlorobenzidine	14.478	252	160892	2264.35	ng/ml	99
83)	Benz(a)anthracene	14.505	228	487281	951.03	ng/ml	97
84)	Chrysene	14.585	228	461828	961.82	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	14.692	149	319378	967.50	ng/ml	99
87)	Di-n-octyl phthalate	16.340	149	457871	916.94	ng/ml	97
88)	Benzo(b)fluoranthene	17.062	252	466607	966.00	ng/ml	97
89)	Benzo(k)fluoranthene	17.126	252	457100	936.44	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.126	252	945312	1903.60	ng/ml	99
91)	Benzo(e)pyrene	17.709	252	466399	1034.89	ng/ml	98
92)	Benzo(a)pyrene	17.821	252	388714	886.60	ng/ml	98
93)	Perylene	18.030	252	410610	1038.36	ng/ml	98
95)	Indeno(1,2,3-cd)pyrene	20.356	276	395635	922.90	ng/ml	98
96)	Dibenz(a,h)anthracene	20.426	278	373008	947.71	ng/ml	97
97)	Benzo(g,h,i)perylene	20.897	276	422555	1026.21	ng/ml	94

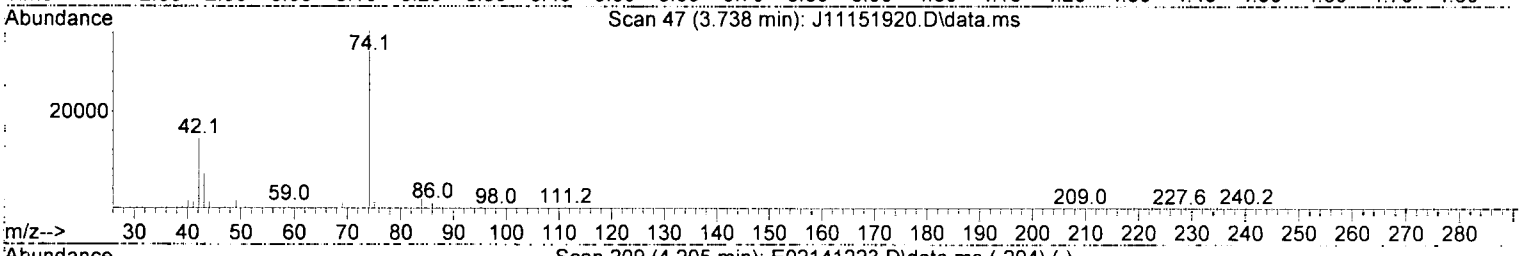
(#) = qualifier out of range (m) = manual integration (+) = signals summed

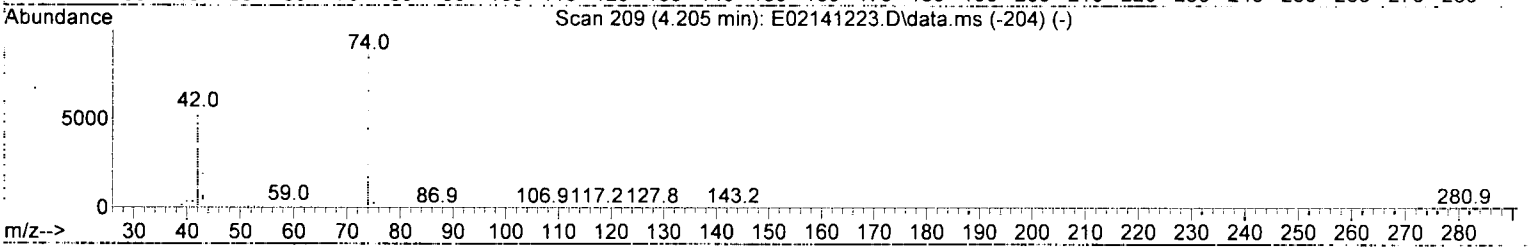
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151920.D
Acq On : 15 Nov 2019 7:34 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BS1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:15 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.738min (-0.080) 340.02 ng/ml m

response 44327

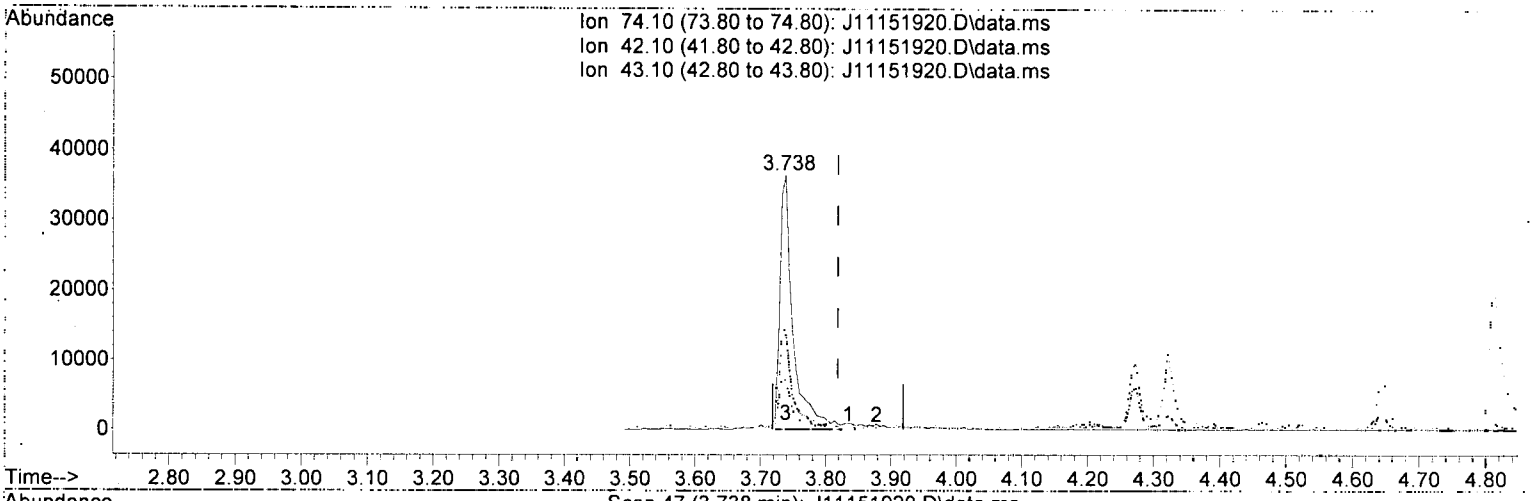
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	39.52
43.10	22.20	19.62
0.00	0.00	0.00

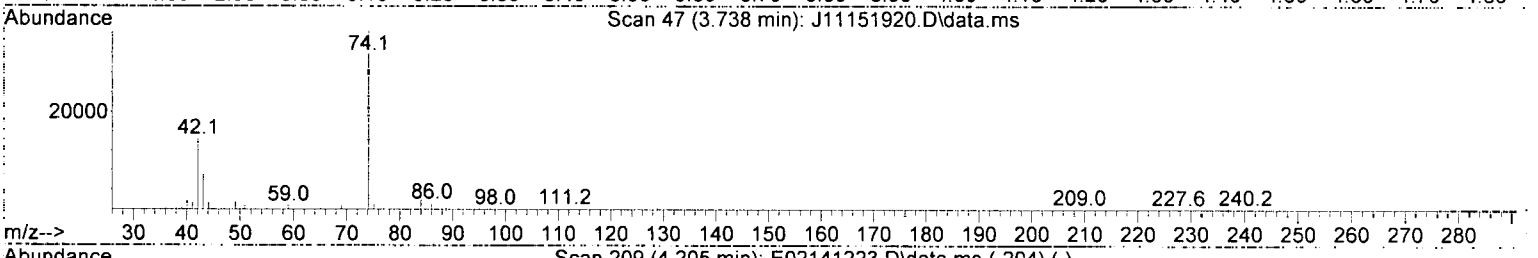
AMS 11/18/19

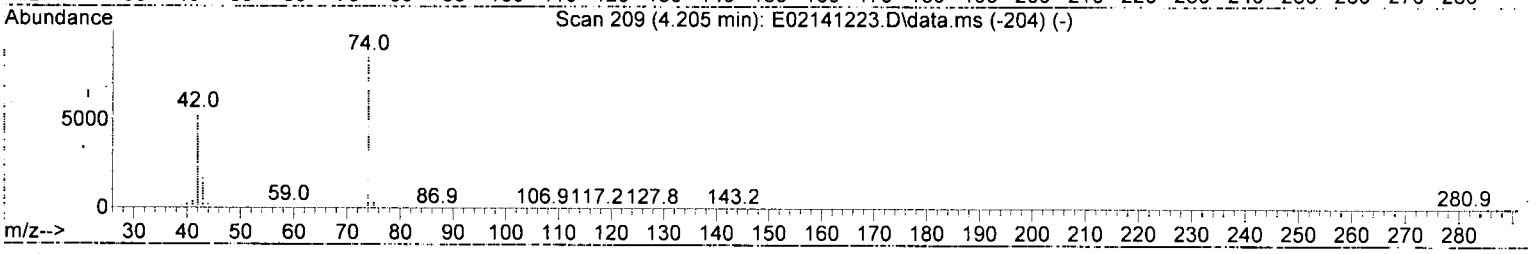
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151920.D
Acq On : 15 Nov 2019 7:34 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BS1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:15 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.738min (-0.080) 402.09 ng/ml m

response 52419

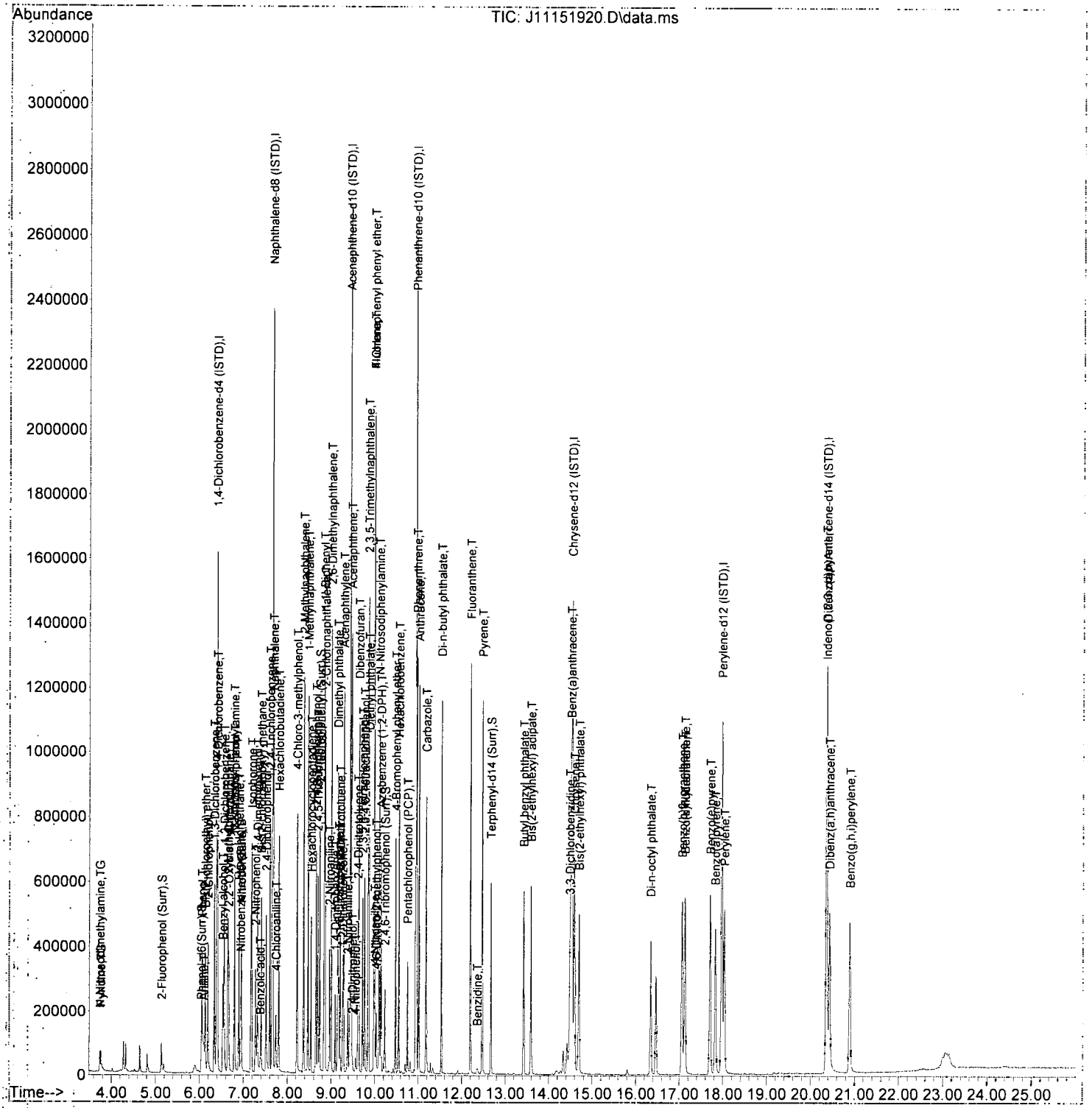
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	39.47
43.10	22.20	19.31
0.00	0.00	0.00

AMS 11/18/19

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151920.D
Acq On : 15 Nov 2019 7:34 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BS1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:15 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Q-19

AMS 11/18/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.386	152	355403	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1262377	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	660195	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1186317	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.532	240	1012430	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	17.976	264	981591	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	20.362	292	810122	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.129	112	56270	260.91	ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	43851	158.85	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	89973	420.12	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.734	172	289636	560.58	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	38381	546.21	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	299939	642.86	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	~~3.851~~	~~74~~	~~528m~~	3.90	ng/ml	MI
3) Pyridine	~~3.899~~	79	1024m	4.44	ng/ml#	MI
6) Phenol	6.054	94	83487	275.04	ng/ml	96
7) Aniline	6.092	93	100482	383.68	ng/ml	89
8) Bis(2-chloroethyl) ether	6.124	93	182186	665.04	ng/ml	97
9) 2-Chlorophenol	6.183	128	184856	734.57	ng/ml	97
10) 1,3-Dichlorobenzene	6.332	146	213144	753.54	ng/ml	97
11) 1,4-Dichlorobenzene	6.402	146	207785	747.42	ng/ml	96
12) Benzyl alcohol	6.525	108	90491	618.81	ng/ml	91
13) 1,2-Dichlorobenzene	6.552	146	209307	763.43	ng/ml	98
14) 2-Methylphenol	6.637	107	118974	649.93	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	136866	566.13	ng/ml	86
16) N-Nitrosodi-n-propylamine	6.782	70	110760	696.39	ng/ml	92
17) 3+4-Methylphenol	6.787	107	137440	605.50	ng/ml	97
18) Hexachloroethane	6.889	201	71133	832.76	ng/ml	91
20) Nitrobenzene	6.948	77	146927	677.15	ng/ml	87
22) Isophorone	7.183	82	324036	805.15	ng/ml	96
23) 2-Nitrophenol	7.268	139	127639	1069.46	ng/ml	85
24) 2,4-Dimethylphenol	7.311	122	147179	869.58	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.397	93	202420	827.33	ng/ml	98
26) Benzoic acid	7.375	105	17592	976.89	ng/ml	97
27) 2,4-Dichlorophenol	7.509	162	162852	863.25	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.589	180	194592	880.75	ng/ml	98
29) Naphthalene	7.670	128	572310	861.80	ng/ml	99
30) 4-Chloroaniline	7.734	127	108971	524.23	ng/ml	95
31) Hexachlorobutadiene	7.803	225	103085	863.43	ng/ml	97
32) 4-Chloro-3-methylphenol	8.210	107	144400	862.05	ng/ml	94
33) 2-Methylnaphthalene	8.365	142	411043	885.88	ng/ml	98
34) 1-Methylnaphthalene	8.467	142	395291	880.03	ng/ml	99
36) Hexachlorocyclopentadiene	8.536	237	86792	850.15	ng/ml	99
37) 2,4,6-Trichlorophenol	8.654	196	124127	973.78	ng/ml	99
38) 2,4,5-Trichlorophenol	8.691	198	121562	966.27	ng/ml	99
39) 1,1'-Biphenyl	8.836	154	504044	888.27	ng/ml	99
41) 2-Chloronaphthalene	8.857	162	388972	949.13	ng/ml	96
42) 2-Nitroaniline	8.959	138	118254	970.20	ng/ml	88
43) 2,6-Dimethylnaphthalene	8.996	156	374263	899.05	ng/ml	98

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

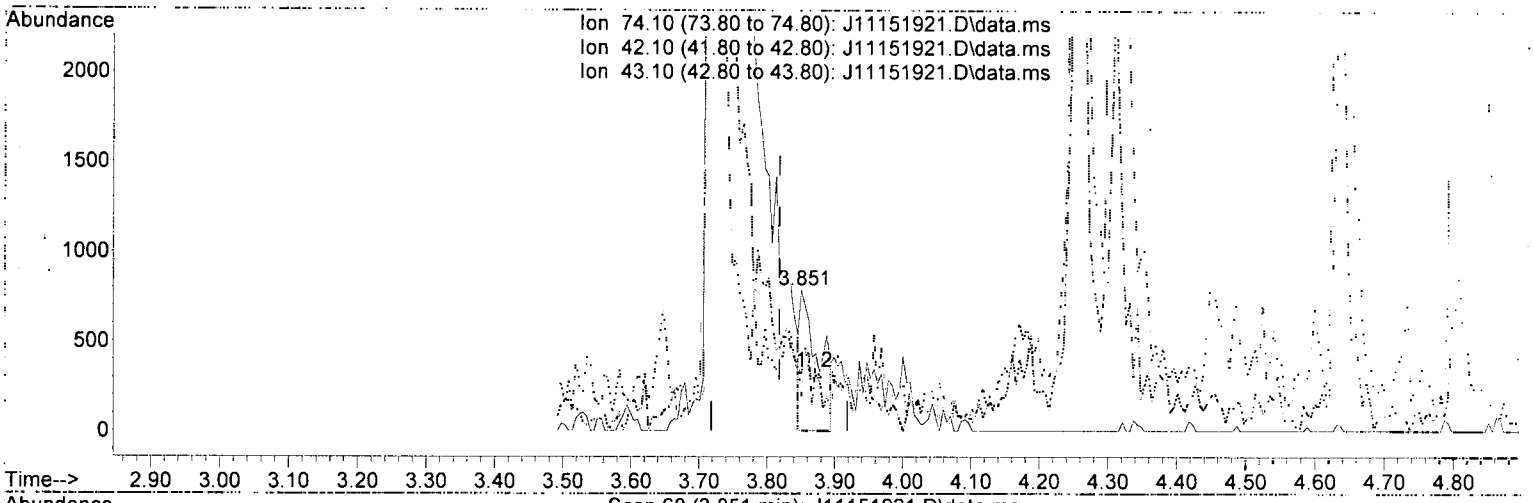
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.092	168	55439	1082.79	ng/ml	76
45)	Dimethyl phthalate	9.146	163	466342	978.12	ng/ml	99
46)	1,3-Dinitrobenzene	9.173	168	65014	996.13	ng/ml	86
47)	2,6-Dinitrotoluene	9.205	165	102428	956.02	ng/ml	85
48)	1,2-Dinitrobenzene	9.258	168	46057	953.52	ng/ml	82
49)	Acenaphthylene	9.280	152	618445	921.51	ng/ml	99
50)	3-Nitroaniline	9.376	138	70079	815.56	ng/ml	90
51)	Acenaphthene	9.456	153	385379	874.47	ng/ml	98
52)	2,4-Dinitrophenol	9.483	184	15720	740.27	ng/ml	88
53)	4-Nitrophenol	9.558	139	16976	328.10	ng/ml	92
54)	2,4-Dinitrotoluene	9.611	165	126605	948.90	ng/ml	87
55)	Dibenzofuran	9.633	168	547909	932.66	ng/ml	96
56)	2,3,5,6-Tetrachlorophenol	9.718	232	92718	922.15	ng/ml	94
57)	2,3,4,6-Tetrachlorophenol	9.761	232	96371	873.57	ng/ml	95
58)	Diethyl phthalate	9.863	149	427348	973.73	ng/ml	97
59)	2,3,5-Trimethylnaphtha...	9.847	170	369434	987.54	ng/ml	93
60)	Fluorene	9.980	166	420424	909.39	ng/ml	100
61)	4-Chlorophenyl phenyl ...	9.975	204	210408	933.55	ng/ml	94
62)	4-Nitroaniline	9.996	138	67048	945.04	ng/ml	92
63)	4,6-Dinitro-2-methylph...	10.028	198	44446	964.54	ng/ml	93
65)	N-Nitrosodiphenylamine	10.098	169	343082	937.94	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.141	77	290012	783.48	ng/ml	84
68)	4-Bromophenyl phenyl e...	10.478	248	128820	962.33	ng/ml	91
69)	Hexachlorobenzene	10.553	284	152098	947.12	ng/ml	95
70)	Pentachlorophenol (PCP)	10.750	266	59093	755.26	ng/ml	95
71)	Phenanthrene	10.959	178	611668	919.07	ng/ml	99
72)	Anthracene	11.007	178	602052	941.10	ng/ml	99
73)	Carbazole	11.173	167	509054	1024.68	ng/ml	99
74)	Di-n-butyl phthalate	11.526	149	658881	939.14	ng/ml	99
75)	Fluoranthene	12.195	202	675378	990.12	ng/ml	98
76)	Benzidine	12.355	184	18251	227.91	ng/ml	95
77)	Pyrene	12.467	202	675166	972.64	ng/ml	99
80)	Butyl benzyl phthalate	13.425	149	251837	973.41	ng/ml	89
81)	Bis(2-ethylhexyl) adipate	13.585	129	219978	936.81	ng/ml	99
82)	3,3-Dichlorobenzidine	14.484	252	157078	1959.02	ng/ml	97
83)	Benz(a)anthracene	14.505	228	568430	1005.60	ng/ml	97
84)	Chrysene	14.585	228	528856	998.36	ng/ml	98
85)	Bis(2-ethylhexyl) phth...	14.692	149	366315	1005.86	ng/ml	98
87)	Di-n-octyl phthalate	16.345	149	524651	936.96	ng/ml	98
88)	Benzo(b)fluoranthene	17.062	252	532924	985.23	ng/ml	99
89)	Benzo(k)fluoranthene	17.126	252	545641	999.70	ng/ml	100
90)	Benzo(b+k)fluoranthene	17.126	252	1100917	1980.17	ng/ml	100
91)	Benzo(e)pyrene	17.709	252	535957	1062.32	ng/ml	98
92)	Benzo(a)pyrene	17.827	252	452829	922.21	ng/ml	98
93)	Perylene	18.030	252	474192	1071.18	ng/ml	98
95)	Indeno(1,2,3-cd)pyrene	20.357	276	452730	945.05	ng/ml	98
96)	Dibenz(a,h)anthracene	20.426	278	438717	997.45	ng/ml	99
97)	Benzo(g,h,i)perylene	20.891	276	493631	1072.77	ng/ml	98

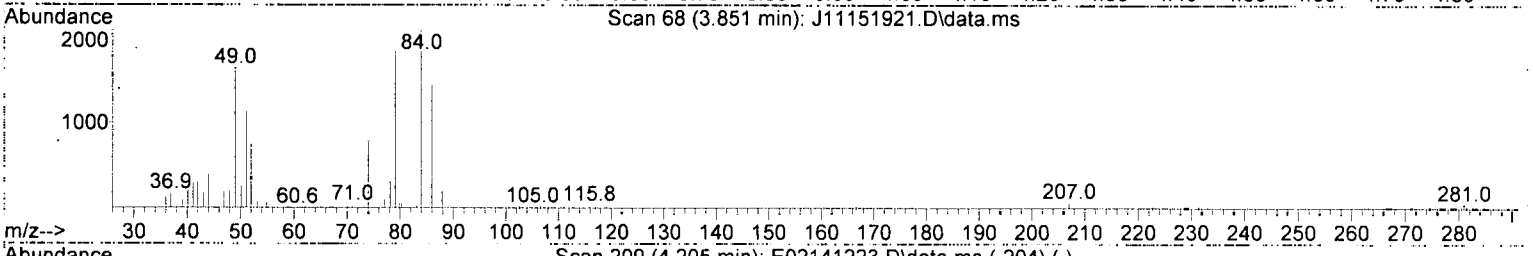
(#) = qualifier out of range (m) = manual integration (+) = signals summed

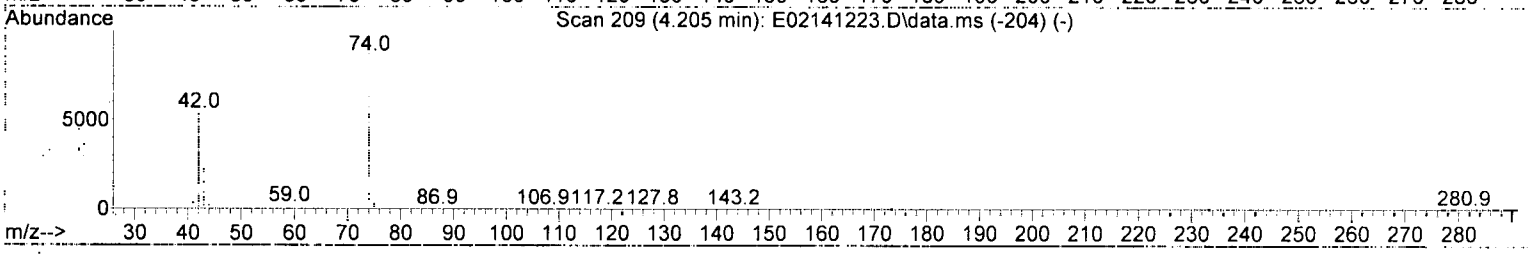
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151921.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.851min (+ 0.032) 3.90 ng/ml m

response 528

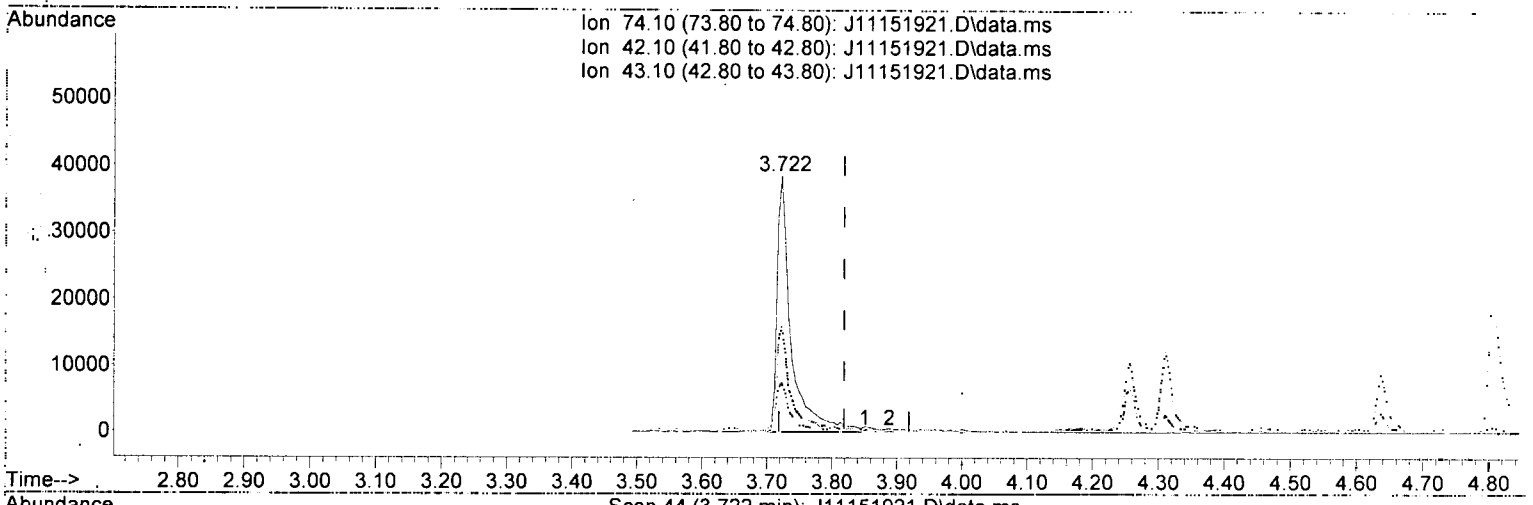
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	40.01
43.10	22.20	35.08
0.00	0.00	0.00

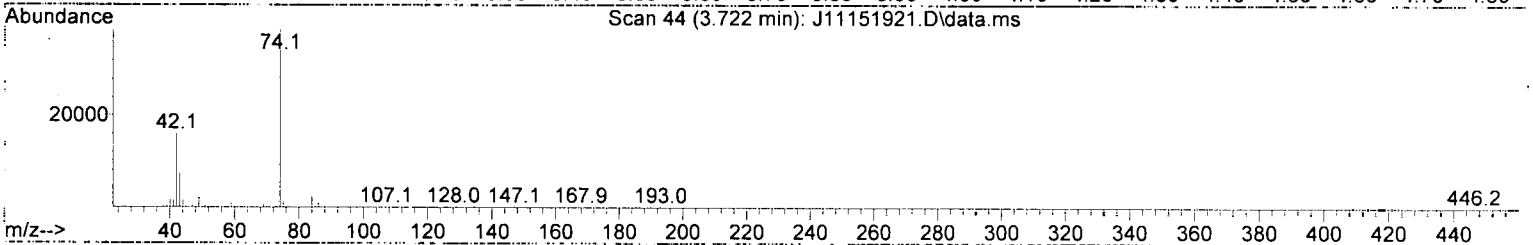
AMS 11/18/19

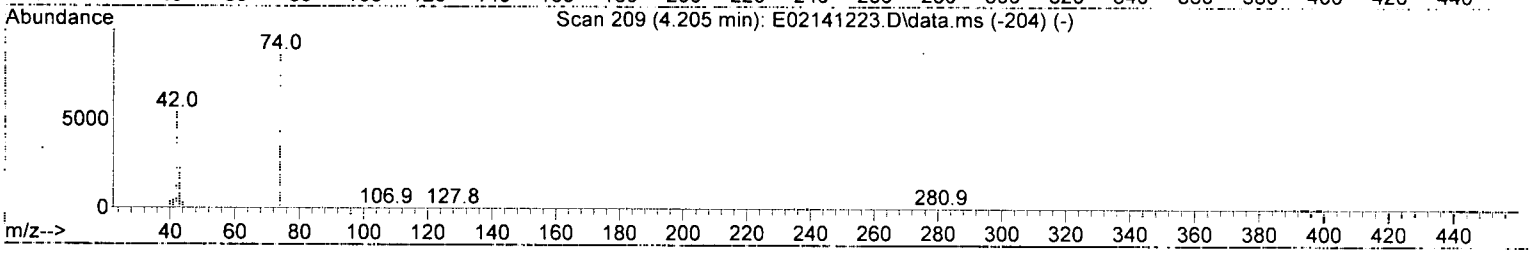
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151921.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.722min (-0.096) 429.94 ng/ml m

response 58203

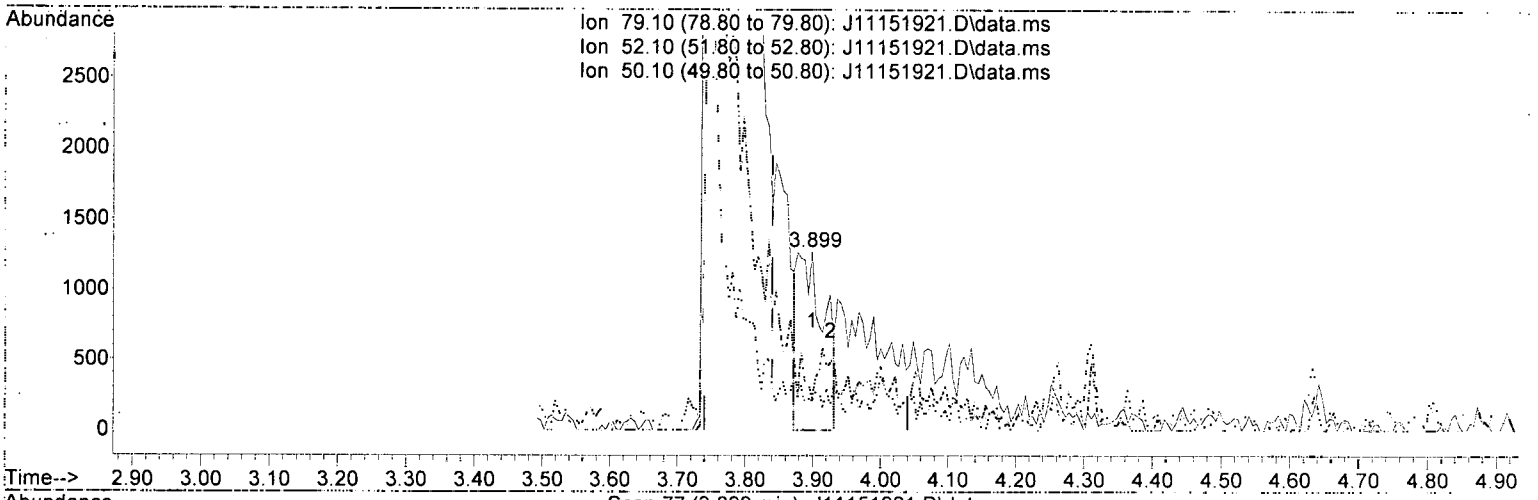
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	41.38
43.10	22.20	19.35
0.00	0.00	0.00

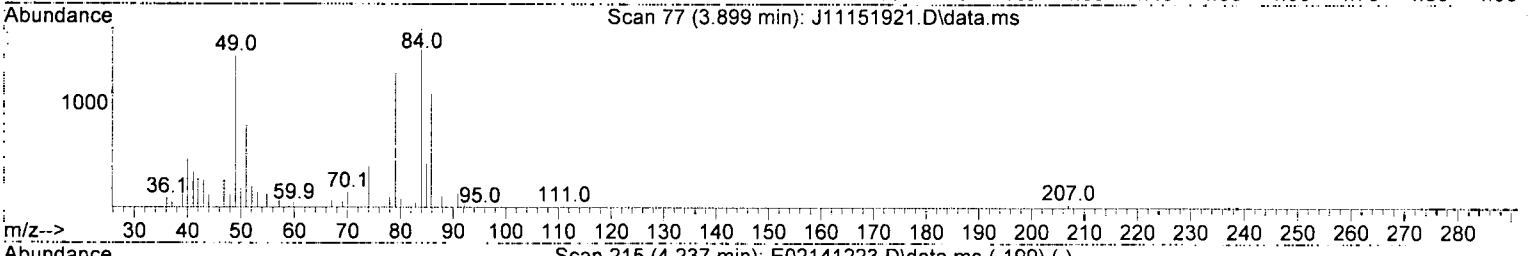
AMS 11/18/19 ✓

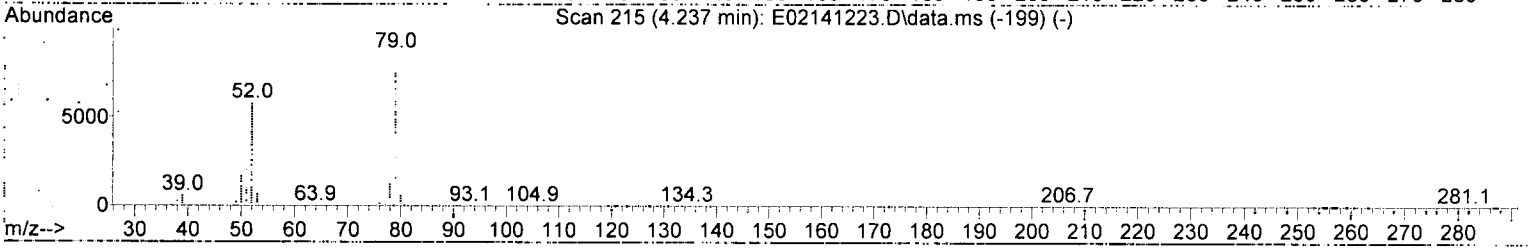
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151921.D\data.ms

(3) Pyridine (TG)

3.899min (+ 0.059) 4.44 ng/ml m

response 1024

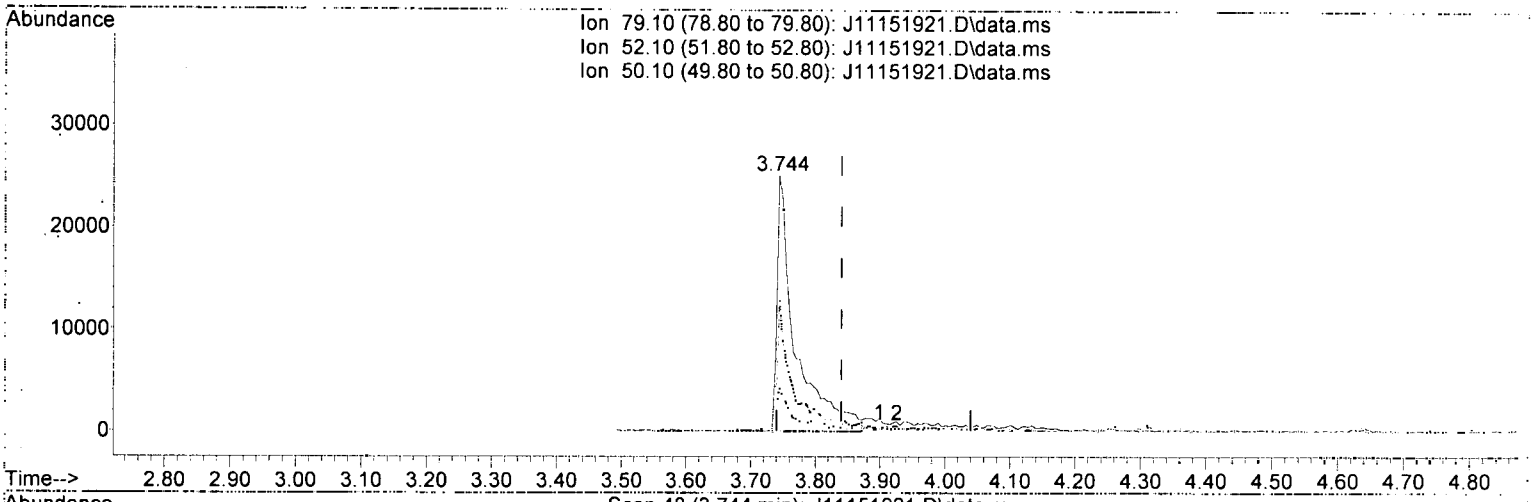
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	23.55
50.10	18.70	16.59
0.00	0.00	0.00

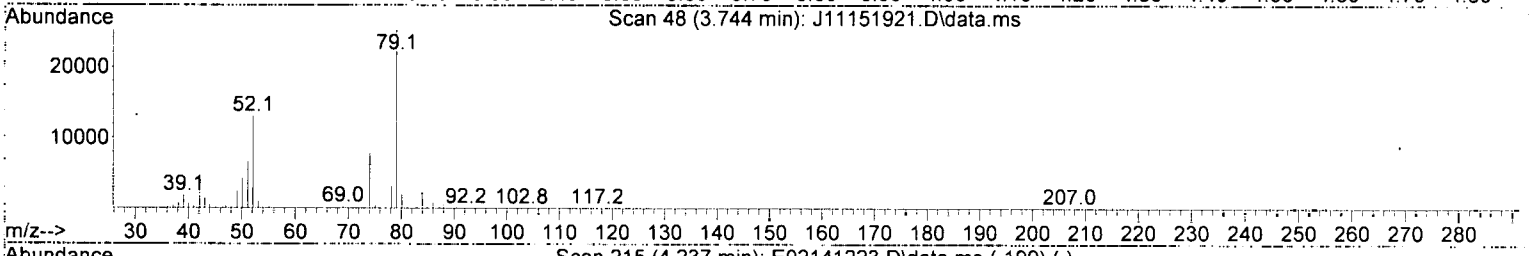
AMS 11/18/19

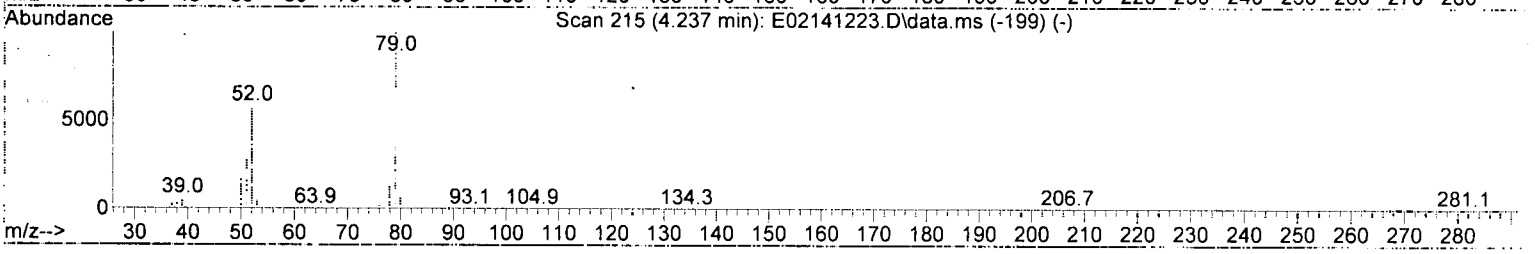
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151921.D\data.ms

(3) Pyridine (TG)

3.744min (-0.096) 216.47 ng/ml m

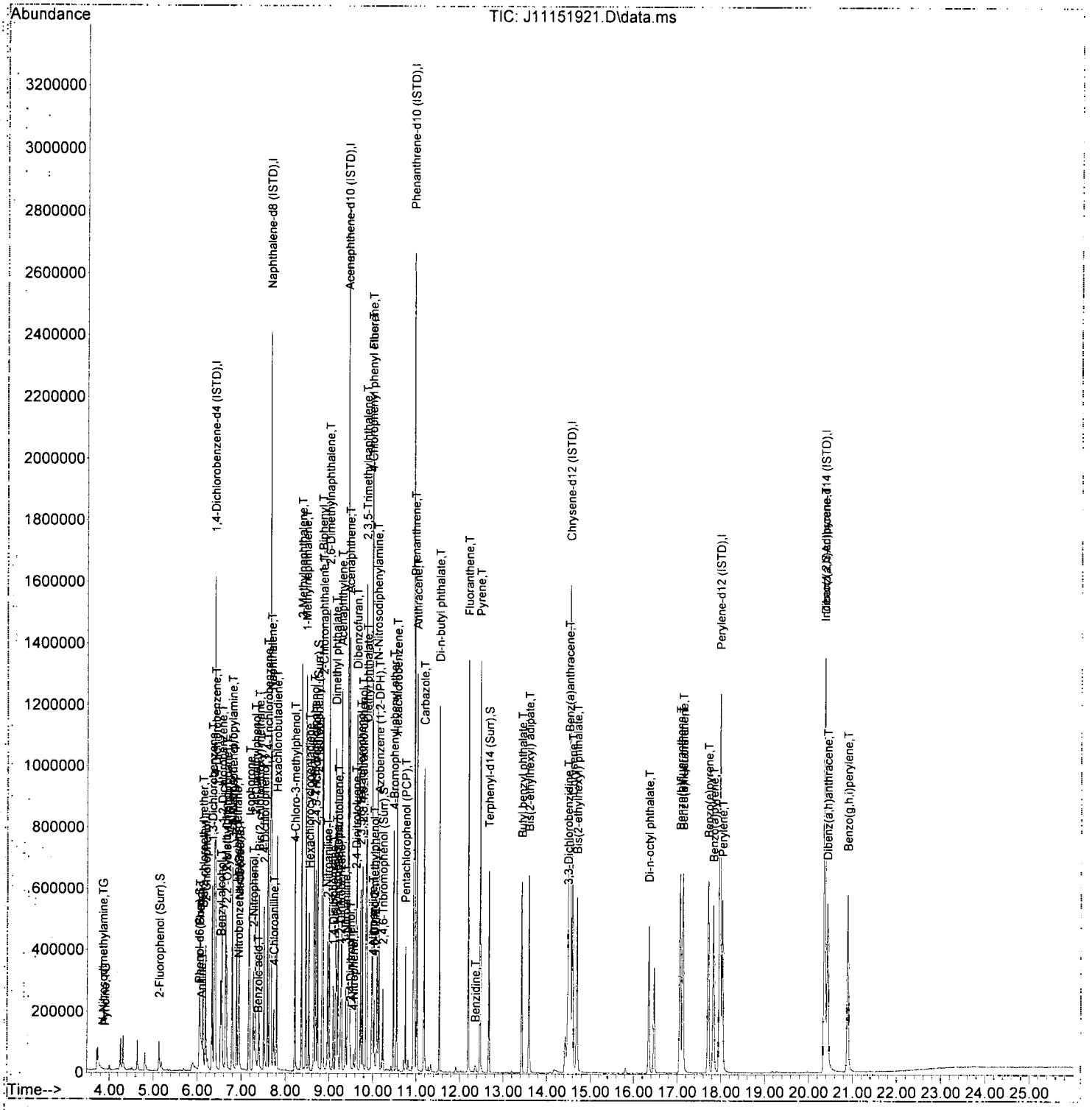
response 49960

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	51.90
50.10	18.70	16.96
0.00	0.00	0.00

AMS 11/18/19

Data Path : T:\data\2019-11\9K15038\
Data File : J11151921.D
Acq On : 15 Nov 2019 8:10 pm
Operator : JK/ AMS/ DTH
Sample : 9110805-BSD1@4
Misc : 4x, 8270D TCLP FULL LIST SVOC
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:22 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 11/18/19 MOS

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
	Internal Standards					
1)	1,4-Dichlorobenzene-d4...	6.386	152	341650	2000.00 ng/ml	0.00
21)	Naphthalene-d8 (ISTD)	7.648	136	1193951	2000.00 ng/ml	0.00
35)	Acenaphthene-d10 (ISTD)	9.424	162	628017	2000.00 ng/ml	0.00
64)	Phenanthrene-d10 (ISTD)	10.932	188	1069849	2000.00 ng/ml	0.00
78)	Chrysene-d12 (ISTD)	14.526	240	905709	2000.00 ng/ml	0.00
86)	Perylene-d12 (ISTD)	17.971	264	786134	2000.00 ng/ml	0.00
94)	Dibenz(a,h)Anthrcene-d...	20.362	292	650507	2000.00 ng/ml	0.01
	System Monitoring Compounds					
4)	2-Fluorophenol (Surr)	5.140	112	78855	380.35 ng/ml	-0.01
5)	Phenol-d6(Surr)	6.043	99	74515	280.80 ng/ml	0.00
19)	Nitrobenzene-d5 (Surr)	6.931	82	66885	324.88 ng/ml	0.00
40)	2-Fluorobiphenyl (Surr)	8.734	172	224962	457.71 ng/ml	0.00
67)	2,4,6-Tribromophenol (...	10.226	330	19489	317.56 ng/ml	0.00
79)	Terphenyl-d14 (Surr)	12.665	244	219290	525.39 ng/ml	0.00
	Target Compounds					Qvalue
2)	N-Nitrosodimethylamine	0.000		0	N.D.	
3)	Pyridine	3.888	79	63	N.D.	
6)	Phenol	6.054	94	479	N.D.	
7)	Aniline	6.070	93	134	N.D.	
8)	Bis(2-chloroethyl) ether	6.113	93	218	N.D.	
9)	2-Chlorophenol	6.156	128	244	N.D.	
10)	1,3-Dichlorobenzene	6.327	146	51	N.D.	
11)	1,4-Dichlorobenzene	6.327	146	51	N.D.	
12)	Benzyl alcohol	6.530	108	149	25.50 ng/ml#	74
13)	1,2-Dichlorobenzene	0.000		0	N.D.	
14)	2-Methylphenol	0.000		0	N.D.	
15)	2,2'-Oxybis(1-Chloropr...	6.659	45	92	N.D.	
16)	N-Nitrosodi-n-propylamine	6.771	70	184	N.D.	
17)	3+4-Methylphenol	6.776	107	51	N.D.	
18)	Hexachloroethane	0.000		0	N.D.	
20)	Nitrobenzene	6.926	77	503	N.D.	
22)	Isophorone	7.188	82	138	N.D.	
23)	2-Nitrophenol	0.000		0	N.D.	
24)	2,4-Dimethylphenol	7.322	122	90	N.D.	
25)	Bis(2-chloroethoxy) me...	7.397	93	123	N.D.	
26)	Benzoic acid	7.418	105	204	808.13 ng/ml#	50
27)	2,4-Dichlorophenol	0.000		0	N.D.	
28)	1,2,4-Trichlorobenzene	0.000		0	N.D.	
29)	Naphthalene	7.669	128	101153	161.05 ng/ml	98
30)	4-Chloroaniline	7.744	127	50	13.50 ng/ml#	46
31)	Hexachlorobutadiene	0.000		0	N.D.	
32)	4-Chloro-3-methylphenol	8.252	107	107	N.D.	
33)	2-Methylnaphthalene	8.365	142	16925	38.57 ng/ml	98
34)	1-Methylnaphthalene	8.466	142	10151	23.89 ng/ml	92
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	8.835	154	8981	16.64 ng/ml	97
41)	2-Chloronaphthalene	8.910	162	954	N.D.	
42)	2-Nitroaniline	9.007	138	91	31.23 ng/ml#	50
43)	2,6-Dimethylnaphthalene	9.001	156	8857	22.37 ng/ml	91

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

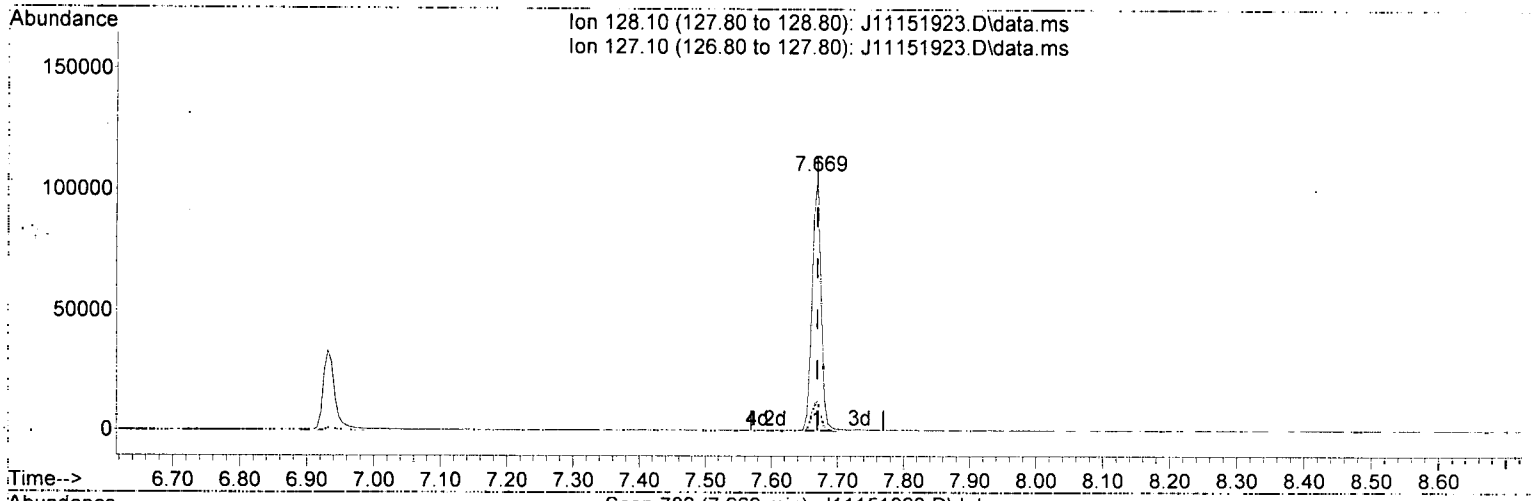
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.114	168	172	69.76	ng/ml#	9
45)	Dimethyl phthalate	9.146	163	206	N.D.		
46)	1,3-Dinitrobenzene	9.114	168	172	60.53	ng/ml#	1
47)	2,6-Dinitrotoluene	0.000		0	N.D.		
48)	1,2-Dinitrobenzene	0.000		0	N.D.		
49)	Acenaphthylene	9.279	152	33848	53.02	ng/ml	97
50)	3-Nitroaniline	9.424	138	121	30.94	ng/ml#	1
51)	Acenaphthene	9.456	153	33679	80.34	ng/ml	97
52)	2,4-Dinitrophenol	0.000		0	N.D.		
53)	4-Nitrophenol	9.536	139	452	80.99	ng/ml#	79
54)	2,4-Dinitrotoluene	9.606	165	86	54.38	ng/ml#	27
55)	Dibenzofuran	9.632	168	4691	8.39	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	9.852	149	375	N.D.		
59)	2,3,5-Trimethylnaphtha...	9.836	170	5044	14.17	ng/ml	89
60)	Fluorene	9.980	166	28030	63.74	ng/ml	95
61)	4-Chlorophenyl phenyl ...	0.000		0	N.D.		
62)	4-Nitroaniline	9.980	138	215	3.19	ng/ml#	59
63)	4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65)	N-Nitrosodiphenylamine	10.103	169	1692	5.13	ng/ml	94
66)	Azobenzene (1,2-DPH)	10.135	77	146	N.D.		
68)	4-Bromophenyl phenyl e...	0.000		0	N.D.		
69)	Hexachlorobenzene	0.000		0	N.D.		
70)	Pentachlorophenol (PCP)	10.756	266	125	78.19	ng/ml#	18
71)	Phenanthrene	10.959	178	310035	516.56	ng/ml	99
72)	Anthracene	11.007	178	63382	109.86	ng/ml	97
73)	Carbazole	11.173	167	7888	19.27	ng/ml	95
74)	Di-n-butyl phthalate	11.526	149	1142	N.D.		
75)	Fluoranthene	12.194	202	329873	536.25	ng/ml	97
76)	Benzidine	12.355	184	63	123.39	ng/ml	68
77)	Pyrene	12.467	202	439161	701.53	ng/ml	99
80)	Butyl benzyl phthalate	13.408	149	435	31.21	ng/ml#	39
81)	Bis(2-ethylhexyl) adipate	13.590	129	2302	10.96	ng/ml	84
82)	3,3-Dichlorobenzidine	14.473	252	131	Below Cal	#	19
83)	Benz(a)anthracene	14.505	228	107040	211.68	ng/ml	88
84)	Chrysene	14.585	228	141345	298.27	ng/ml	95
85)	Bis(2-ethylhexyl) phth...	14.687	149	5291	16.24	ng/ml	96
87)	Di-n-octyl phthalate	16.329	149	417	58.82	ng/ml#	1
88)	Benzo(b)fluoranthene	17.067	252	184163	431.73	ng/ml	97
89)	Benzo(k)fluoranthene	~~17.067~~	~~252~~	~~234597~~	~~533.89~~	~~ng/ml~~	~~97~~ MI-MOS
90)	Benzo(b+k)fluoranthene	17.067	252	248523	567.16	ng/ml	97
91)	Benzo(e)pyrene	17.703	252	131187	324.68	ng/ml	97
92)	Benzo(a)pyrene	17.826	252	155724	401.65	ng/ml	98
93)	Perylene	18.024	252	42110	118.78	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.356	276	137127	356.48	ng/ml	99
96)	Dibenz(a,h)anthracene	20.421	278	17135	48.52	ng/ml	92
97)	Benzo(g,h,i)perylene	20.891	276	171896	465.23	ng/ml	97

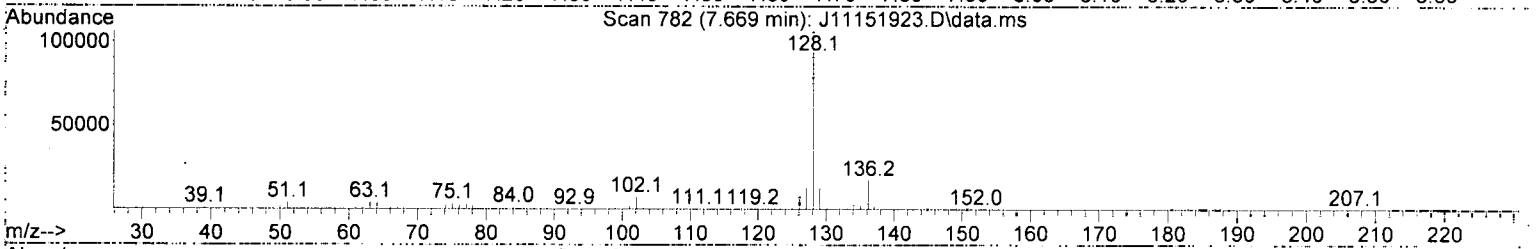
(#) = qualifier out of range (m) = manual integration (+) = signals summed

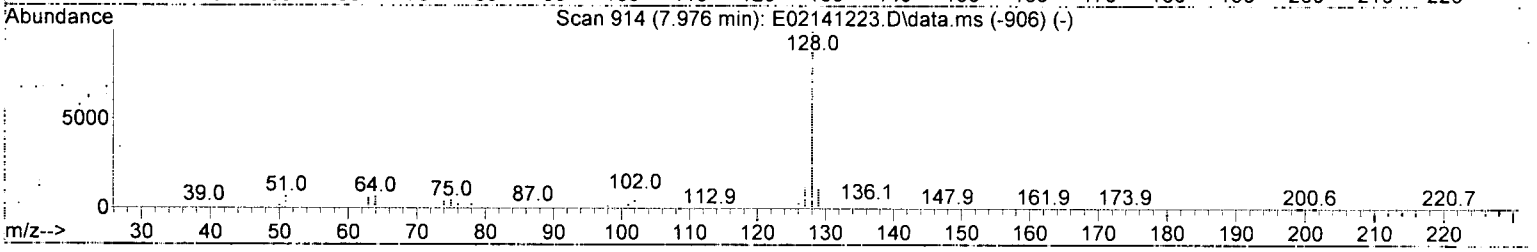
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151923.D\data.ms

(29) Naphthalene (T)

7.669min (-0.000) 161.05 ng/ml

response 101153

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.70	11.87
0.00	0.00	0.00
0.00	0.00	0.00

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Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
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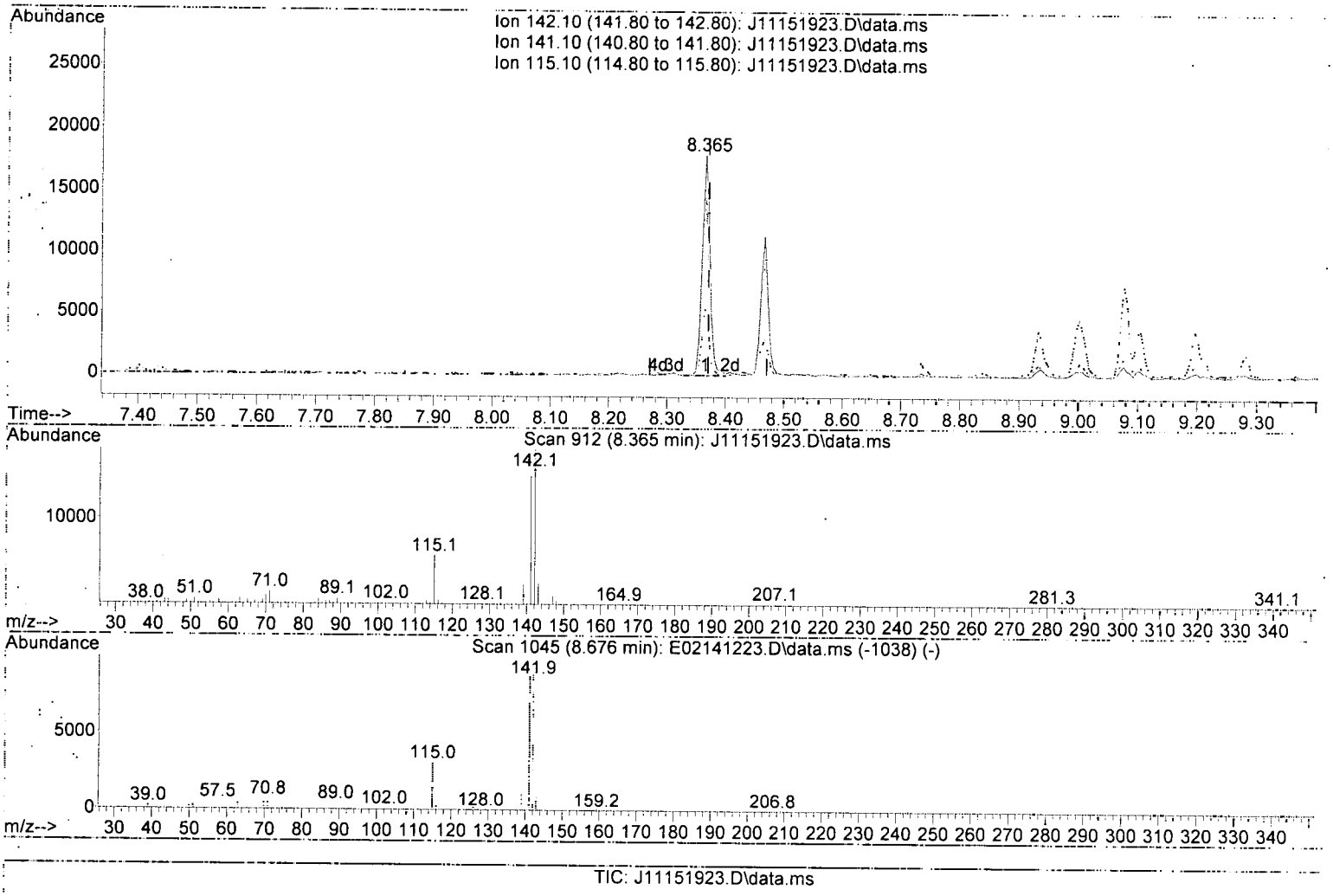

TIC: J11151923.D\data.ms

(33) 2-Methylnaphthalene (T)

8.365min (-0.006) 38.57 ng/ml

response 16925

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	84.80	83.06
115.10	30.60	31.74
0.00	0.00	0.00

Quantitation Report (Qedit)

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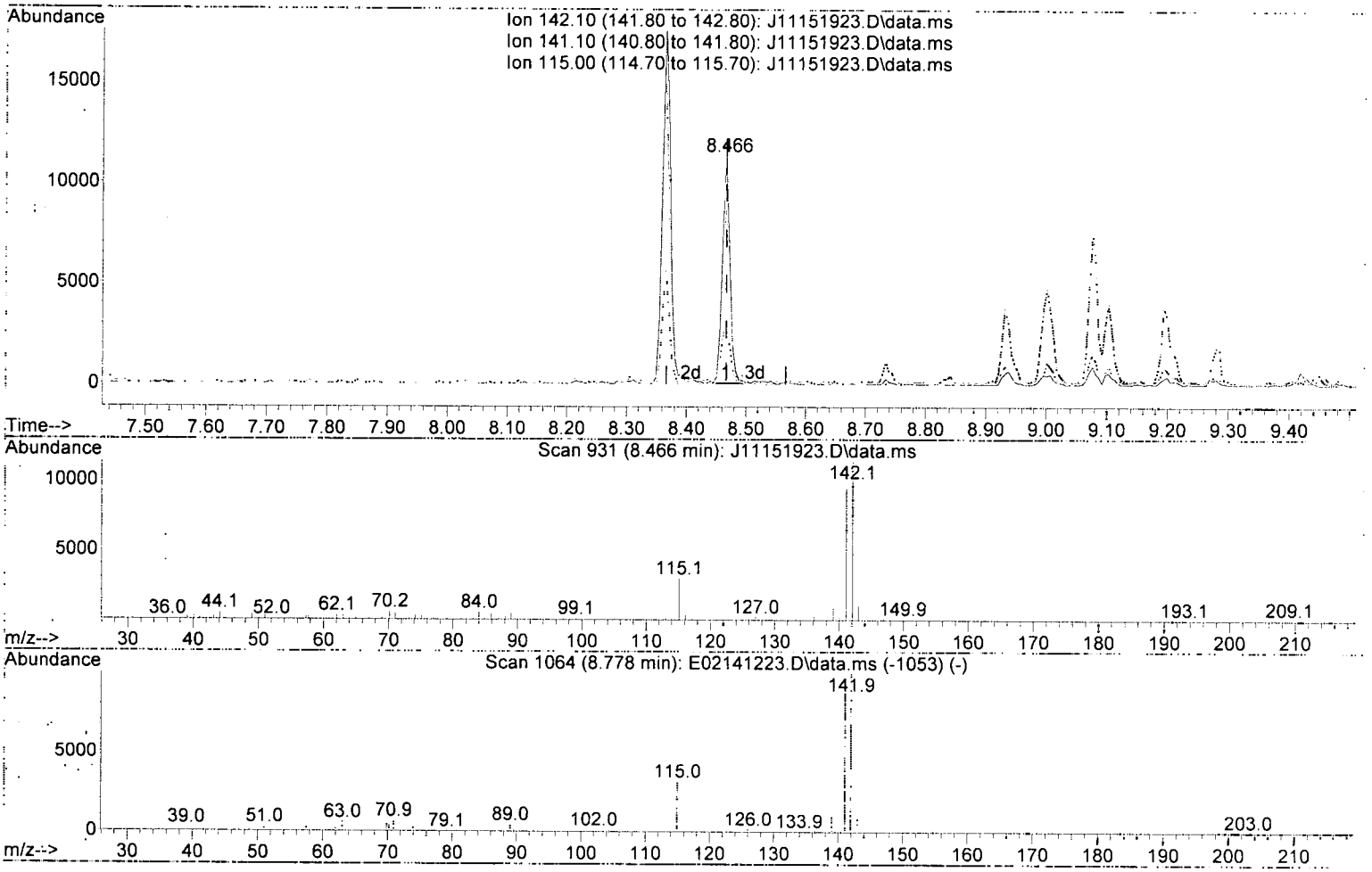

TIC: J11151923.D\data.ms

(34) 1-Methylnaphthalene (T)

8.466min (-0.000) 23.89 ng/ml

response 10151

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	88.40	82.34
115.00	32.20	26.16
0.00	0.00	0.00

J

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

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QLast Update : Fri Oct 25 11:15:50 2019
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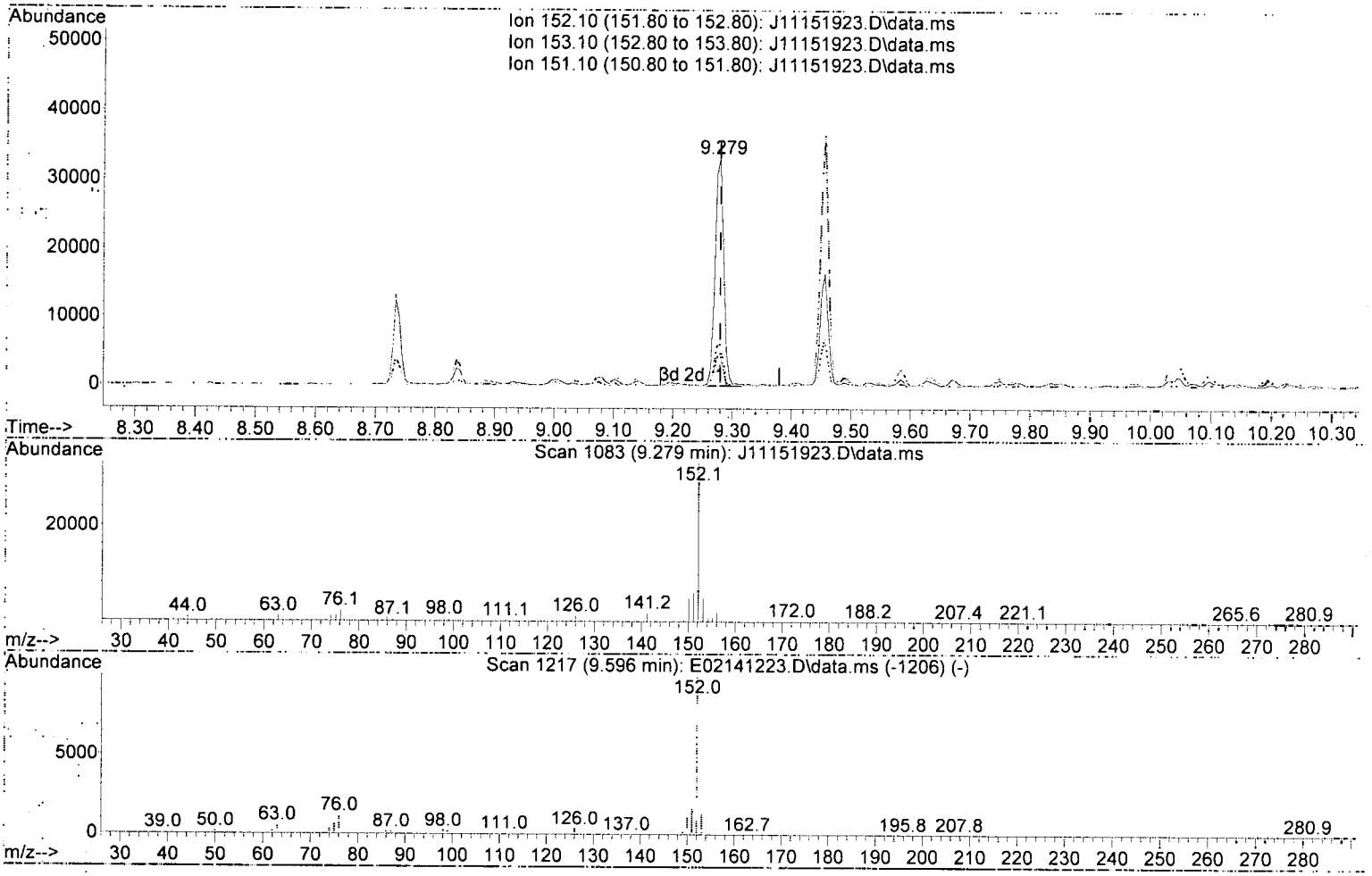
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(49) Acenaphthylene (T)

9.279min (-0.000) 53.02 ng/ml

response 33848

Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.20	14.60
151.10	19.50	18.17
0.00	0.00	0.00

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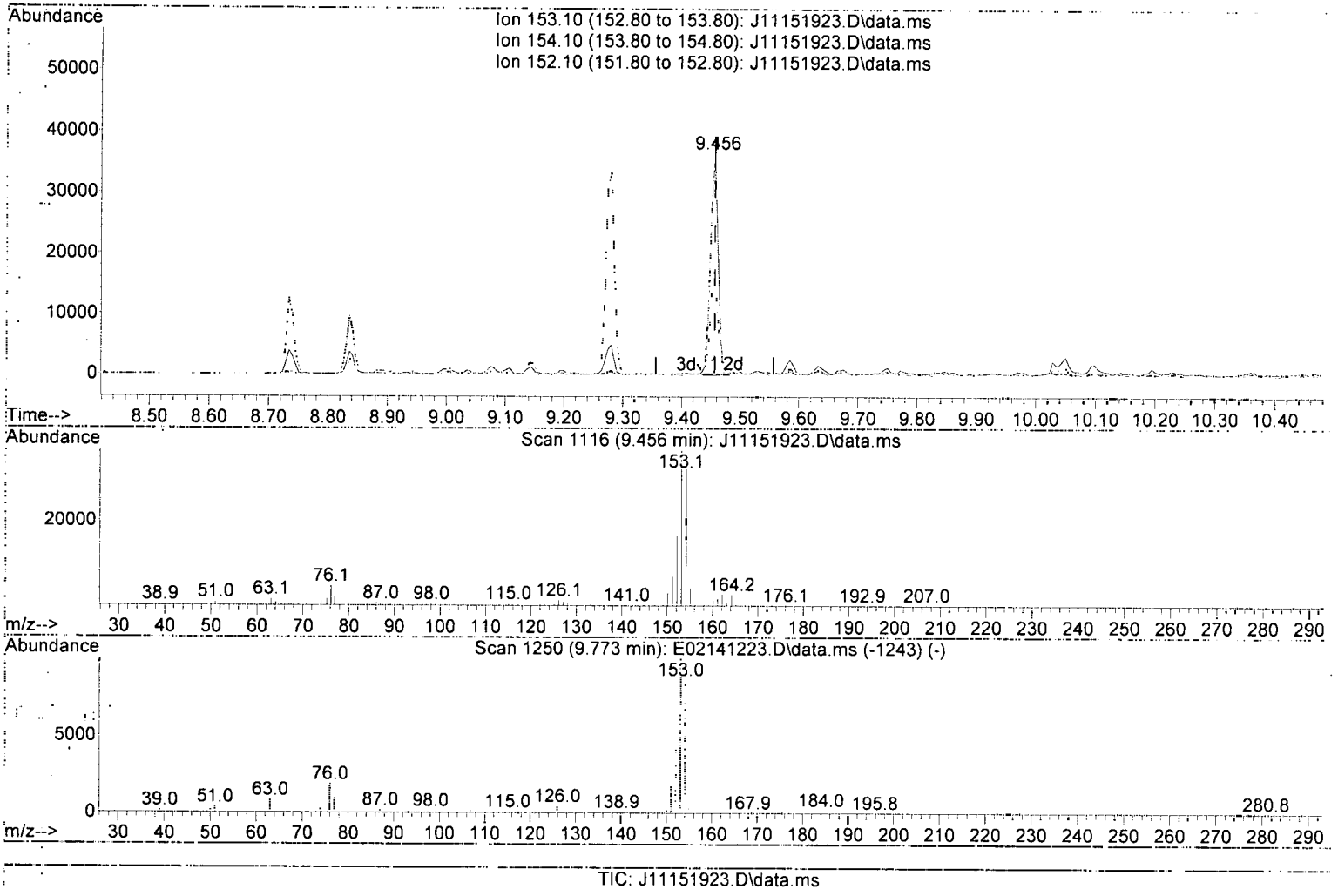

TIC: J11151923.D\data.ms

(51) Acenaphthene (T)

9.456min (-0.000) 80.34 ng/ml

response 33679

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	93.60	91.40
152.10	48.20	45.21
0.00	0.00	0.00

Quantitation Report (Qedit)

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ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

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Quant Title : EPA 8270D: Semivolatile Organics
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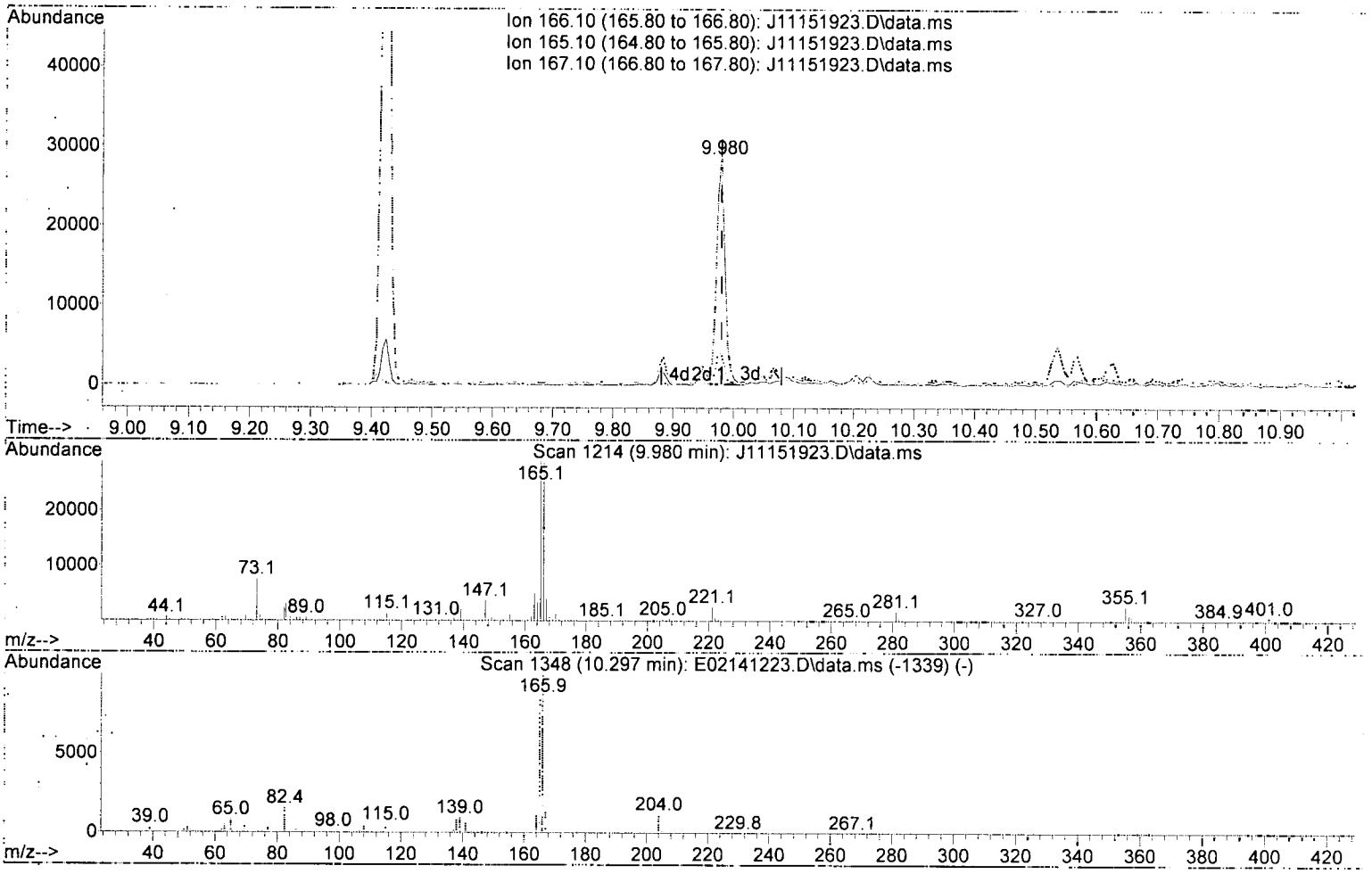
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(60) Fluorene (T)

9.980min (-0.000) 63.74 ng/ml

response 28030

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	95.00	100.47
167.10	13.90	13.91
0.00	0.00	0.00

Quantitation Report (Qedit)

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Acq On : 15 Nov 2019 9:21 pm
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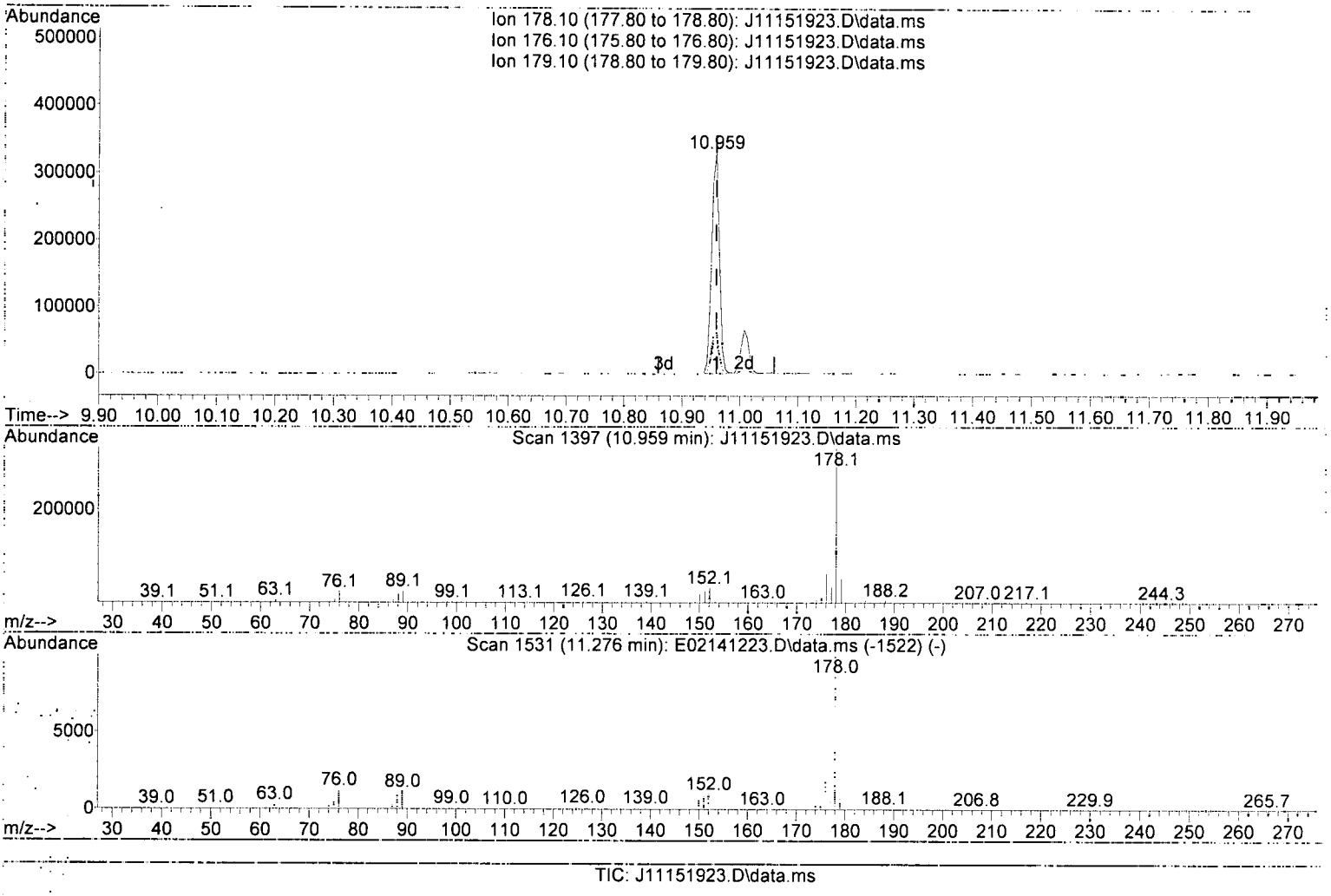
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(71) Phenanthrene (T)

10.959min (-0.000) 516.56 ng/ml

response 310035

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.60	18.79
179.10	15.60	15.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
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Sample : A9K0332-05RE1@4
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ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
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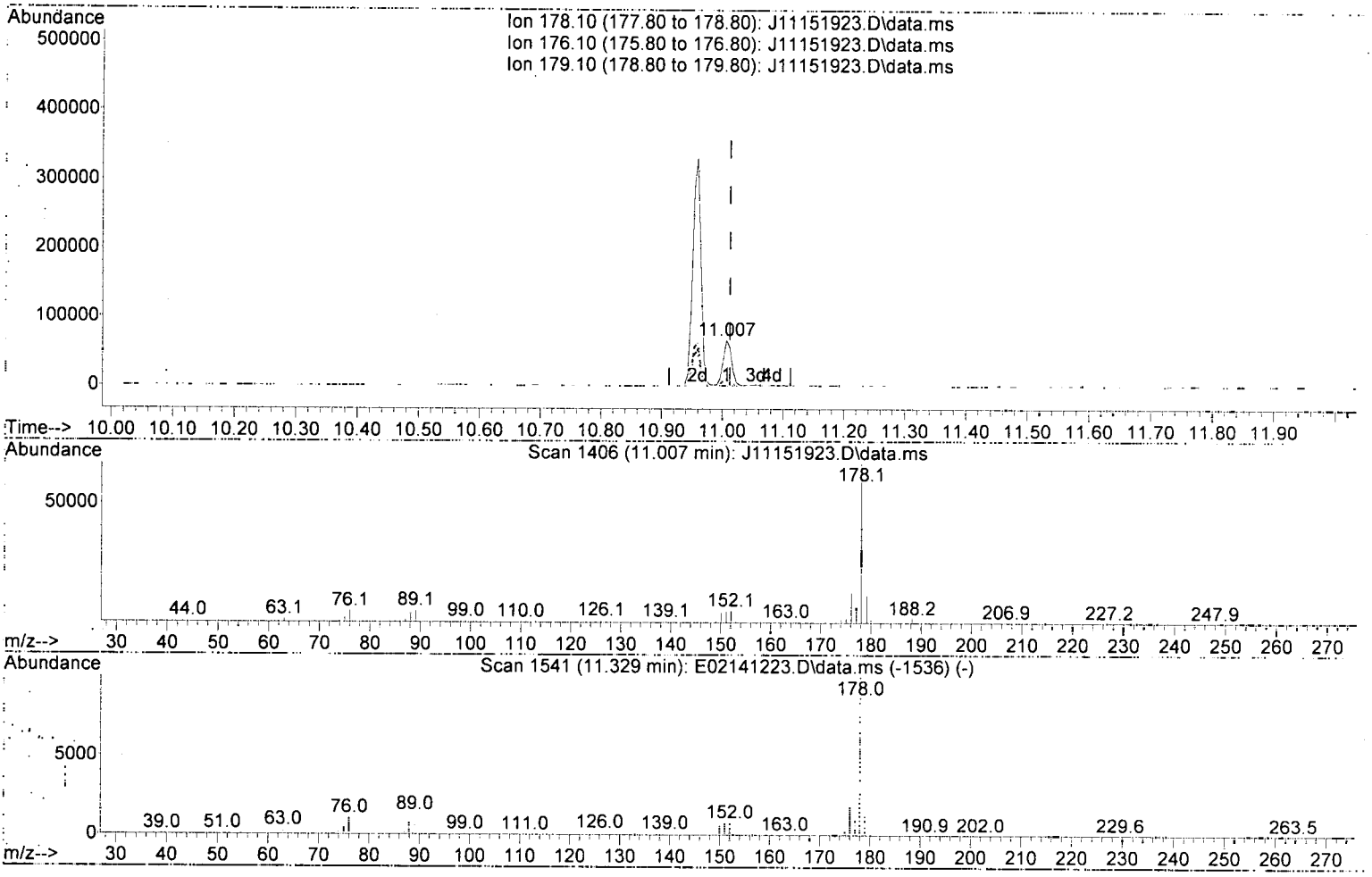
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(72) Anthracene (T)

11.007min (-0.006) 109.86 ng/ml

response 63382

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.70	18.98
179.10	15.20	17.29
0.00	0.00	0.00

Quantitation Report (Qedit)

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Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
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DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
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Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
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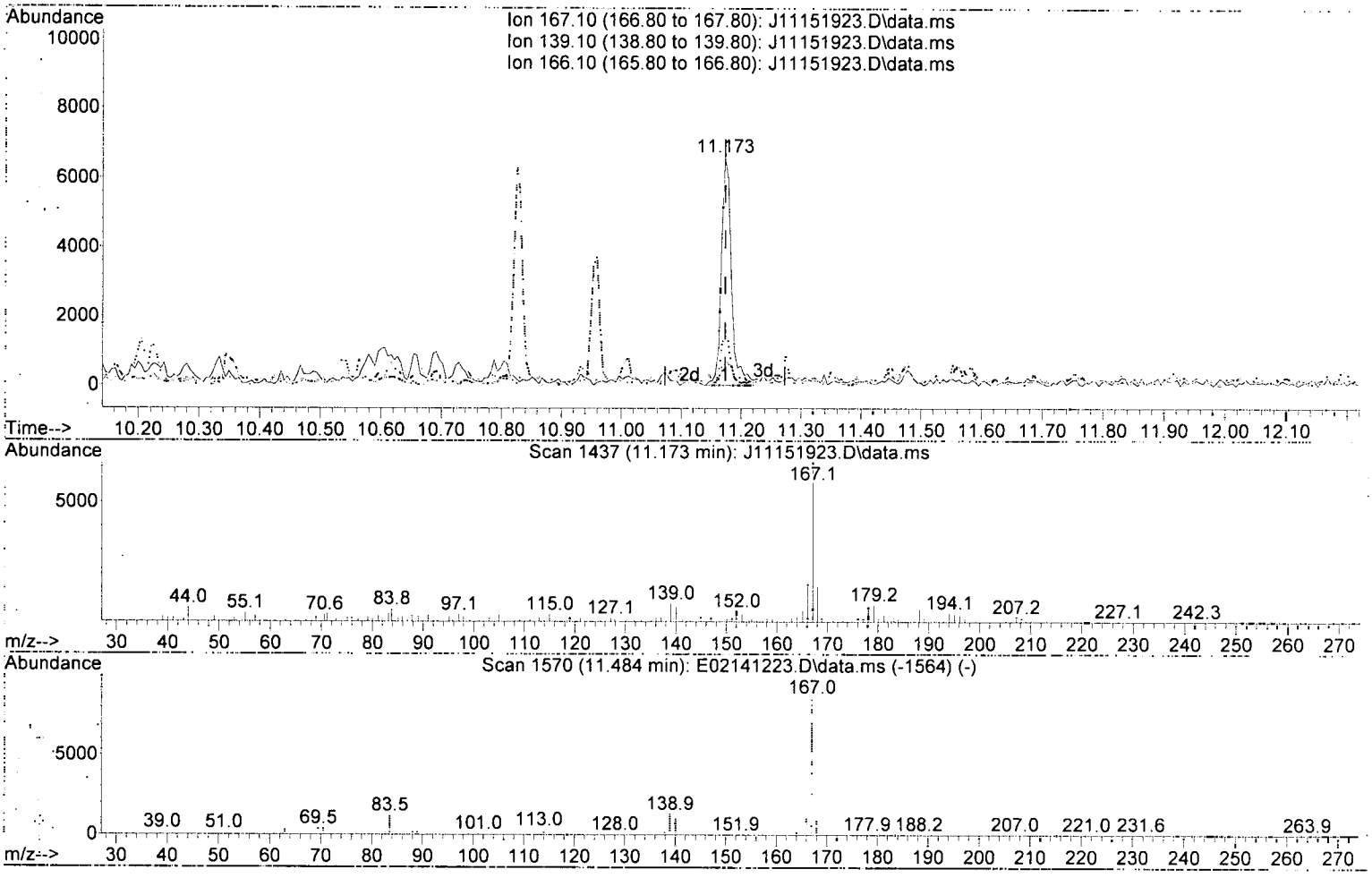
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(73) Carbazole (T)

11.173min (-0.000) 19.27 ng/ml

response 7888

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	12.90	11.66
166.10	20.90	23.58
0.00	0.00	0.00

J

Quantitation Report (Qedit)

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DataAcq Meth:SV10_AQUISITION.M

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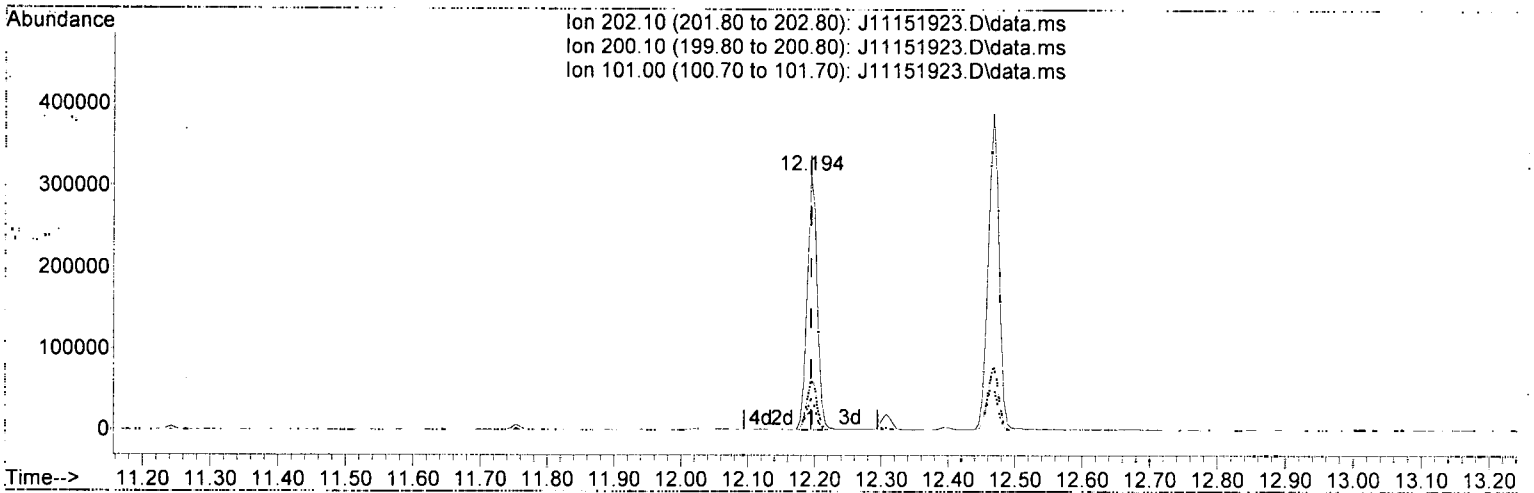

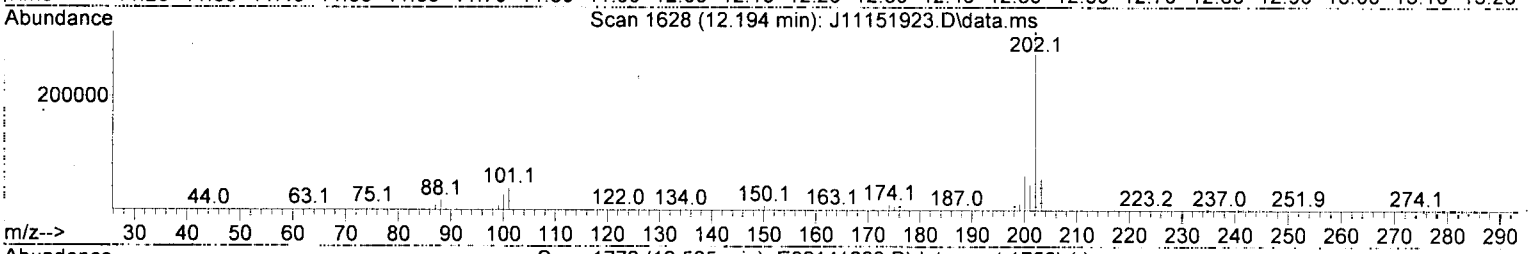

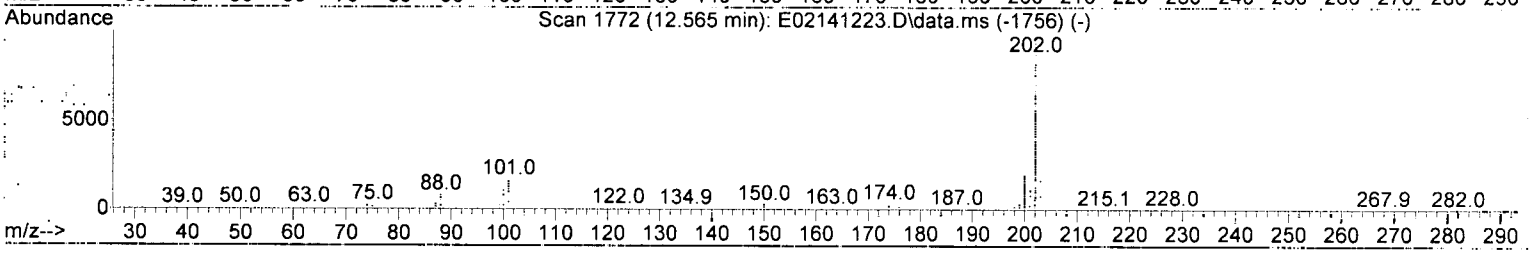

TIC: J11151923.D\data.ms

(75) Fluoranthene (T)

12.194min (-0.000) 536.25 ng/ml

response 329873

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.90	19.39
101.00	13.50	12.40
0.00	0.00	0.00

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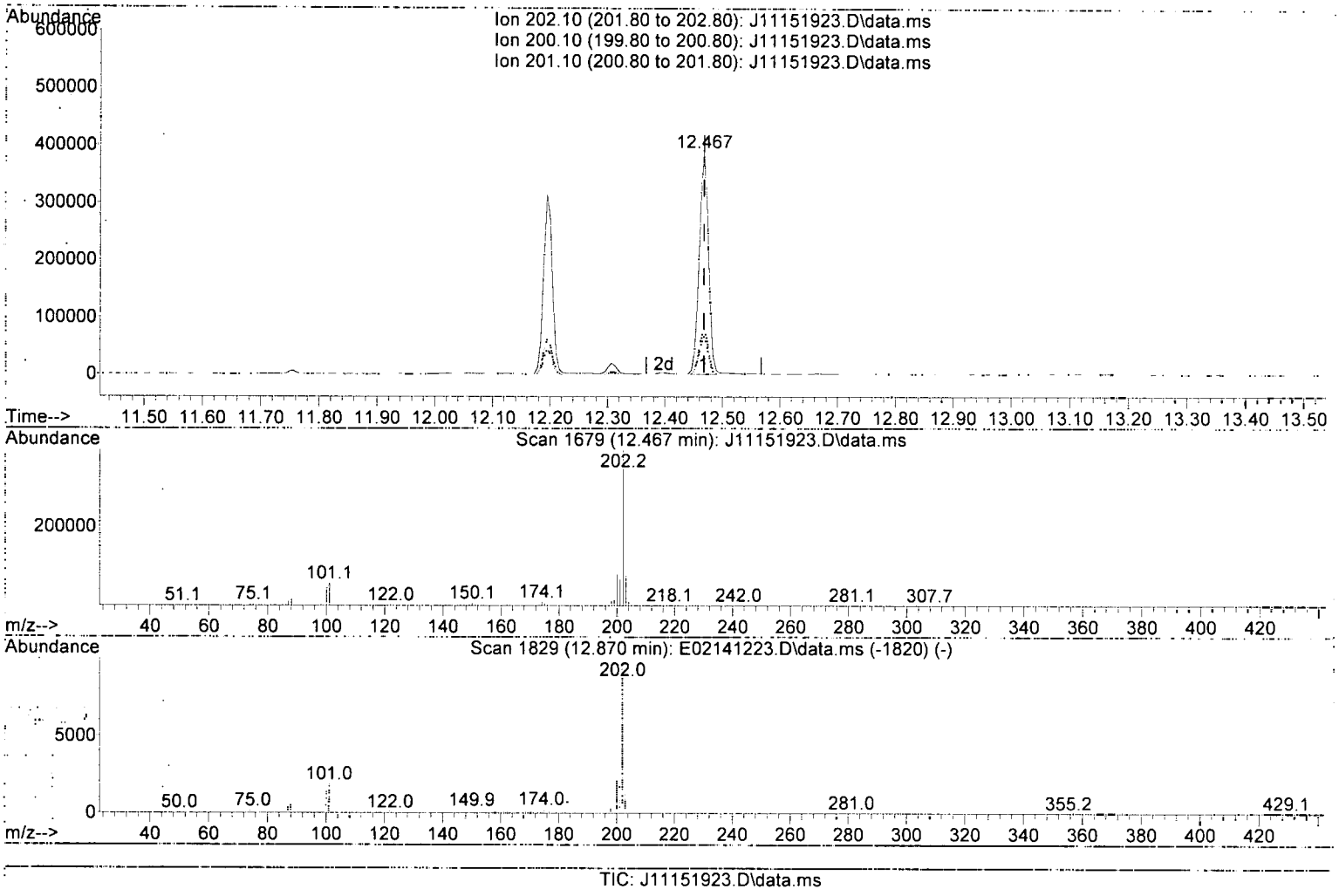

TIC: J11151923.D\data.ms

(77) Pyrene (T)

12.467min (-0.000) 701.53 ng/ml

response 439161

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.60	20.61
201.10	16.70	17.36
0.00	0.00	0.00

Quantitation Report (Qedit)

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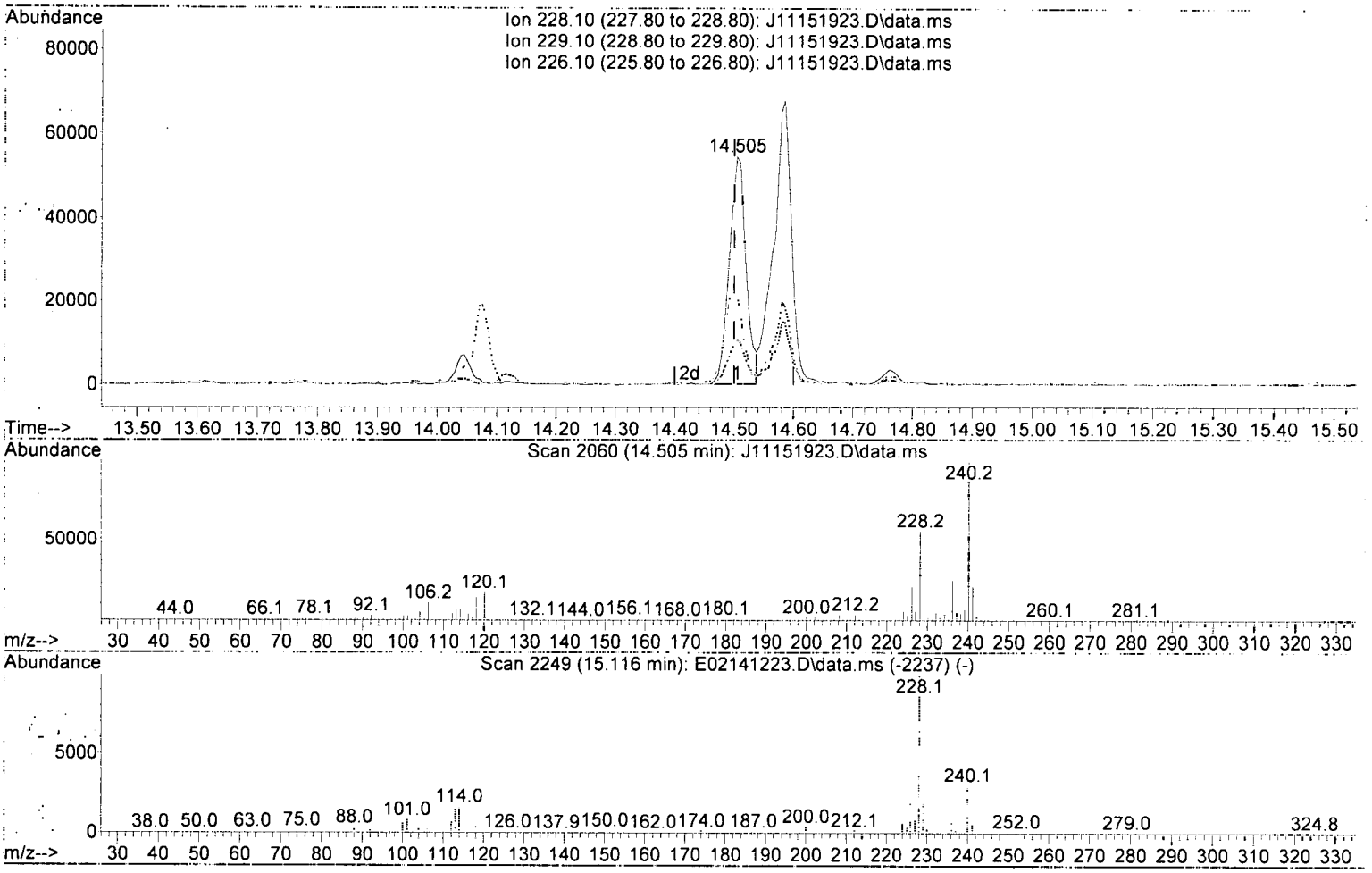

TIC: J11151923.D\data.ms

(83) Benz(a)anthracene (T)

14.505min (+ 0.005) 211.68 ng/ml

response 107040

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	19.96
226.10	27.90	38.67
0.00	0.00	0.00

Quantitation Report (Qedit)

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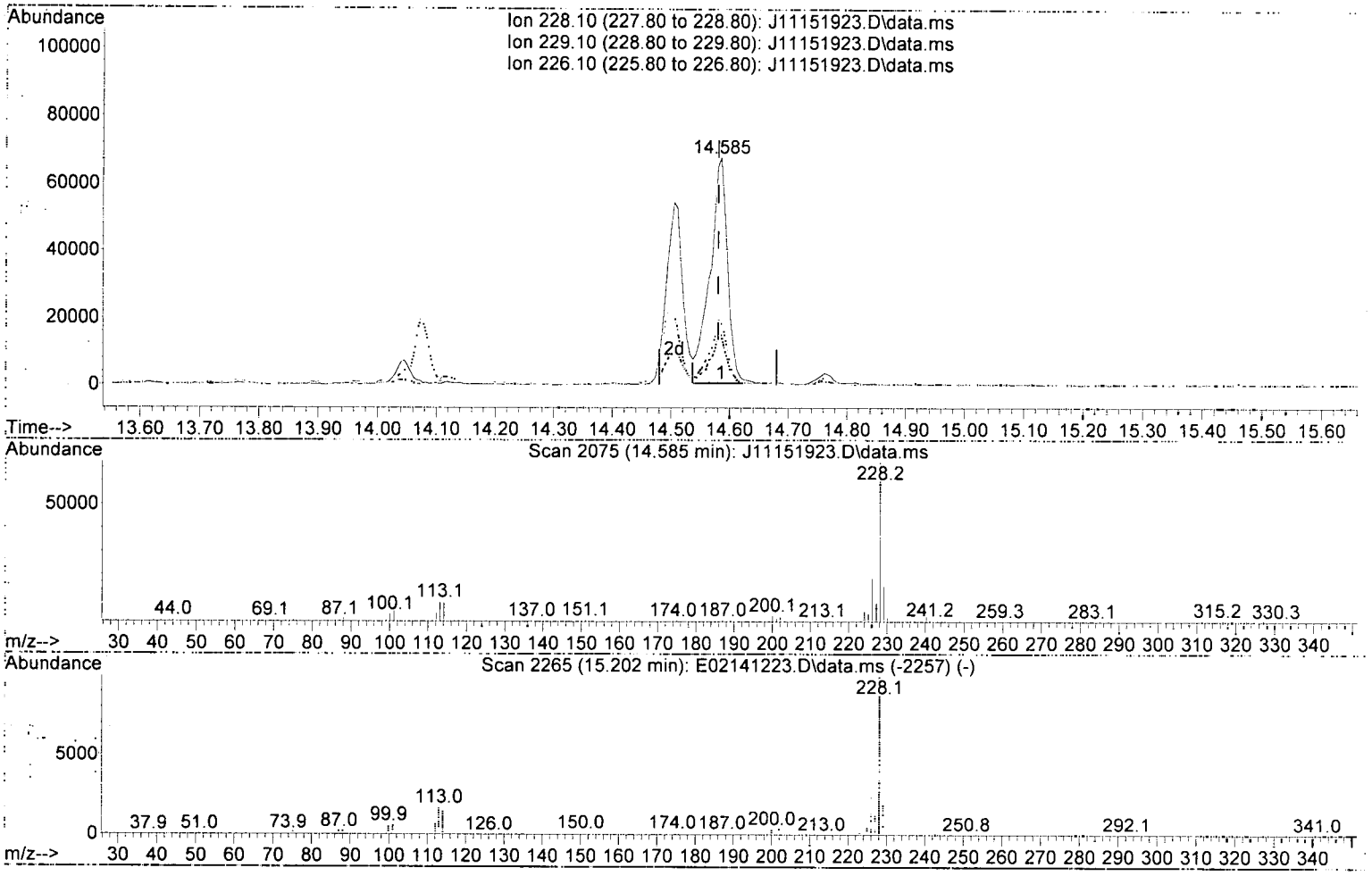

TIC: J11151923.D\data.ms

(84) Chrysene (T)

14.585min (+ 0.005) 298.27 ng/ml

response 141345

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.30	22.37
226.10	29.10	27.47
0.00	0.00	0.00

Quantitation Report (Qedit)

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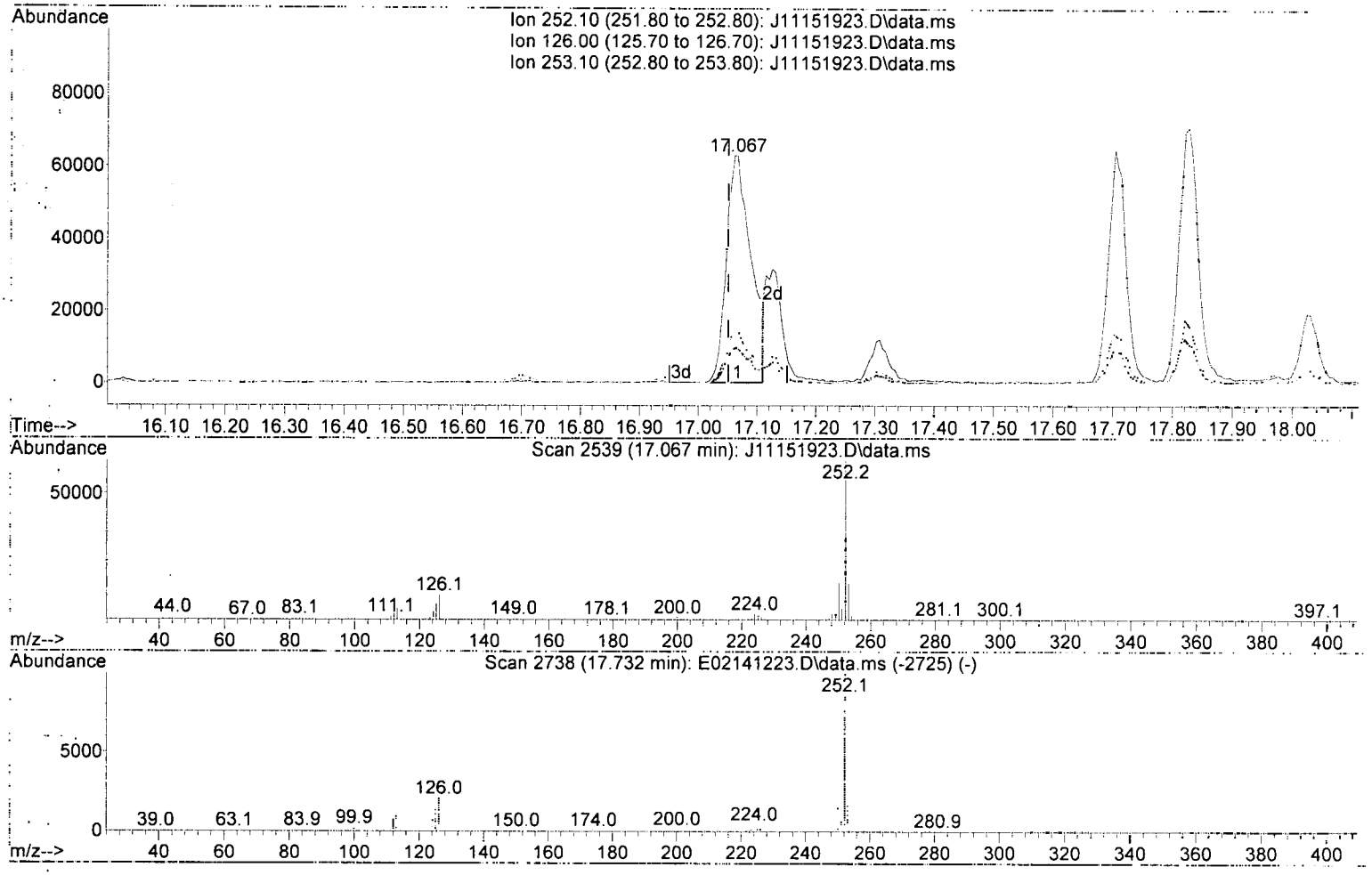


TIC: J11151923.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.067min (+ 0.016) 431.73 ng/ml

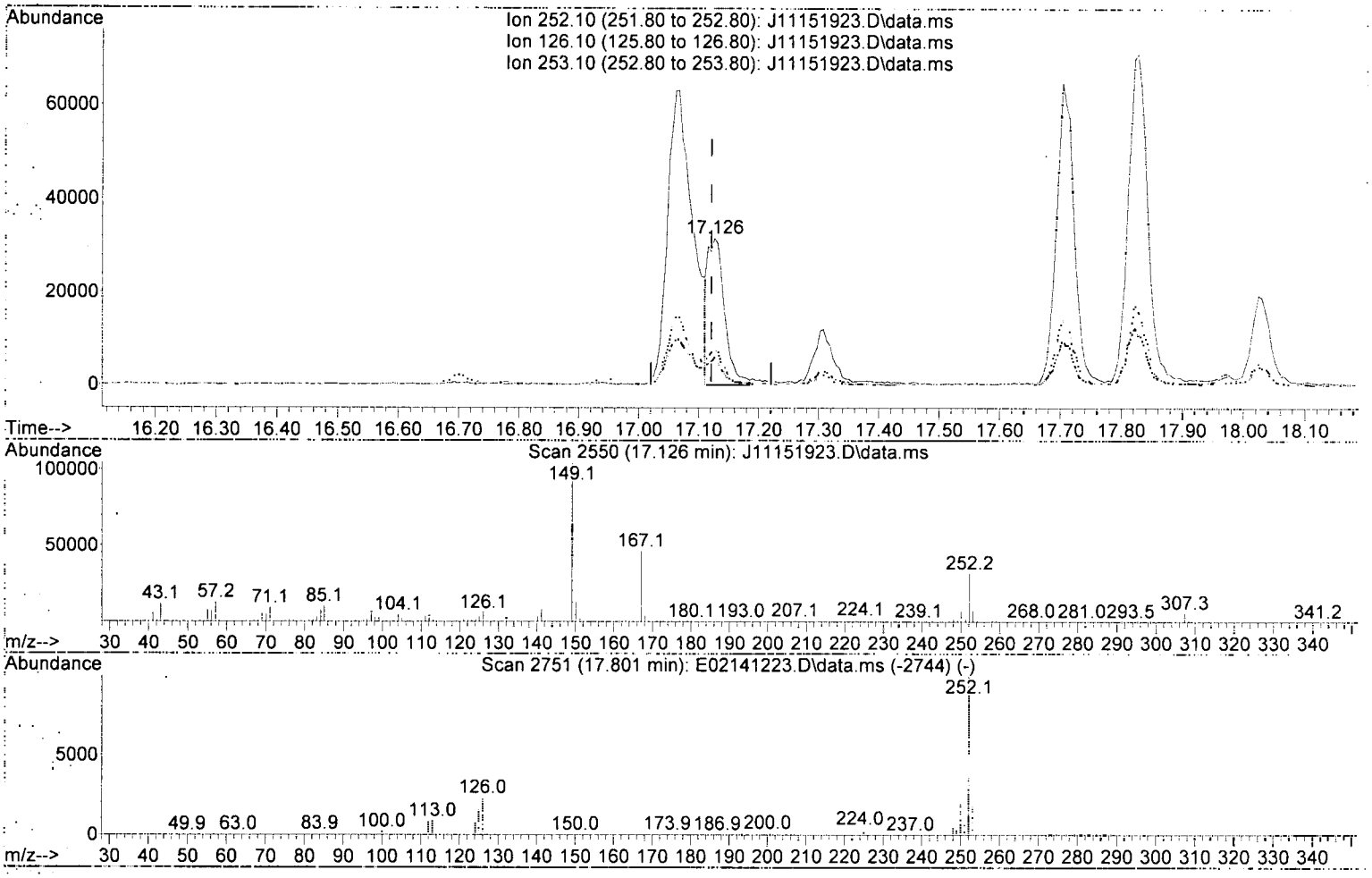
response 184163

Ion	Exp%	Act%
252.10	100.00	100.00
126.00	16.50	15.65
253.10	21.90	23.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.126min (+ 0.005) 144.65 ng/ml m

response 61446

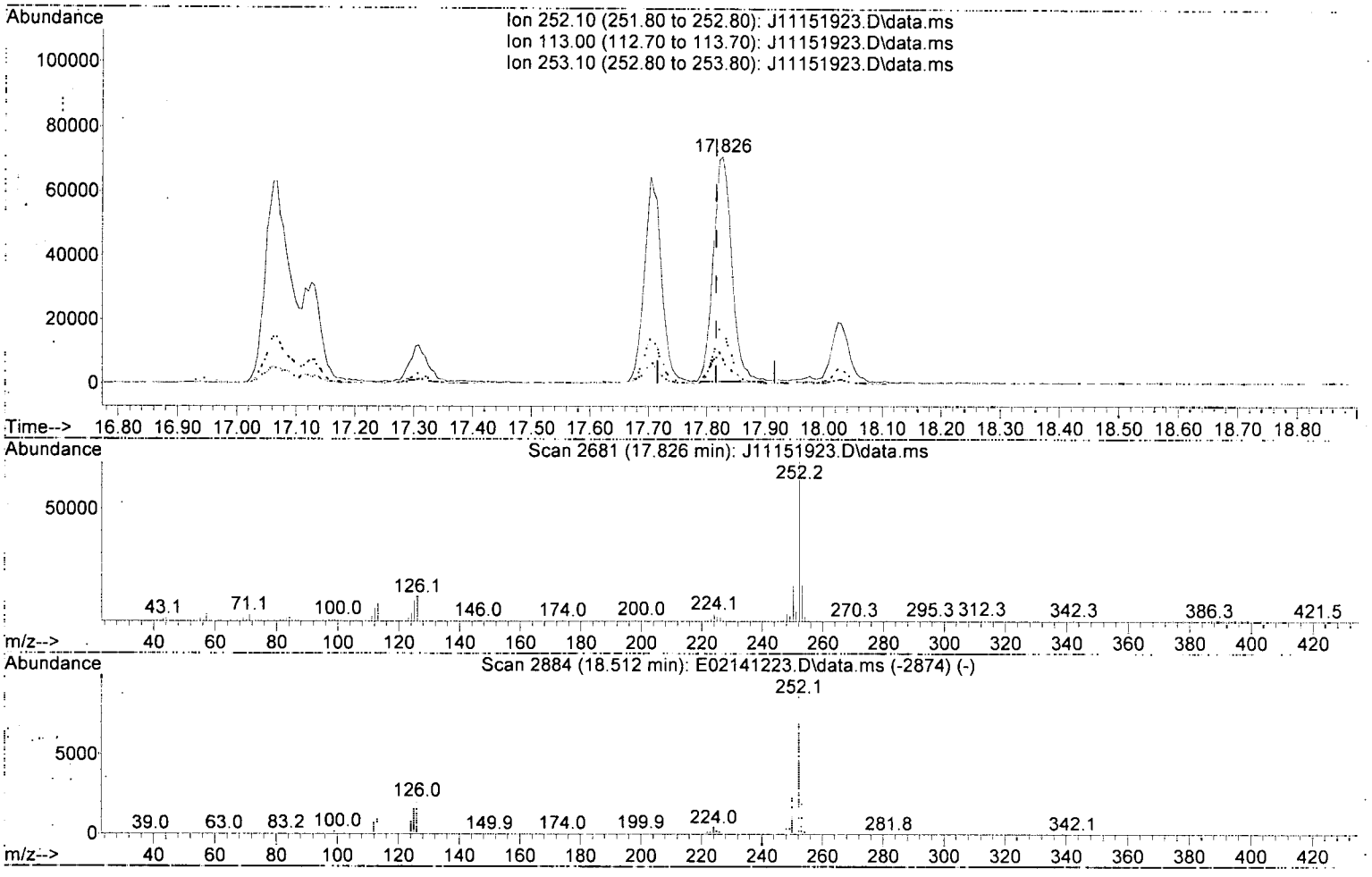
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	18.65
253.10	22.00	23.09
0.00	0.00	0.00

AMS 1/8/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(92) Benzo(a)pyrene (T)

17.826min (+ 0.010) 401.65 ng/ml

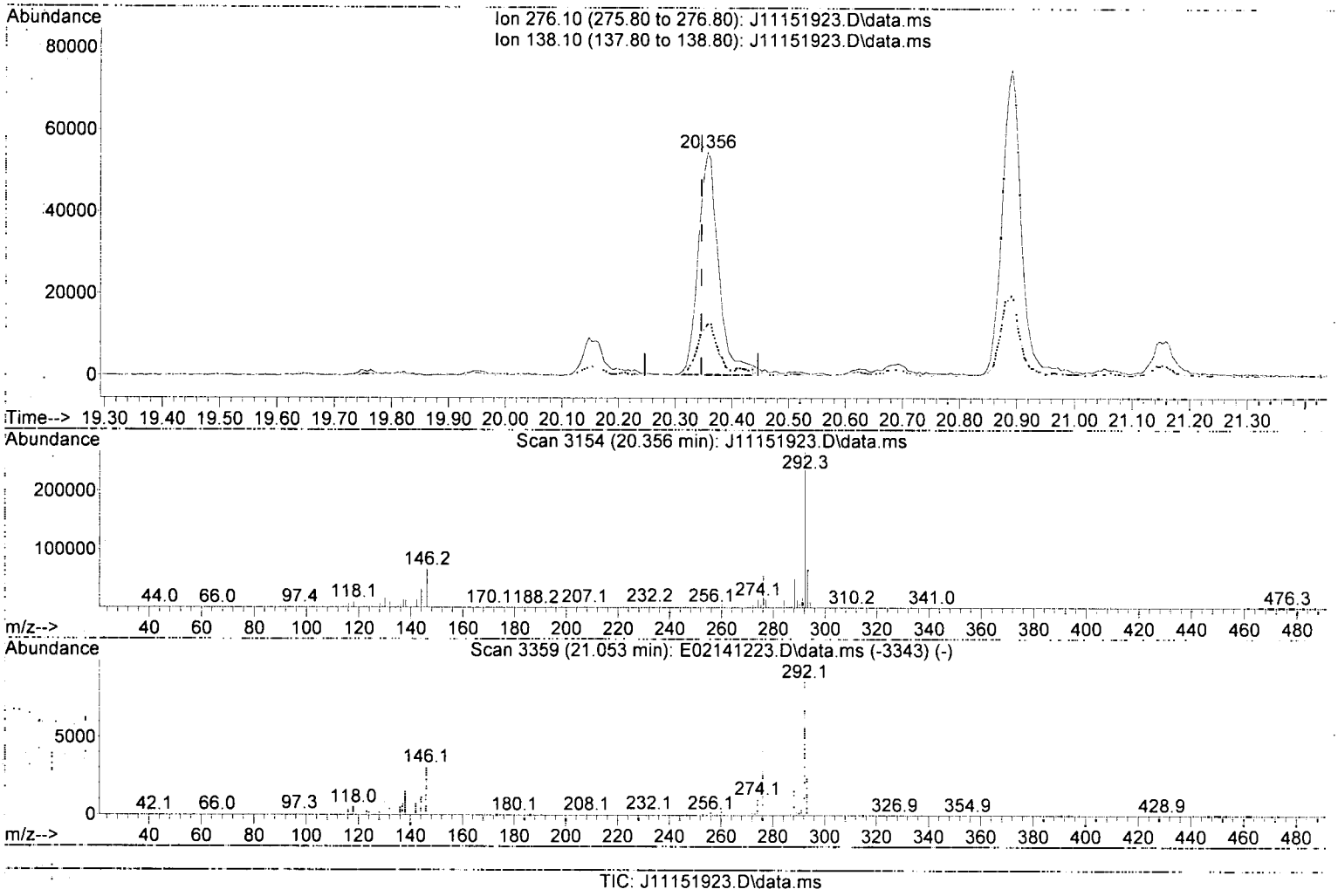
response 155724

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	9.90	11.42
253.10	22.50	22.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(95) Indeno(1,2,3-cd)pyrene (T)

20.356min (+ 0.010) 356.48 ng/ml

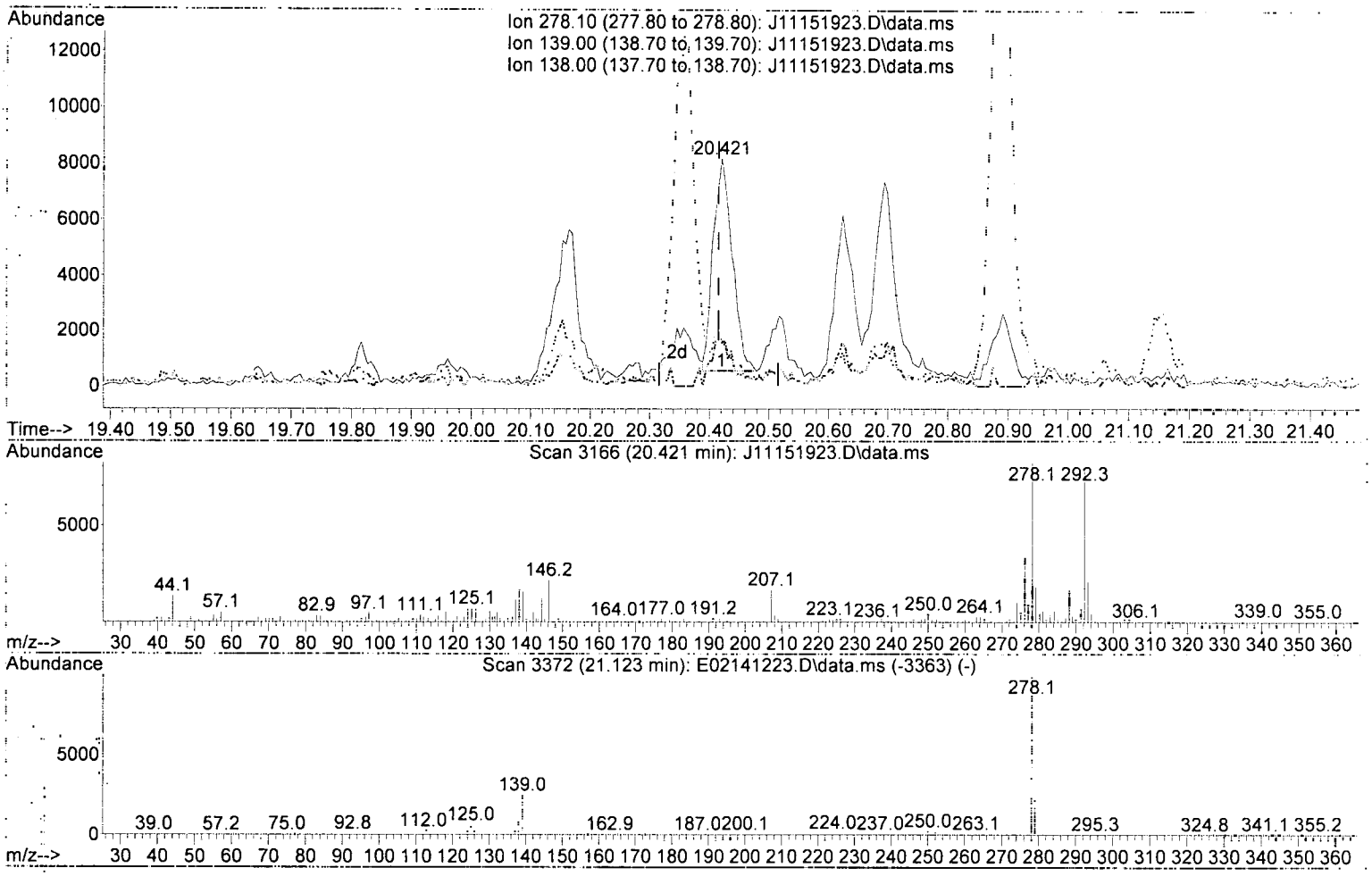
response 137127

Ion	Exp%	Act%
276.10	100.00	100.00
138.10	22.50	23.08
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(96) Dibenz(a,h)anthracene (T)

20.421min (+ 0.005) 48.52 ng/ml

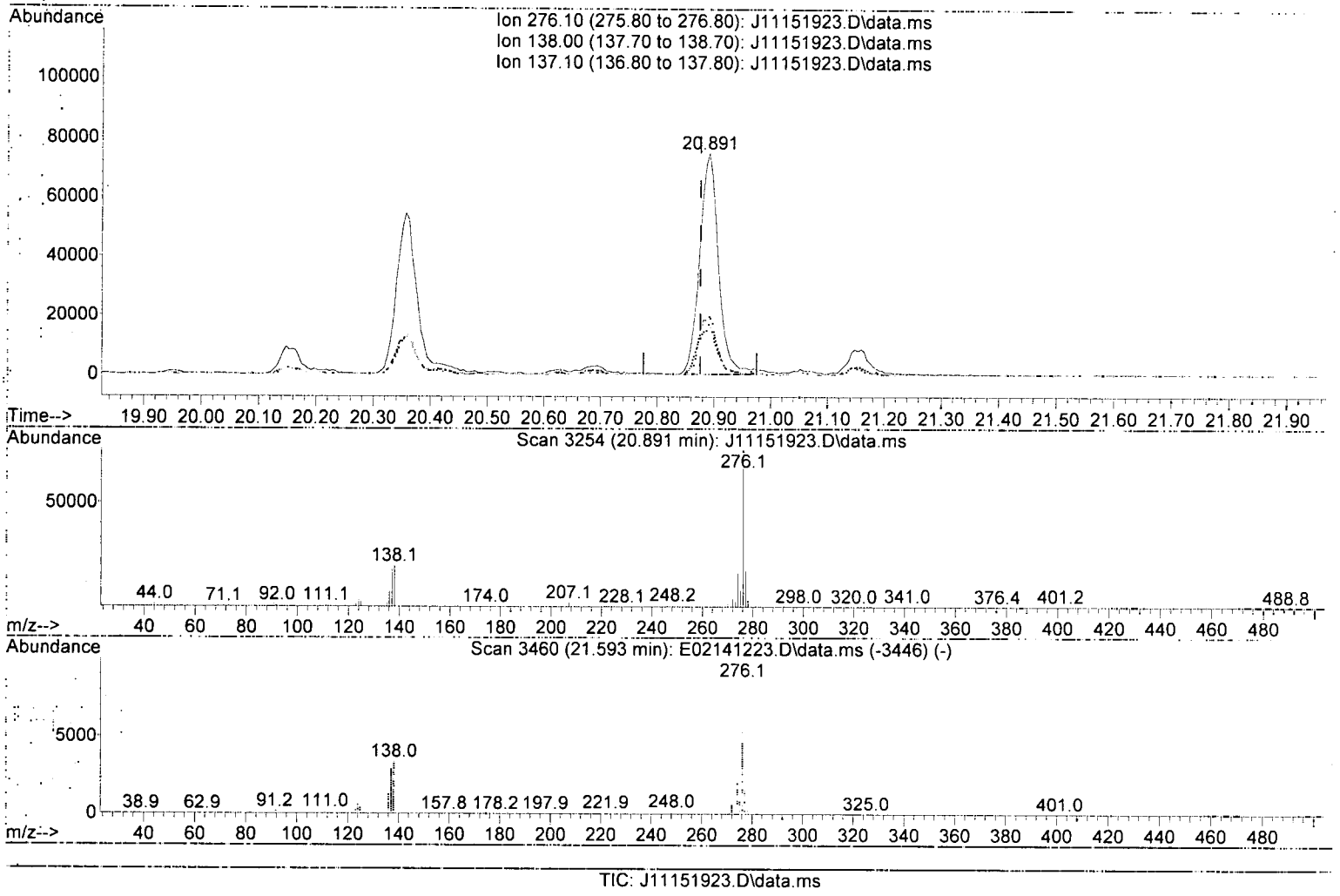
response 17135

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	18.70	19.23
138.00	12.80	20.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151923.D\data.ms

(97) Benzo(g,h,i)perylene (T)

20.891min (+ 0.016) 465.23 ng/ml

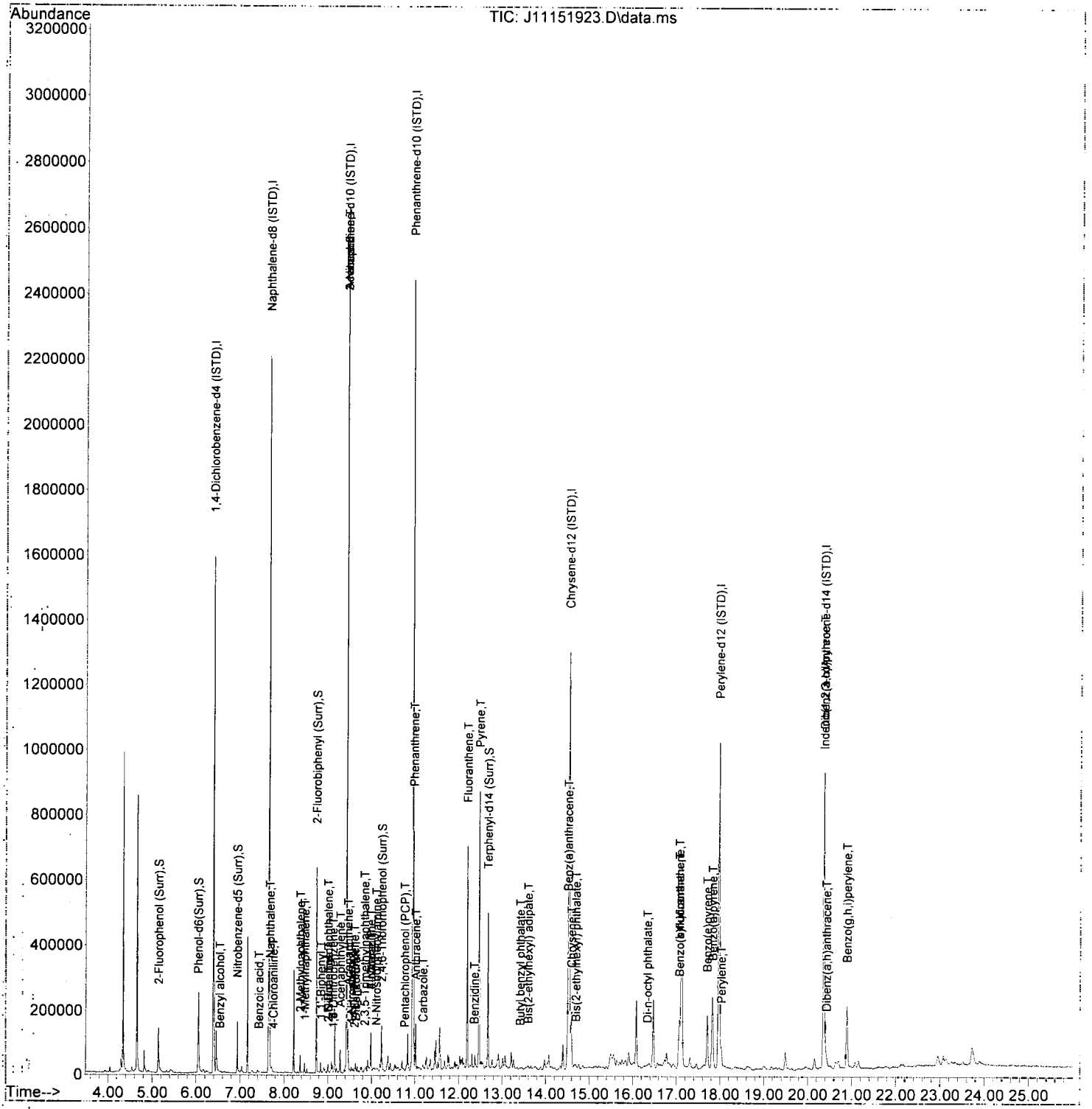
response 171896

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	24.50	26.42
137.10	22.20	23.25
0.00	0.00	0.00

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151923.D
Acq On : 15 Nov 2019 9:21 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-05RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:37 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 11/18/19 MOS

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	352962	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1246504	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	639117	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1096136	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.532	240	972208	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.971	264	943355	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.362	292	748252	2000.00 ng/ml	0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	101806	475.31 ng/ml	-0.02
5) Phenol-d6(Surr)	6.044	99	98570	359.54 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	86858	408.38 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.734	172	284437	568.67 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	25795	403.45 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.671	244	289674	646.55 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.926	79	560	N.D.	
6) Phenol	6.049	94	150	N.D.	
7) Aniline	6.076	93	78	N.D.	
8) Bis(2-chloroethyl) ether	6.113	93	177	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	6.648	107	159	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.792	70	67	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.926	77	311	N.D.	
22) Isophorone	7.183	82	306	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	7.434	105	60	806.62 ng/ml#	8
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.670	128	9159	13.97 ng/ml	93
30) 4-Chloroaniline	7.670	127	1093	18.37 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.365	142	1306	2.85 ng/ml	95
34) 1-Methylnaphthalene	8.467	142	665	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	8.836	154	735	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	9.007	156	508	N.D.	

J

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

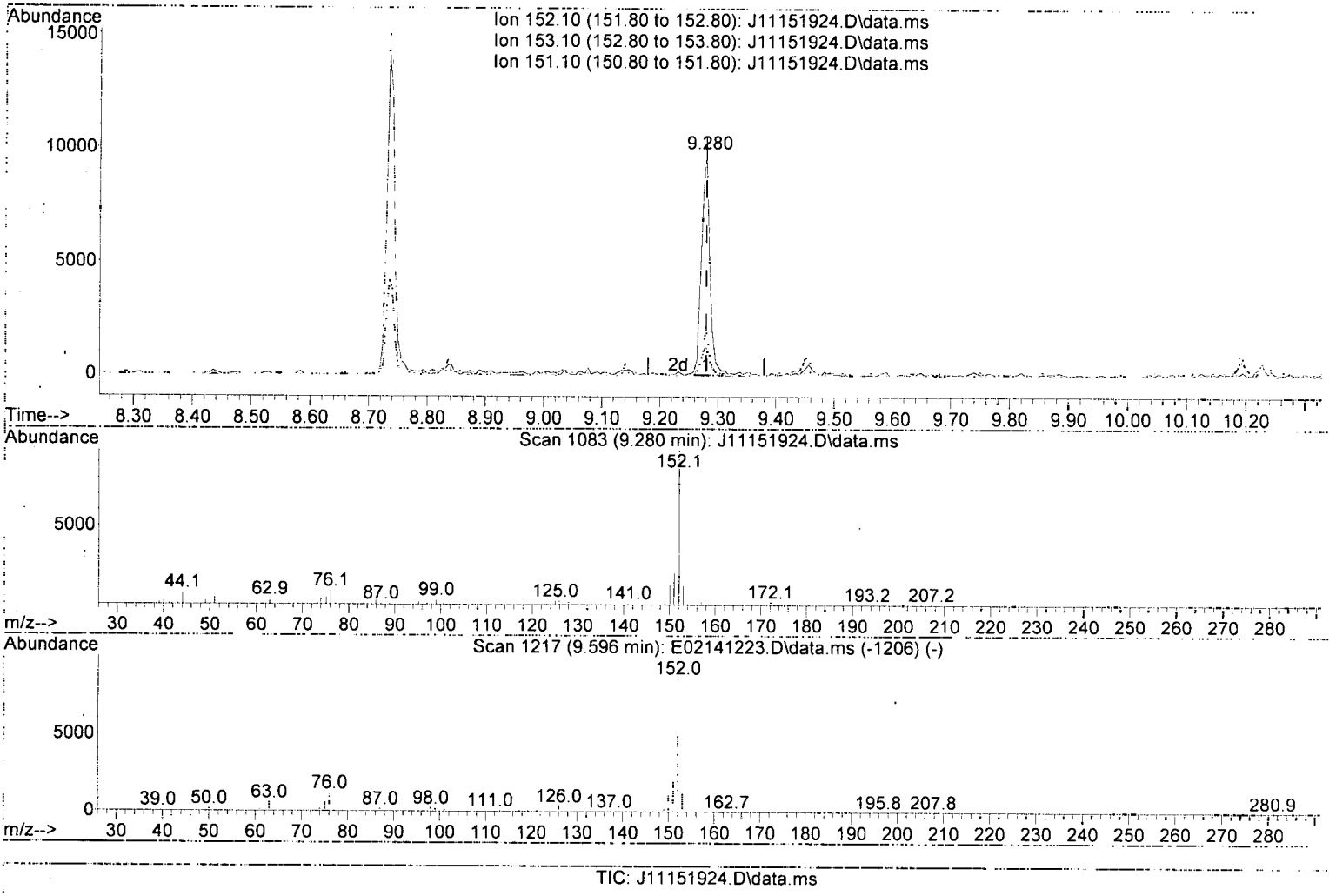
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.151	163	165	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.194	165	89	25.91 ng/ml#	55
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.280	152	9983	15.37 ng/ml	98
50) 3-Nitroaniline	9.419	138	57	30.28 ng/ml#	1
51) Acenaphthene	9.451	153	1010	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.611	165	151	54.84 ng/ml#	27
55) Dibenzofuran	9.633	168	269	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	9.857	149	440	N.D.	
59) 2,3,5-Trimethylnaphtha...	9.846	170	244	N.D.	
60) Fluorene	9.980	166	711	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	10.103	169	484	N.D.	
66) Azobenzene (1,2-DPH)	10.162	77	259	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	10.954	178	8620	14.02 ng/ml	92
72) Anthracene	11.007	178	3339	5.65 ng/ml	87
73) Carbazole	11.178	167	546	6.52 ng/ml	66
74) Di-n-butyl phthalate	11.526	149	1282	N.D.	
75) Fluoranthene	12.200	202	82065	130.21 ng/ml	98
76) Benzidine	12.328	184	95	123.58 ng/ml	67
77) Pyrene	12.467	202	121333	189.17 ng/ml	99
80) Butyl benzyl phthalate	13.430	149	354	30.76 ng/ml#	58
81) Bis(2-ethylhexyl) adipate	13.591	129	1364	6.05 ng/ml	85
82) 3,3-Dichlorobenzidine	14.409	252	74	Below Cal #	11
83) Benz(a)anthracene	14.511	228	47681	87.84 ng/ml	91
84) Chrysene	14.580	228	60079	118.11 ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.692	149	3254	9.30 ng/ml	98
87) Di-n-octyl phthalate	16.350	149	113	58.14 ng/ml#	1
88) Benzo(b)fluoranthene	~~17.062~~	~~252~~	~~64888~~	~~132.72 ng/ml~~	~~98~~ MI-HIT
89) Benzo(k)fluoranthene	~~17.062~~	~~252~~	~~84002~~	~~163.70 ng/ml~~	~~98~~ MI-MOS
90) Benzo(b+k)fluoranthene	17.062	252	93649	188.70 ng/ml	98
91) Benzo(e)pyrene	17.704	252	51307	105.82 ng/ml	97
92) Benzo(a)pyrene	17.827	252	66053	148.34 ng/ml	97
93) Perylene	18.025	252	16984	39.92 ng/ml	95
95) Indeno(1,2,3-cd)pyrene	20.351	276	53959	121.95 ng/ml	90
96) Dibenz(a,h)anthracene	20.426	278	6767	16.66 ng/ml	90
97) Benzo(g,h,i)perylene	20.886	276	67332	158.43 ng/ml	95

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(49) Acenaphthylene (T)

9.280min (-0.000) 15.37 ng/ml

response 9983

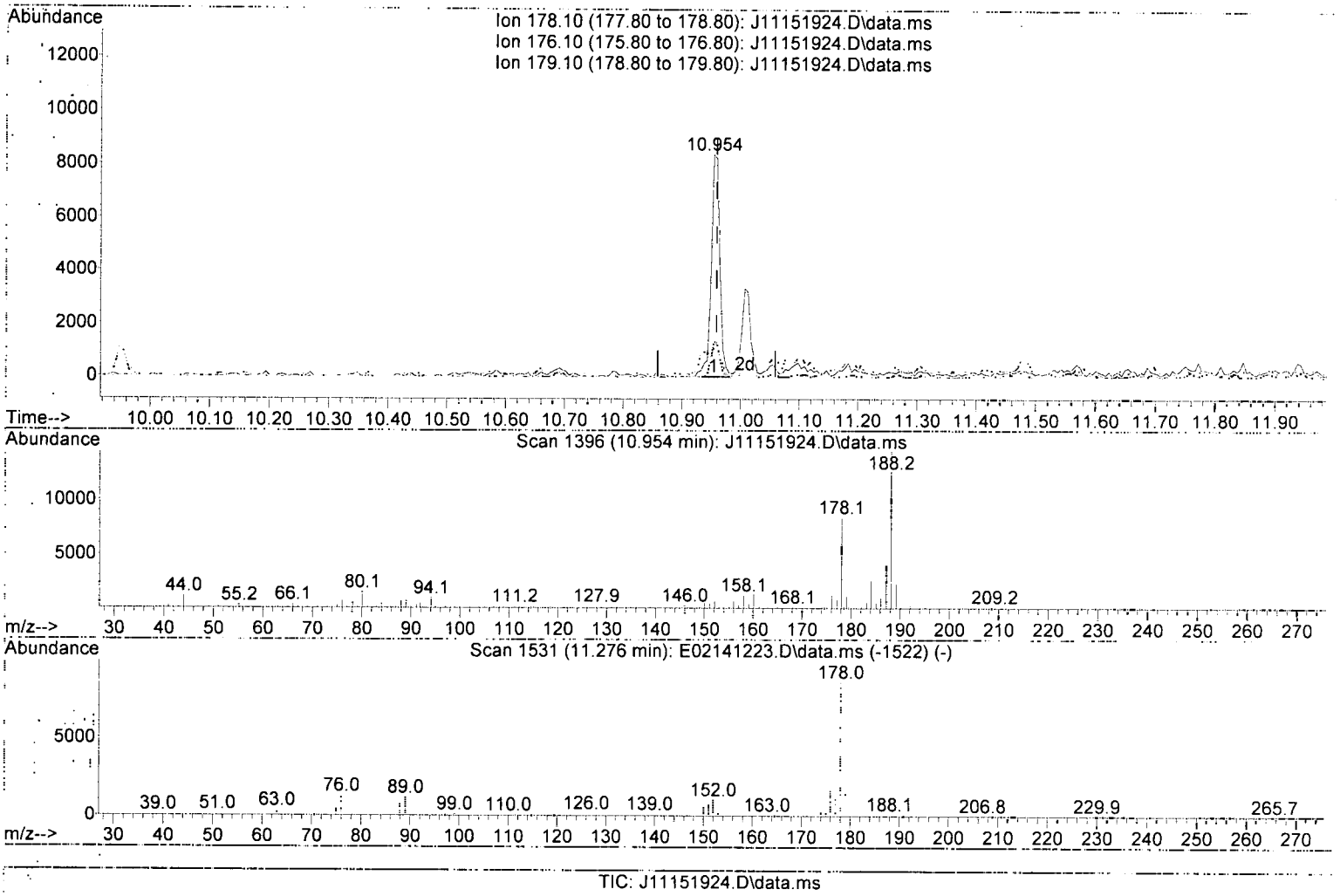
Ion	Exp%	Act%
152.10	100.00	100.00
153.10	13.20	12.67
151.10	19.50	20.98
0.00	0.00	0.00

J

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(71) Phenanthrene (T)

10.954min (-0.005) 14.02 ng/ml

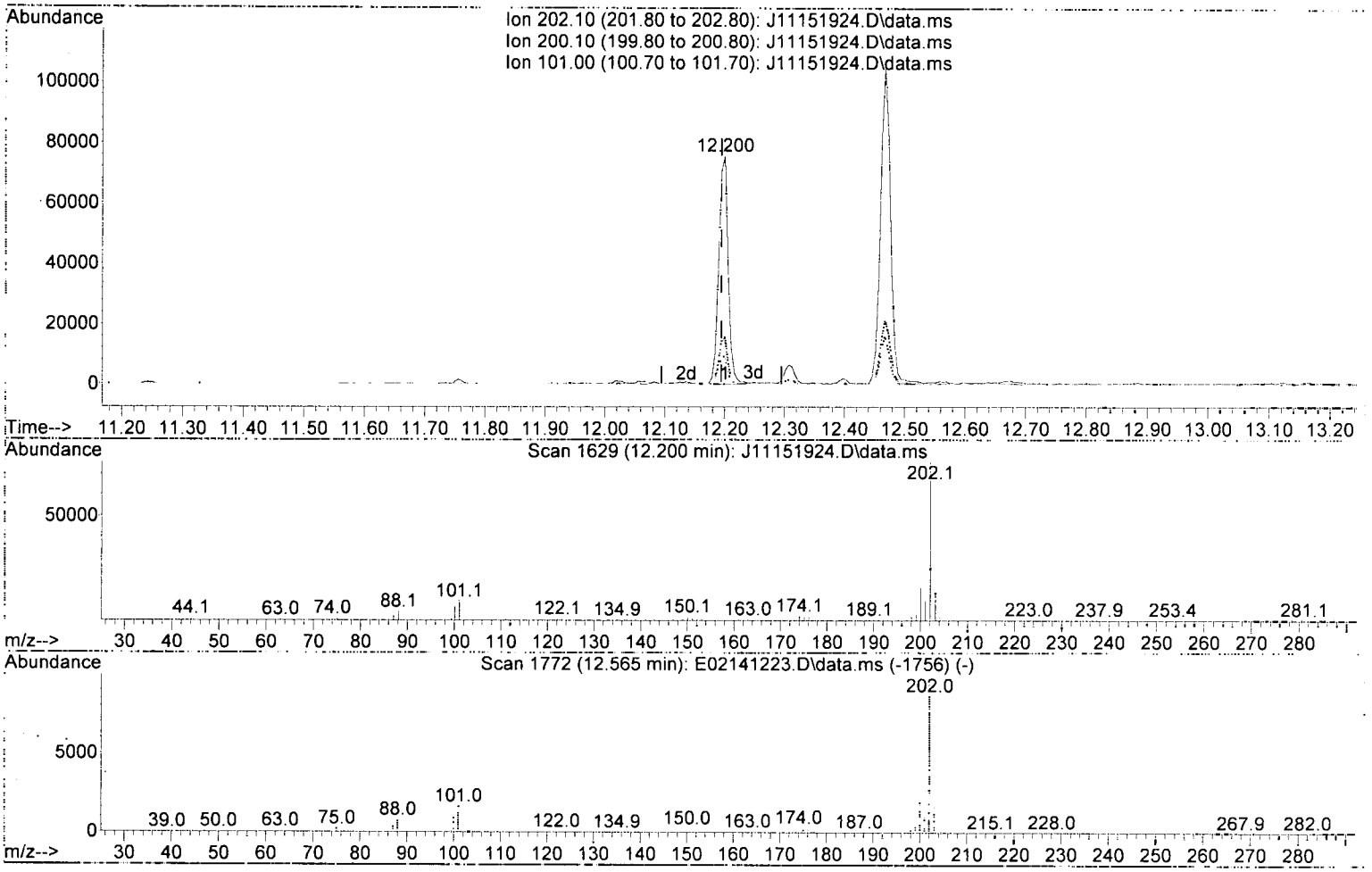
response 8620

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.60	15.28
179.10	15.60	13.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(75) Fluoranthene (T)

12.200min (+ 0.005) 130.21 ng/ml

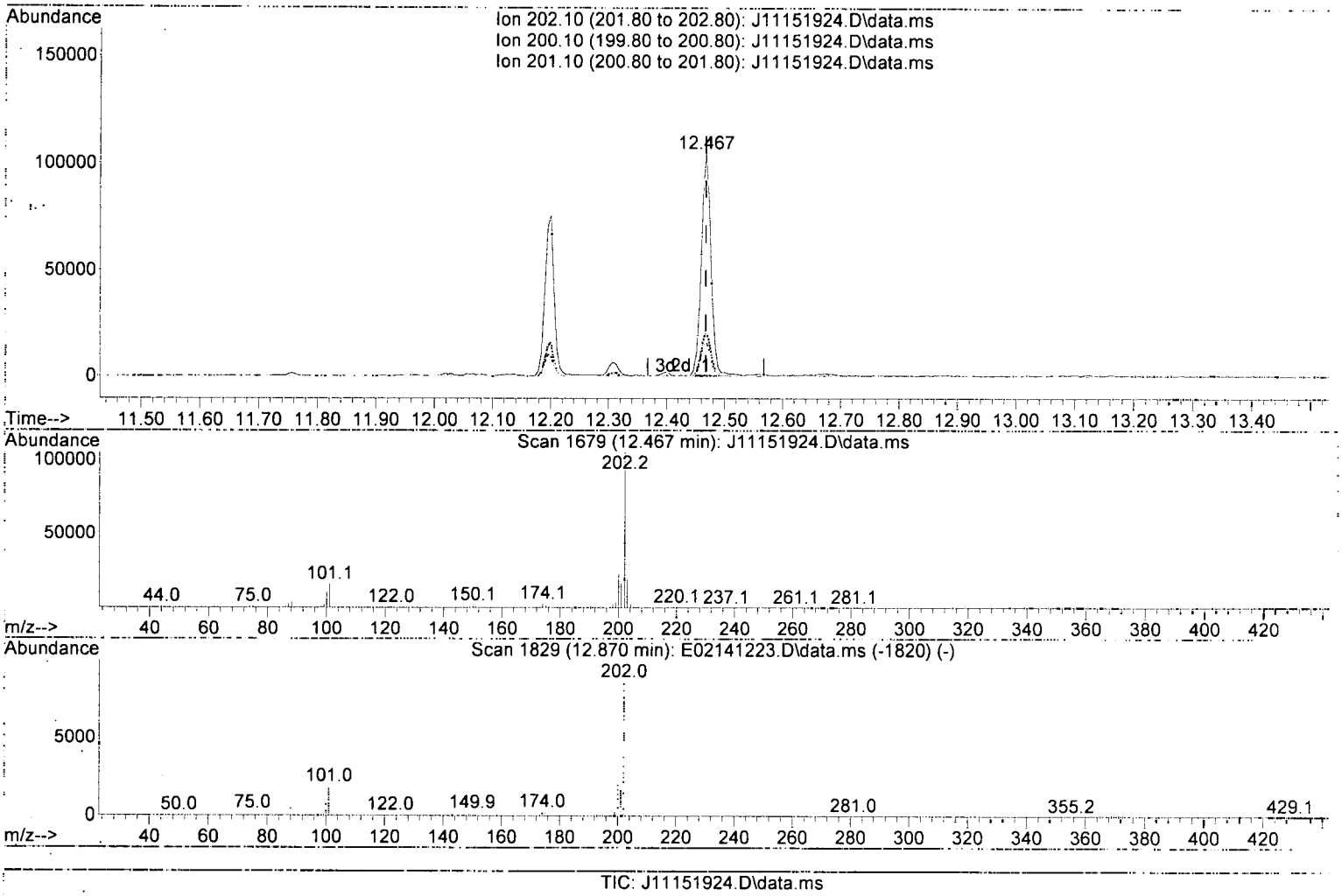
response 82065

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.90	20.80
101.00	13.50	12.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(77) Pyrene (T)

12.467min (-0.000) 189.17 ng/ml

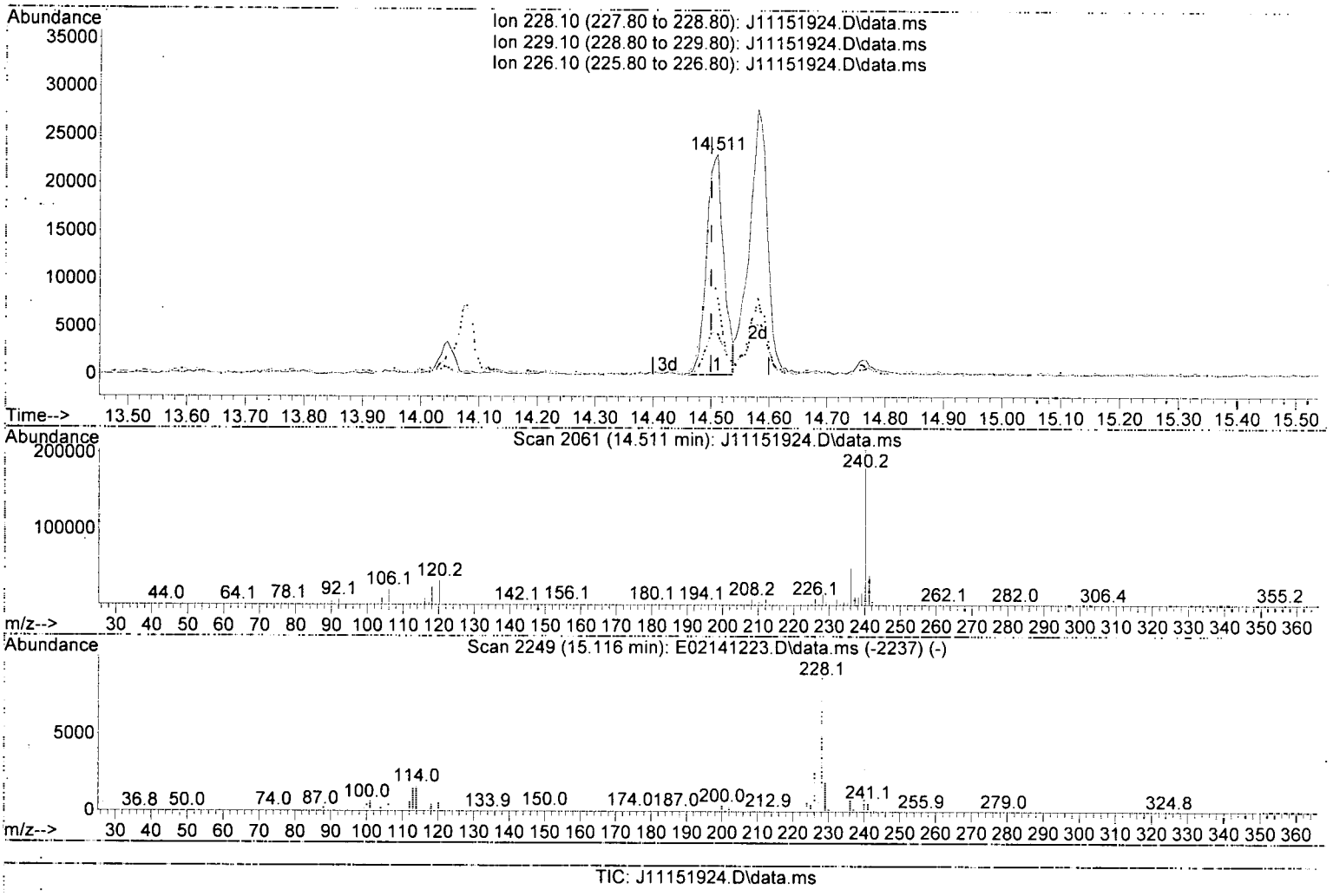
response 121333

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.60	20.58
201.10	16.70	15.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(83) Benz(a)anthracene (T)

14.511min (+ 0.011) 87.84 ng/ml

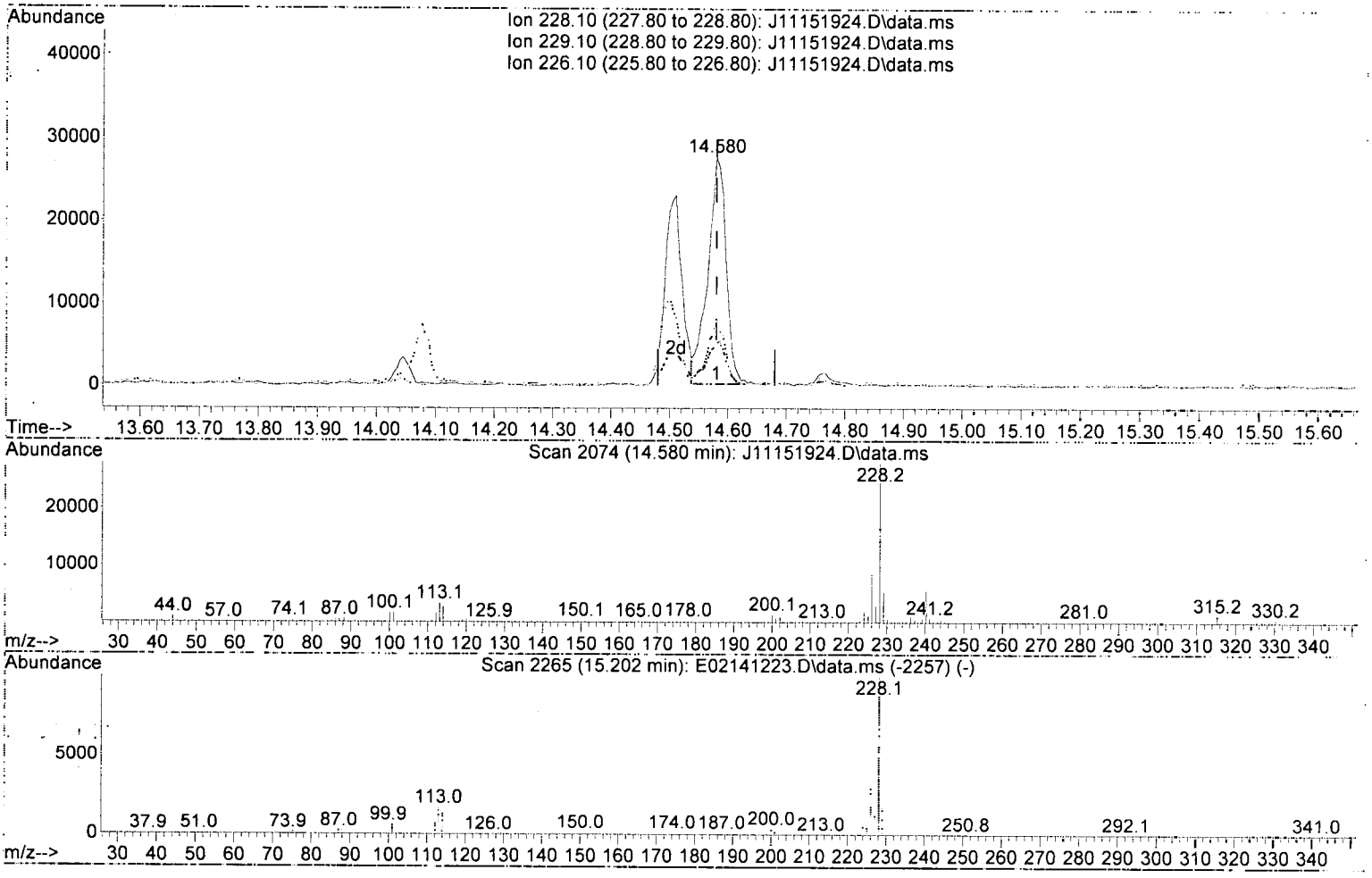
response 47681

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	19.34
226.10	27.90	35.98
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(84) Chrysene (T)

14.580min (-0.000) 118.11 ng/ml

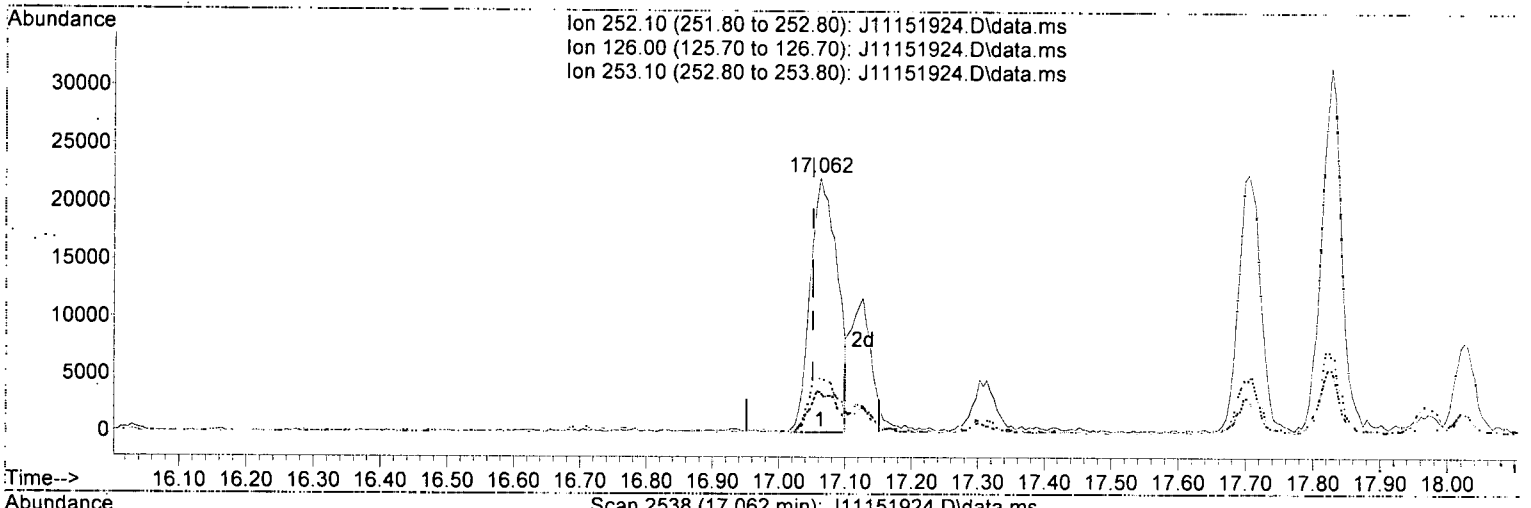
response 60079

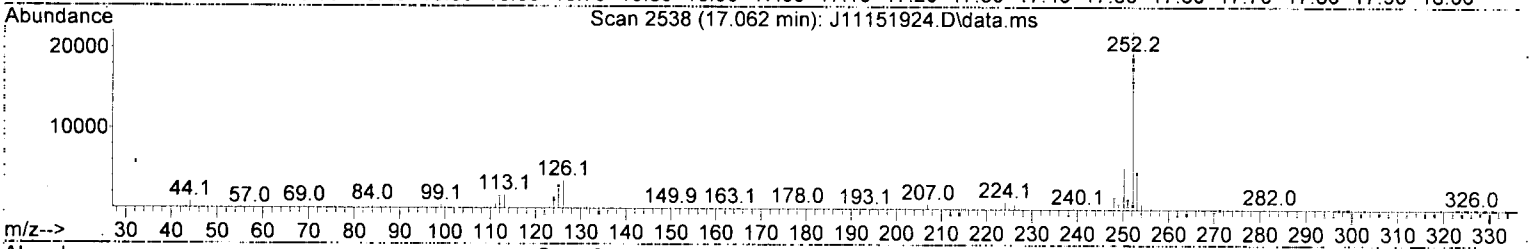
Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.30	19.08
226.10	29.10	29.63
0.00	0.00	0.00

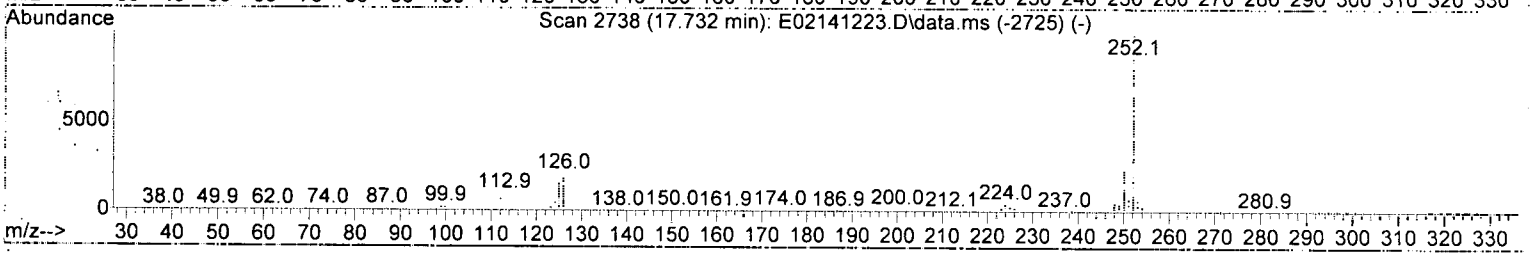
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151924.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.062min (+ 0.011) 128.38 ng/ml m

response 62629

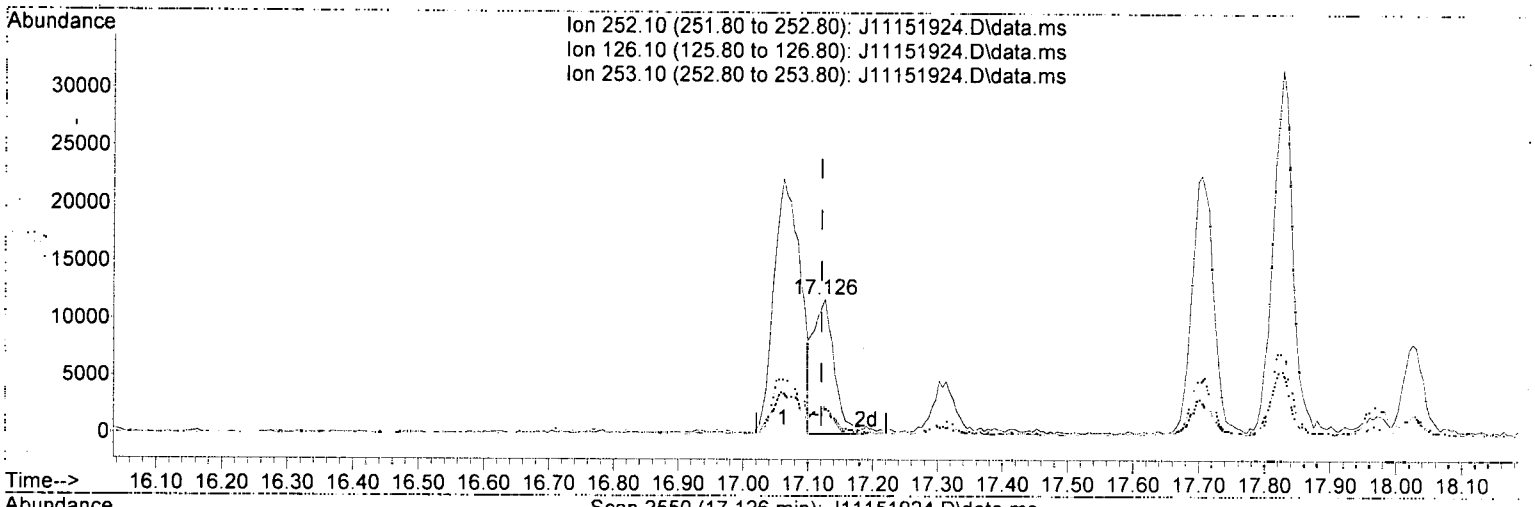
Ion	Exp%	Act%
252.10	100.00	100.00
126.00	16.50	15.86
253.10	21.90	21.08
0.00	0.00	0.00

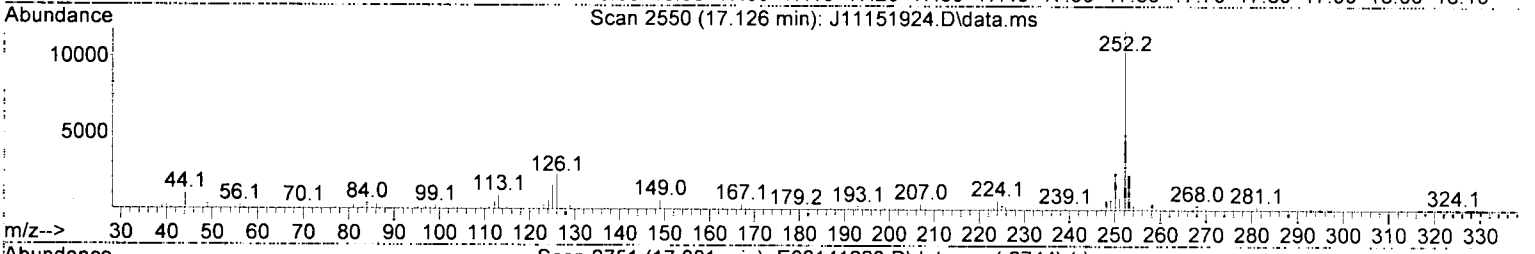
AMS 11/18/19

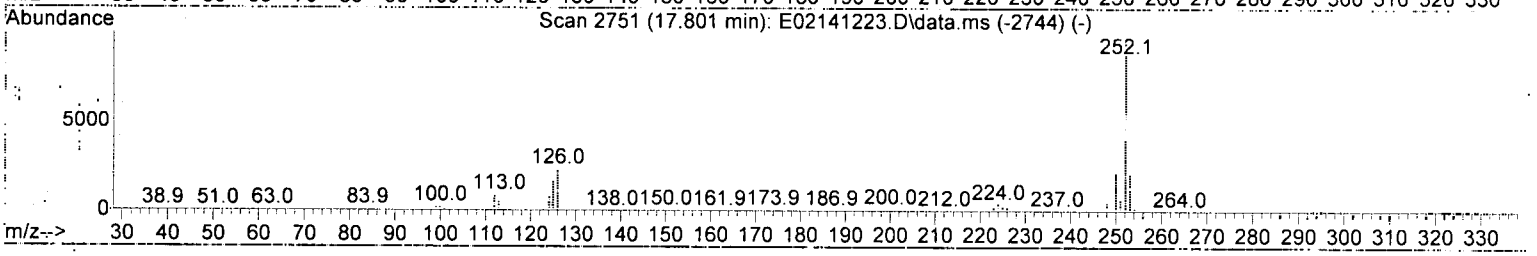
Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151924.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.126min (+ 0.005) 57.67 ng/ml m

response 26700

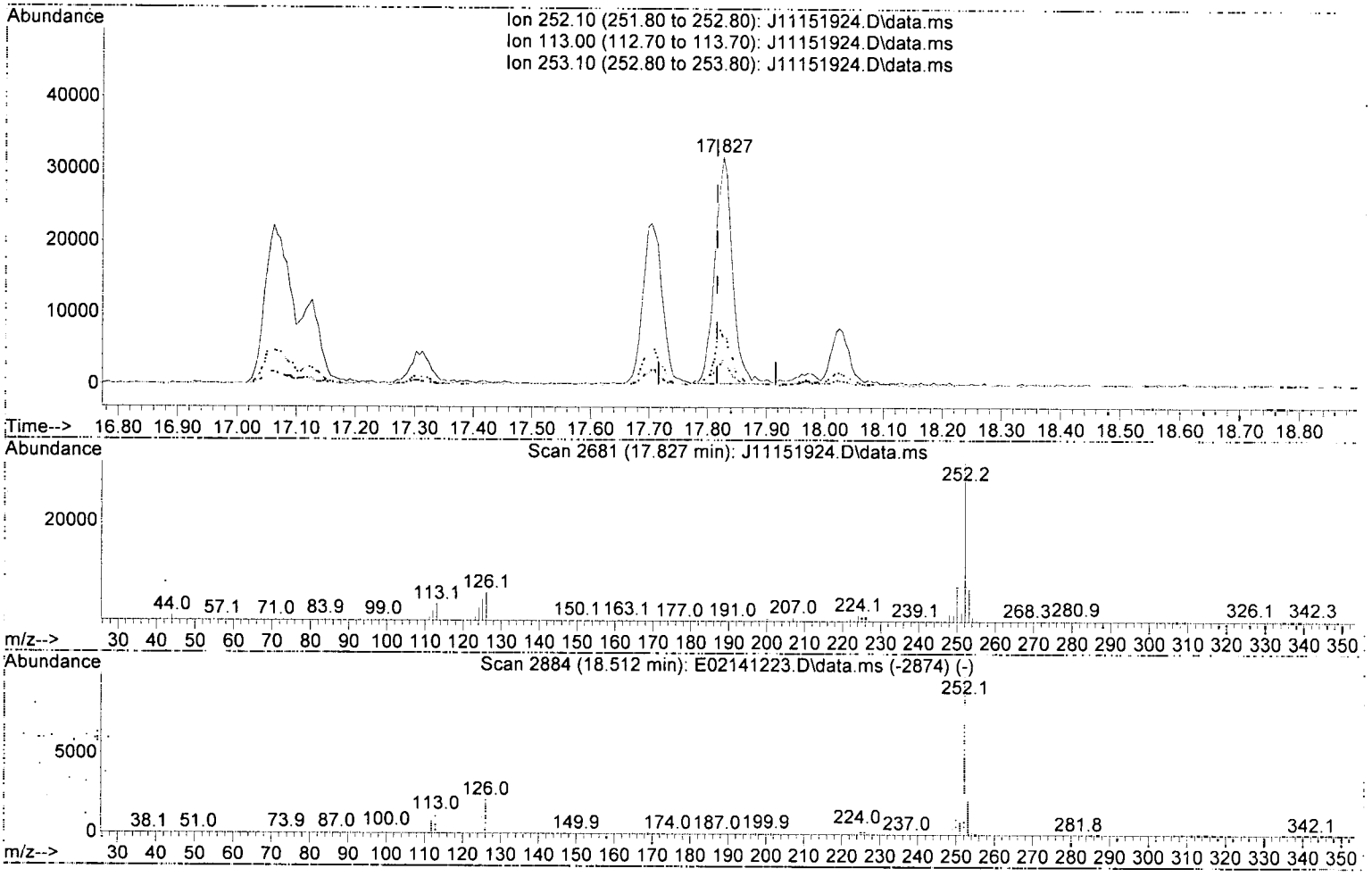
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	18.33
253.10	22.00	19.50
0.00	0.00	0.00

AMS 11/18/19 MOS

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(92) Benzo(a)pyrene (T)

17.827min (+ 0.011) 148.34 ng/ml

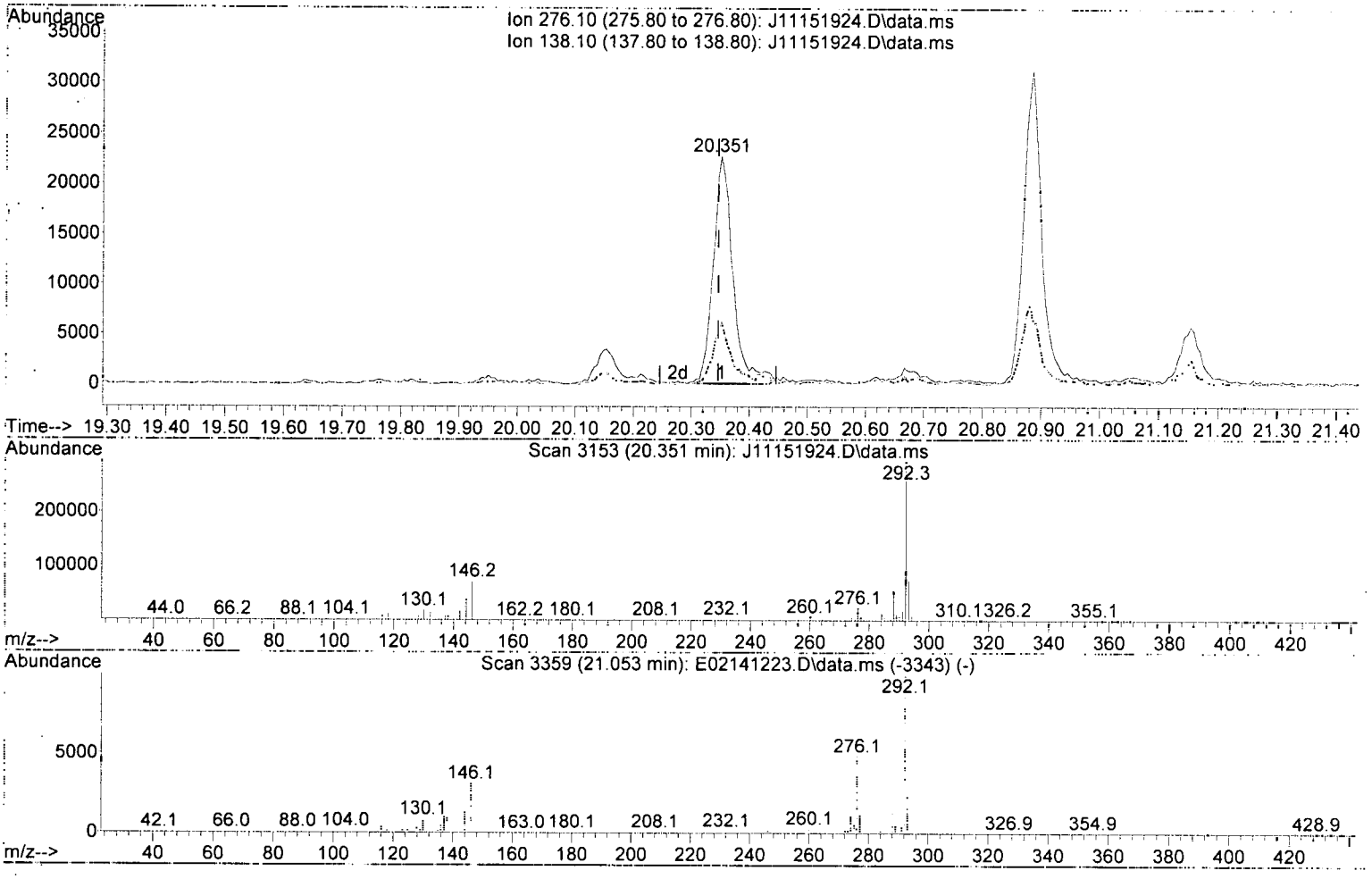
response 66053

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	9.90	10.76
253.10	22.50	20.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

20.351min (+ 0.005) 121.95 ng/ml

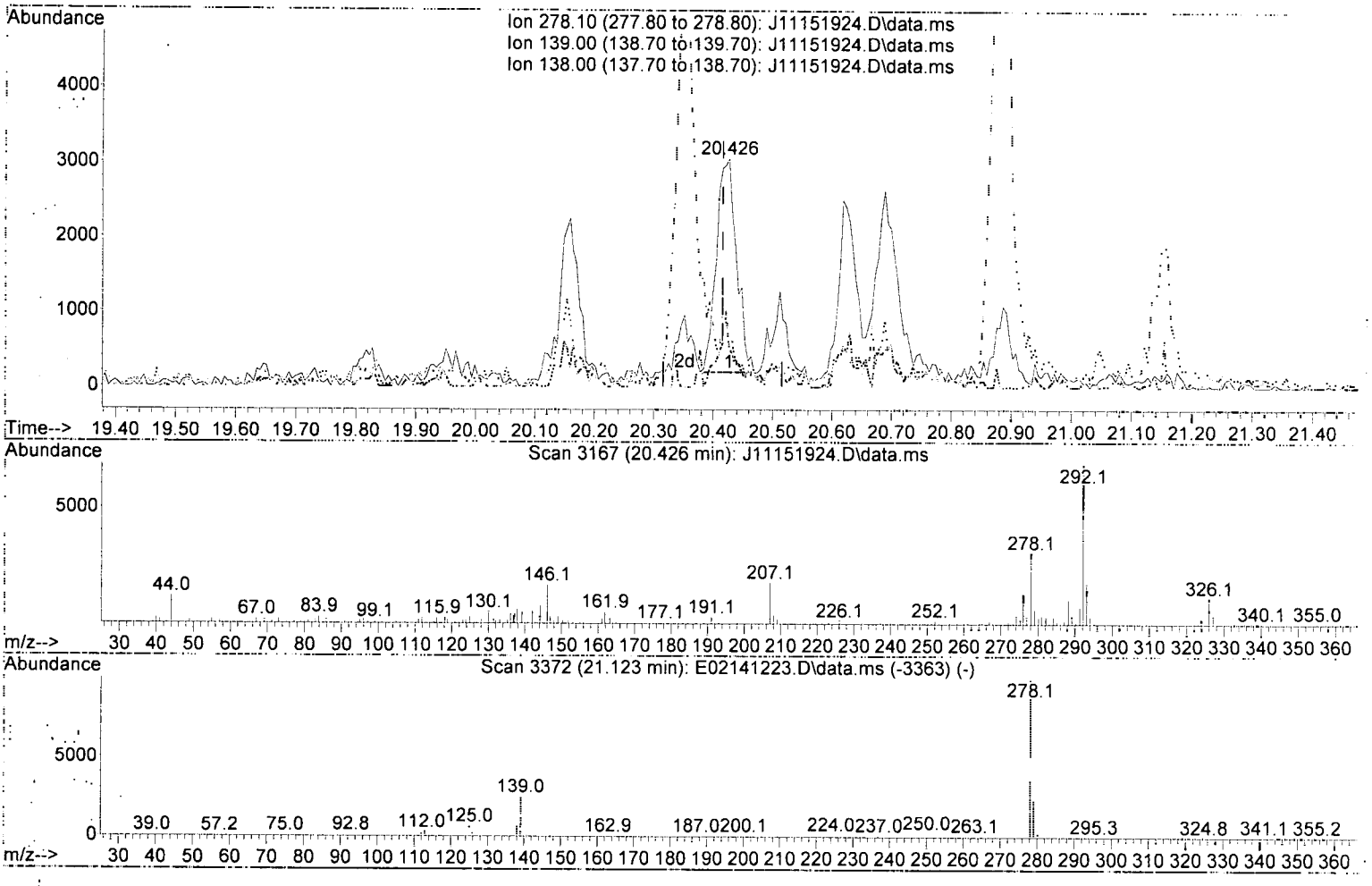
response 53959

Ion	Exp%	Act%
276.10	100.00	100.00
138.10	22.50	27.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(96) Dibenz(a,h)anthracene (T)

20.426min (+ 0.011) 16.66 ng/ml

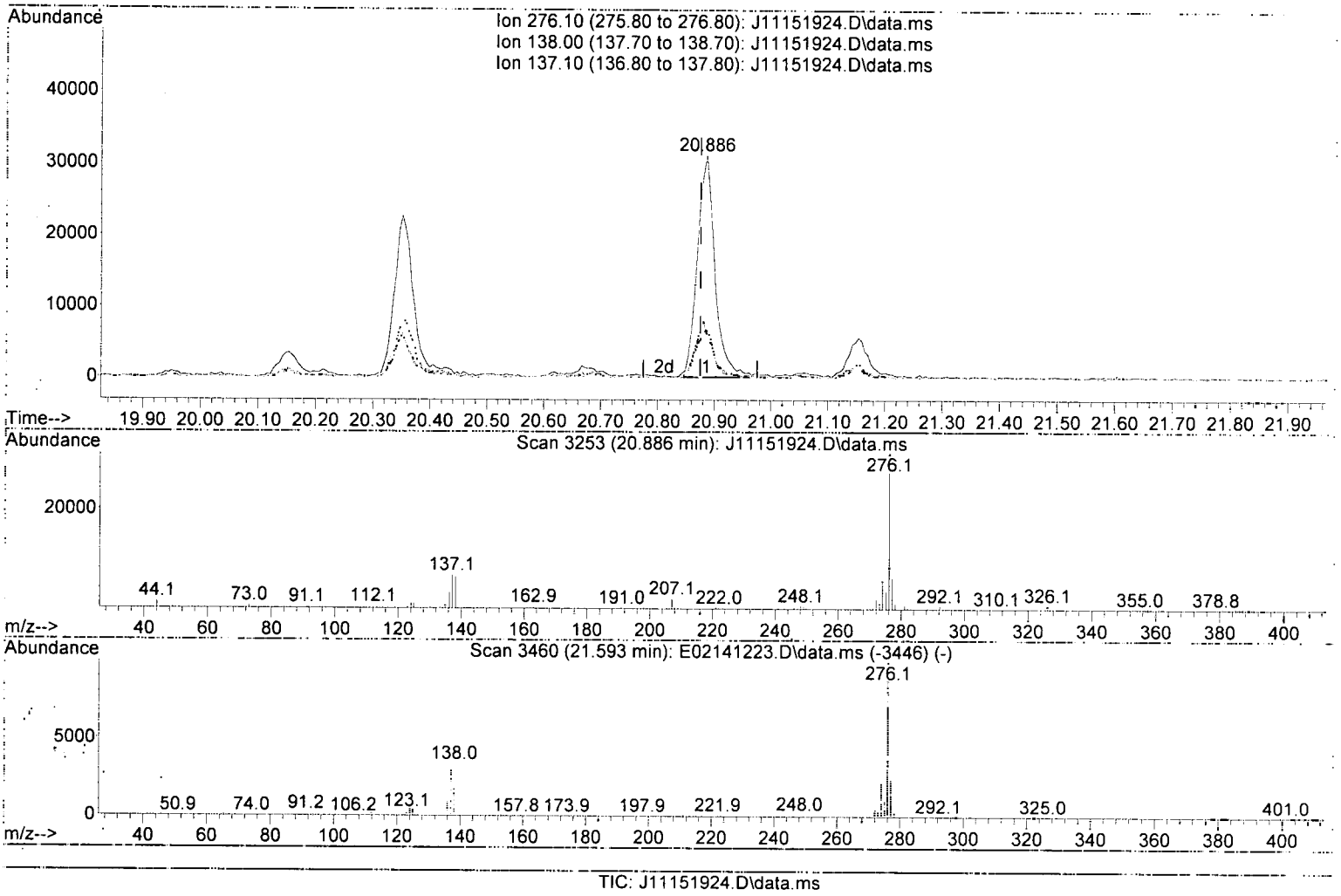
response 6767

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	18.70	17.29
138.00	12.80	20.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J11151924.D\data.ms

(97) Benzo(g,h,i)perylene (T)

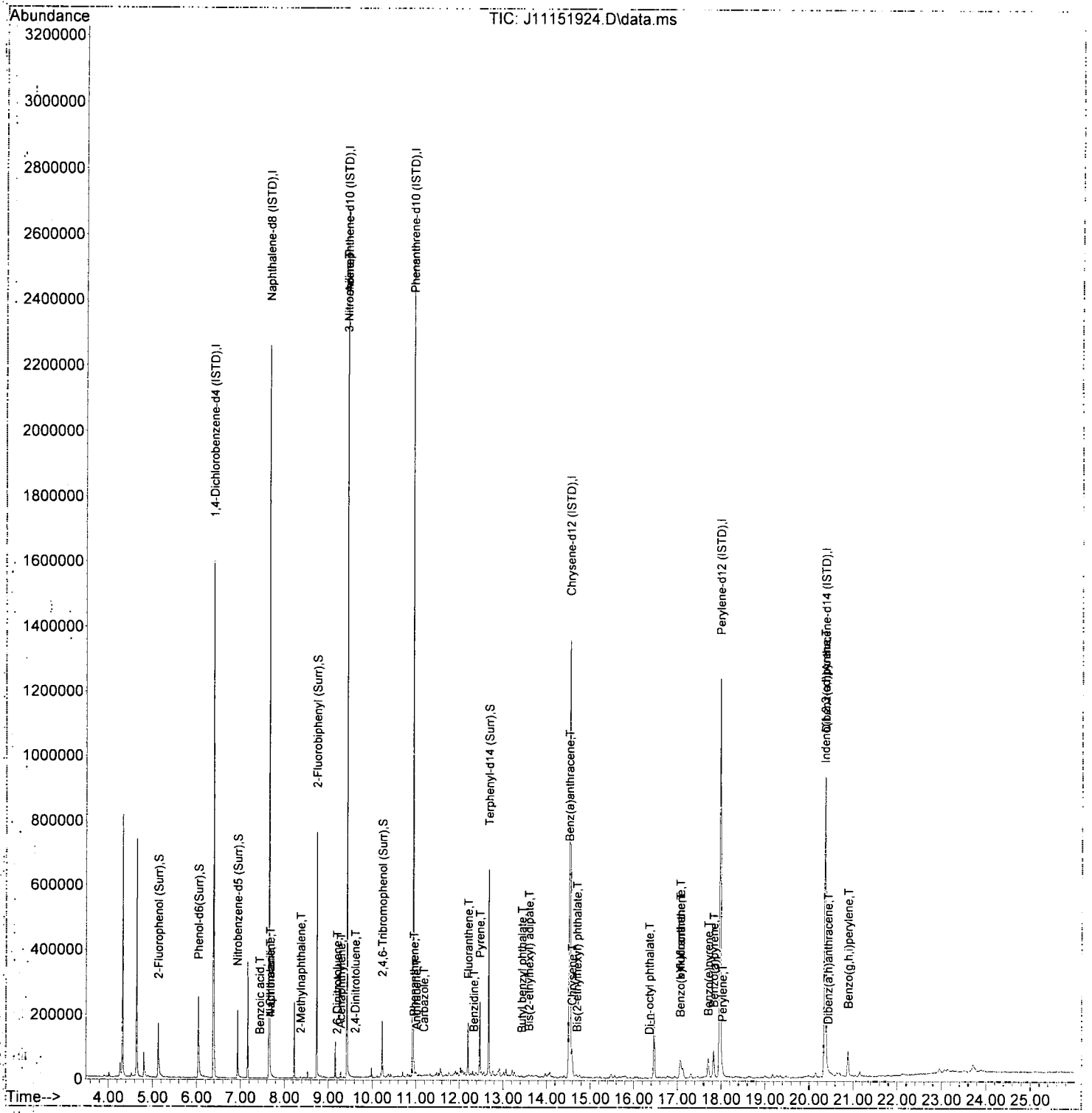
20.886min (+ 0.011) 158.43 ng/ml

response 67332

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	24.50	20.01
137.10	22.20	21.62
0.00	0.00	0.00

Data Path : T:\data\2019-11\9K15038\
Data File : J11151924.D
Acq On : 15 Nov 2019 9:56 pm
Operator : JK/ AMS/ DTH
Sample : A9K0332-08RE1@4
Misc : 4x, 8270D PAH/2,4,5-TCP/BEHP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 18 08:30:44 2019
Quant Method : T:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



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

Semivolatile Organic Compounds by EPA 8270D
Benchsheet & Analysis Sequence Data

Sequence 9K15018 (QC Only)

APEX LABORATORIES

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	9K15018	Instrument:	SV-GCMS10
Date:	11/15/19 08:20	Calibration:	A9I2405

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K15018-TUN1	Soil	QC	QC			A19I086	A19K083
2	9K15018-CCV1	Soil	QC	QC			A19I086	A19G243
3	9K15018-IBL1	Soil	QC	QC			A19I086	
4	9K15018-TUN2	Soil	QC	QC			A19I086	A19K083
5	9K15018-CCV2	Soil	QC	QC			A19I086	A19G243
6	9K15018-CCB1	Soil	QC	QC			A19I086	
7	9110811-BLK3	Soil	QC	QC		9110811	A19I086	
8	9110825-BLK1	Solid	QC	QC		9110825	A19I086	
9	9110825-BS1	Solid	QC	QC		9110825	A19I086	
10	A9K0403-01	Solid	8270D LL Full List			9110825	A19I086	
11	9110825-DUP1	Solid	QC	QC		9110825	A19I086	
12	9110781-BLK2	Soil	QC	QC		9110781	A19I086	

Data Entered By: DTH 11/15/19

Comments:

Data Reviewed By: GJd 11/15/19

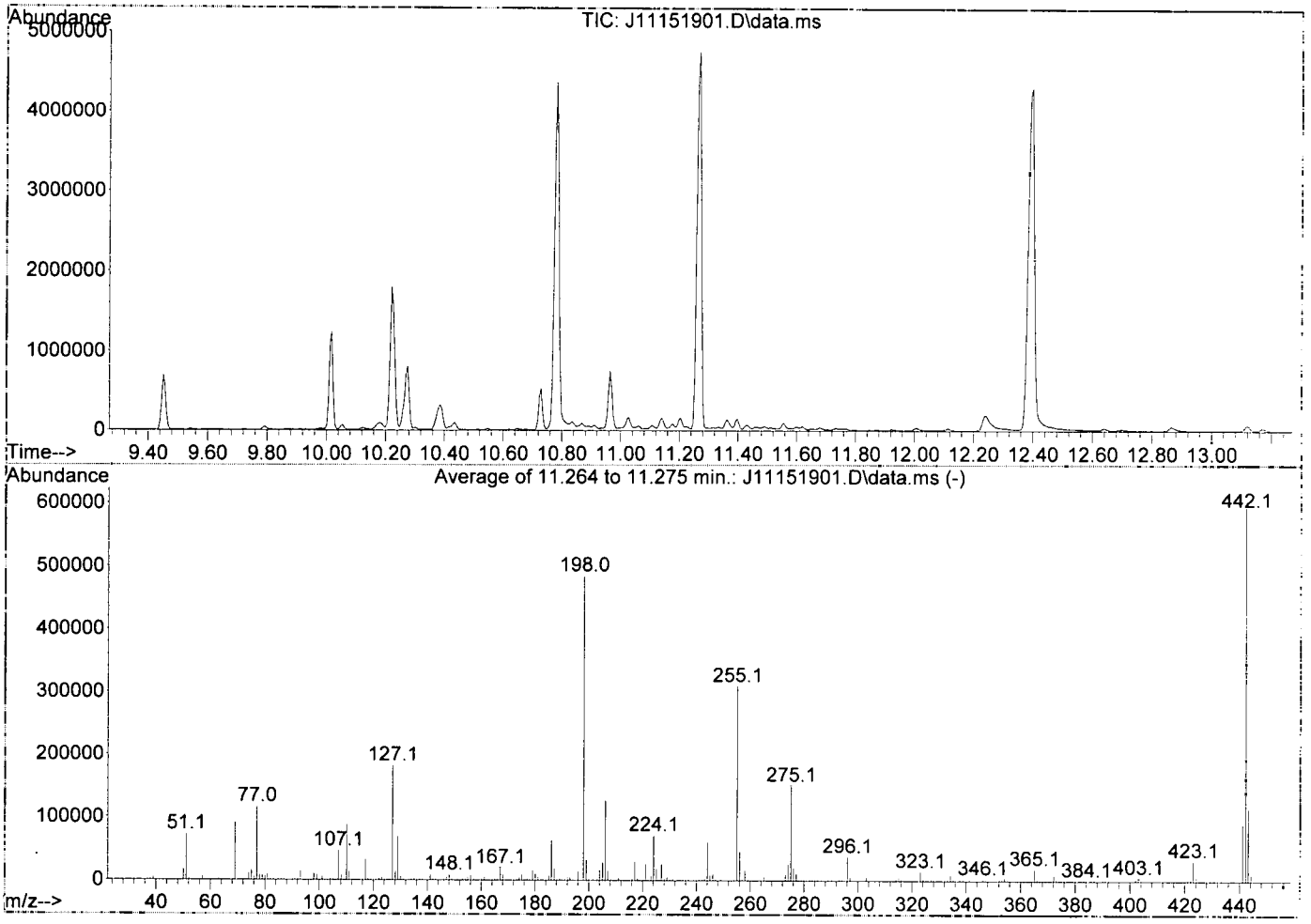
Data Path : R:\data\2019-11\9K15018\
Data File : J11151901.D
Acq On : 15 Nov 2019 8:26 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Q14

Integration File: rteint.p

Method : R:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Nov 11 08:41:49 2019

DTH 11/15/19



AutoFind: Scans 1454, 1455, 1456; Background Corrected with Scan 1449

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.3	1168	PASS
69	198	0.01	100	18.9	91555	PASS
70	69	0.00	2	0.2	185	PASS
197	198	0.00	2	0.2	789	PASS
198	198	100	100	100.0	484235	PASS
199	198	5	9	6.9	33179	PASS
365	198	1	100	3.8	18485	PASS
441	443	0.01	150	77.8	90005	PASS
442	198	0.10	200	122.7	594005	PASS
443	442	15	24	19.5	115664	PASS

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151901.D
Acq On : 15 Nov 2019 8:26 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:11:02 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10

QA DTH 11/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.413	150	138977	2.00	ug/mL	0.00
2) Naphthalene-d8	7.675	136	323132	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.451	162	153300	2.00	ug/mL	0.00
5) Phenanthrene-d10	10.964	188	276037	2.00	ug/mL	0.00
11) Chrysene-d12	14.564	240	221025	2.00	ug/mL	-0.02
12) Perylene-d12	16.875	264	207106	2.00	ug/mL	#-0.04
Target Compounds						Qvalue
4) Pentachlorophenol	10.782	266	665678	45.98	ug/mL	83
6) DFTPP	11.269	442	681518	30.58	ug/mL	81
7) Benzidine	12.398	184	2823189	28.75	ug/mL	96
8) 4,4-DDE	12.638	TIC	32207	No Calib		
9) 4,4-DDD	13.120	TIC	88517	No Calib		
10) 4,4-DDT	13.644	TIC	8534156	30.15	ug/mL	94

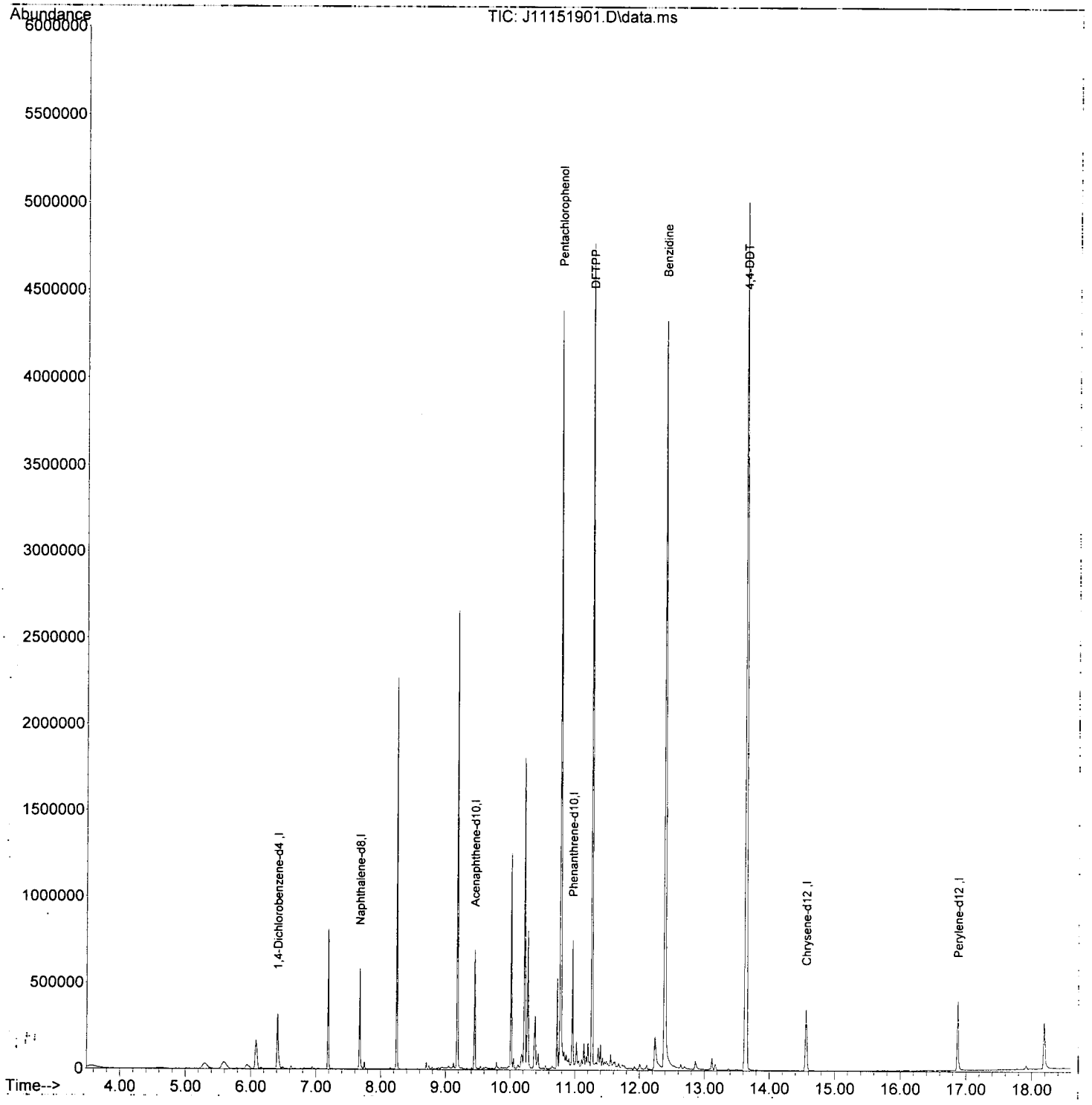
(#) = qualifier out of range (m) = manual integration (+) = signals summed

J

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151901.D
Acq On : 15 Nov 2019 8:26 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN1
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:11:02 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151902.D
Acq On : 15 Nov 2019 8:53 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:35:02 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Q14
DTH 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	338978	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1199895	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	630304	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.937	188	1158177	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	1143798	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.965	264	1159589	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.356	292	1012297	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	213806	1039.39 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	231014	877.39 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	174225	852.95 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.734	172	521625	1057.46 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	69035	989.20 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	566223	1074.21 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.738	74	100118m	775.39 ng/ml	
3) Pyridine	3.760	79	170768	775.77 ng/ml	93
6) Phenol	6.049	94	245176	846.85 ng/ml	98
7) Aniline	6.065	93	144288	577.65 ng/ml	88
8) Bis(2-chloroethyl) ether	6.129	93	255895	979.37 ng/ml	95
9) 2-Chlorophenol	6.188	128	235509	981.20 ng/ml	95
10) 1,3-Dichlorobenzene	6.332	146	277510	1028.64 ng/ml	97
11) 1,4-Dichlorobenzene	6.402	146	266919	1006.65 ng/ml	98
12) Benzyl alcohol	6.525	108	118642	839.48 ng/ml	91
13) 1,2-Dichlorobenzene	6.551	146	262157	1002.53 ng/ml	98
14) 2-Methylphenol	6.637	107	161632	925.74 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	164673	714.15 ng/ml	85
16) N-Nitrosodi-n-propylamine	6.781	70	120196	792.33 ng/ml	92
17) 3+4-Methylphenol	6.787	107	201575	931.07 ng/ml	98
18) Hexachloroethane	6.888	201	94041	1154.29 ng/ml	92
20) Nitrobenzene	6.947	77	176446	852.59 ng/ml	92
22) Isophorone	7.183	82	351222	918.14 ng/ml	98
23) 2-Nitrophenol	7.268	139	146815	1284.58 ng/ml	87
24) 2,4-Dimethylphenol	7.311	122	180383	1121.26 ng/ml	96
25) Bis(2-chloroethoxy) me...	7.397	93	227569	978.55 ng/ml	98
26) Benzoic acid	7.413	105	146526	2252.71 ng/ml	94
27) 2,4-Dichlorophenol	7.509	162	187384	1041.88 ng/ml	97
28) 1,2,4-Trichlorobenzene	7.589	180	230739	1098.73 ng/ml	100
29) Naphthalene	7.669	128	657557	1041.73 ng/ml	99
30) 4-Chloroaniline	7.734	127	148893	752.64 ng/ml	96
31) Hexachlorobutadiene	7.803	225	126325	1113.18 ng/ml	100
32) 4-Chloro-3-methylphenol	8.215	107	168311	1057.12 ng/ml	91
33) 2-Methylnaphthalene	8.365	142	471914	1070.03 ng/ml	99
34) 1-Methylnaphthalene	8.466	142	439595	1029.63 ng/ml	98
36) Hexachlorocyclopentadiene	8.536	237	127370	1306.79 ng/ml	100
37) 2,4,6-Trichlorophenol	8.653	196	140126	1146.29 ng/ml	99
38) 2,4,5-Trichlorophenol	8.691	198	135313	1122.89 ng/ml	99
39) 1,1'-Biphenyl	8.835	154	556613	1027.42 ng/ml	99
41) 2-Chloronaphthalene	8.857	162	431406	1102.59 ng/ml	97
42) 2-Nitroaniline	8.958	138	133233	1136.47 ng/ml	85

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151902.D
Acq On : 15 Nov 2019 8:53 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:35:02 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

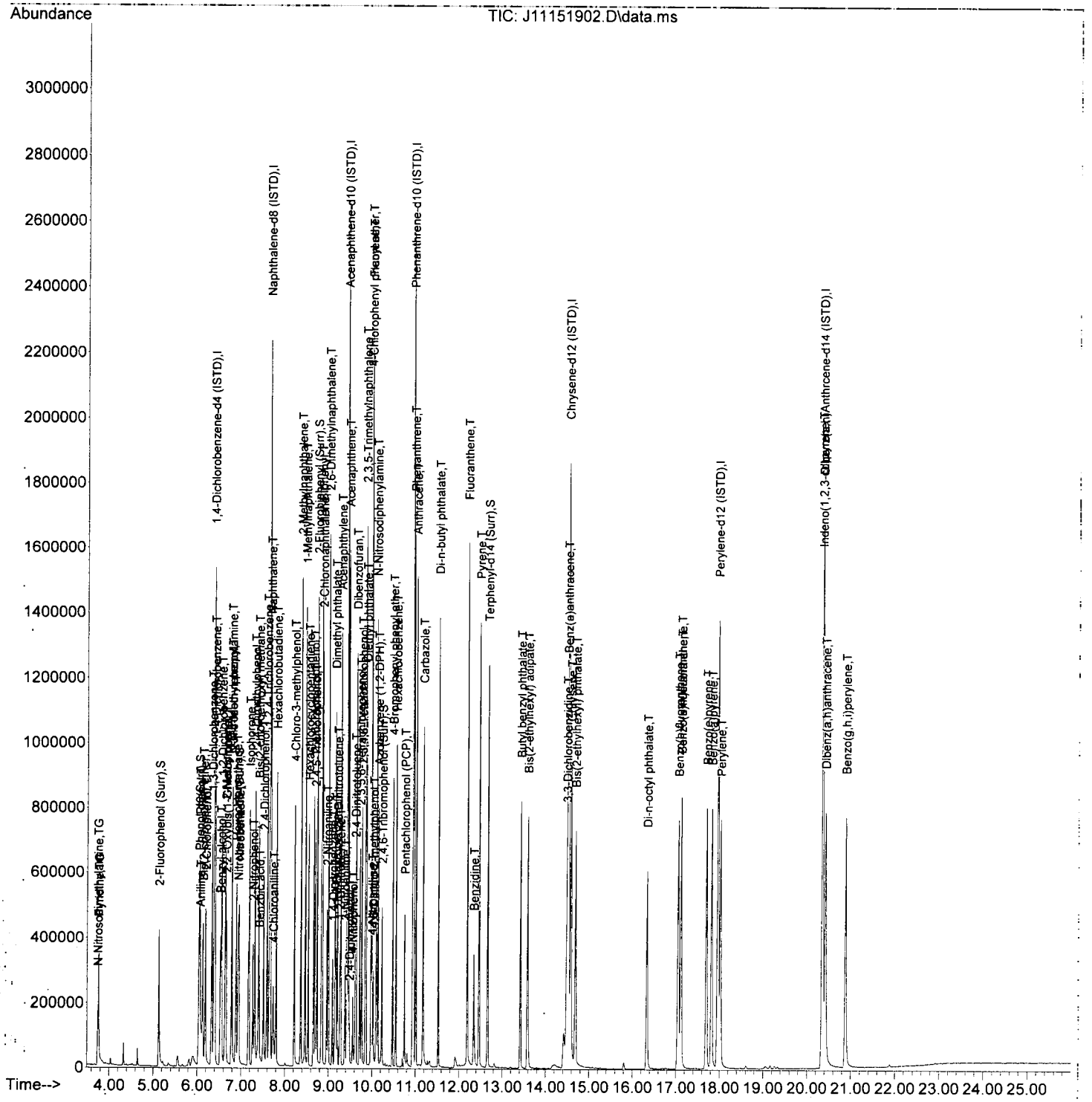
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	8.996	156	408929	1028.91	ng/ml	98
44) 1,4-Dinitrobenzene	9.092	168	63162	1268.44	ng/ml	75
45) Dimethyl phthalate	9.146	163	489039	1074.37	ng/ml	99
46) 1,3-Dinitrobenzene	9.172	168	73157	1160.77	ng/ml	86
47) 2,6-Dinitrotoluene	9.204	165	110711	1079.85	ng/ml	87
48) 1,2-Dinitrobenzene	9.258	168	50298	1090.71	ng/ml	83
49) Acenaphthylene	9.279	152	674378	1052.50	ng/ml	99
50) 3-Nitroaniline	9.376	138	84858	1084.09	ng/ml	90
51) Acenaphthene	9.456	153	425541	1011.39	ng/ml	100
52) 2,4-Dinitrophenol	9.483	184	26560	1091.51	ng/ml	86
53) 4-Nitrophenol	9.552	139	63669	1027.83	ng/ml	93
54) 2,4-Dinitrotoluene	9.611	165	141408	1102.75	ng/ml	88
55) Dibenzofuran	9.632	168	600494	1070.65	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.718	232	106233	1097.53	ng/ml	93
57) 2,3,4,6-Tetrachlorophenol	9.761	232	115712	1091.85	ng/ml	95
58) Diethyl phthalate	9.862	149	449427	1072.60	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	9.846	170	396261	1109.48	ng/ml	94
60) Fluorene	9.980	166	455154	1031.20	ng/ml	99
61) 4-Chlorophenyl phenyl ...	9.975	204	230472	1071.06	ng/ml	94
62) 4-Nitroaniline	9.996	138	83537	1233.29	ng/ml	93
63) 4,6-Dinitro-2-methylph...	10.028	198	55401	1197.80	ng/ml	91
65) N-Nitrosodiphenylamine	10.098	169	388347	1087.49	ng/ml	99
66) Azobenzene (1,2-DPH)	10.135	77	315257	872.37	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.472	248	139815	1069.84	ng/ml	97
69) Hexachlorobenzene	10.552	284	163641	1043.76	ng/ml	96
70) Pentachlorophenol (PCP)	10.750	266	69971	900.14	ng/ml	97
71) Phenanthrene	10.959	178	653584	1005.91	ng/ml	100
72) Anthracene	11.007	178	666826	1067.67	ng/ml	100
73) Carbazole	11.173	167	564629	1235.87	ng/ml	98
74) Di-n-butyl phthalate	11.526	149	734417	1072.24	ng/ml	99
75) Fluoranthene	12.194	202	740810	1112.44	ng/ml	98
76) Benzidine	12.344	184	210988	1355.11	ng/ml	99
77) Pyrene	12.467	202	749340	1105.72	ng/ml	99
80) Butyl benzyl phthalate	13.419	149	317907	1081.90	ng/ml	89
81) Bis(2-ethylhexyl) adipate	13.585	129	270921	1021.25	ng/ml	99
82) 3,3-Dichlorobenzidine	14.484	252	159385	1721.83	ng/ml	96
83) Benz(a)anthracene	14.500	228	663771	1039.40	ng/ml	97
84) Chrysene	14.580	228	625180	1044.65	ng/ml	98
85) Bis(2-ethylhexyl) phth...	14.687	149	451963	1098.50	ng/ml	98
87) Di-n-octyl phthalate	16.340	149	687306	1031.54	ng/ml	98
88) Benzo(b)fluoranthene	17.056	252	676529	1057.46	ng/ml	97
89) Benzo(k)fluoranthene	17.120	252	667631	1036.17	ng/ml	99
90) Benzo(b+k)fluoranthene	17.120	252	1371472	2087.95	ng/ml	99
91) Benzo(e)pyrene	17.703	252	676964	1135.85	ng/ml	99
92) Benzo(a)pyrene	17.821	252	632369	1088.33	ng/ml	98
93) Perylene	18.024	252	567059	1084.33	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.346	276	598199	999.31	ng/ml	96
96) Dibenz(a,h)anthracene	20.421	278	582652	1060.13	ng/ml	99
97) Benzo(g,h,i)perylene	20.886	276	636212	1106.49	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151902.D
Acq On : 15 Nov 2019 8:53 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:35:02 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

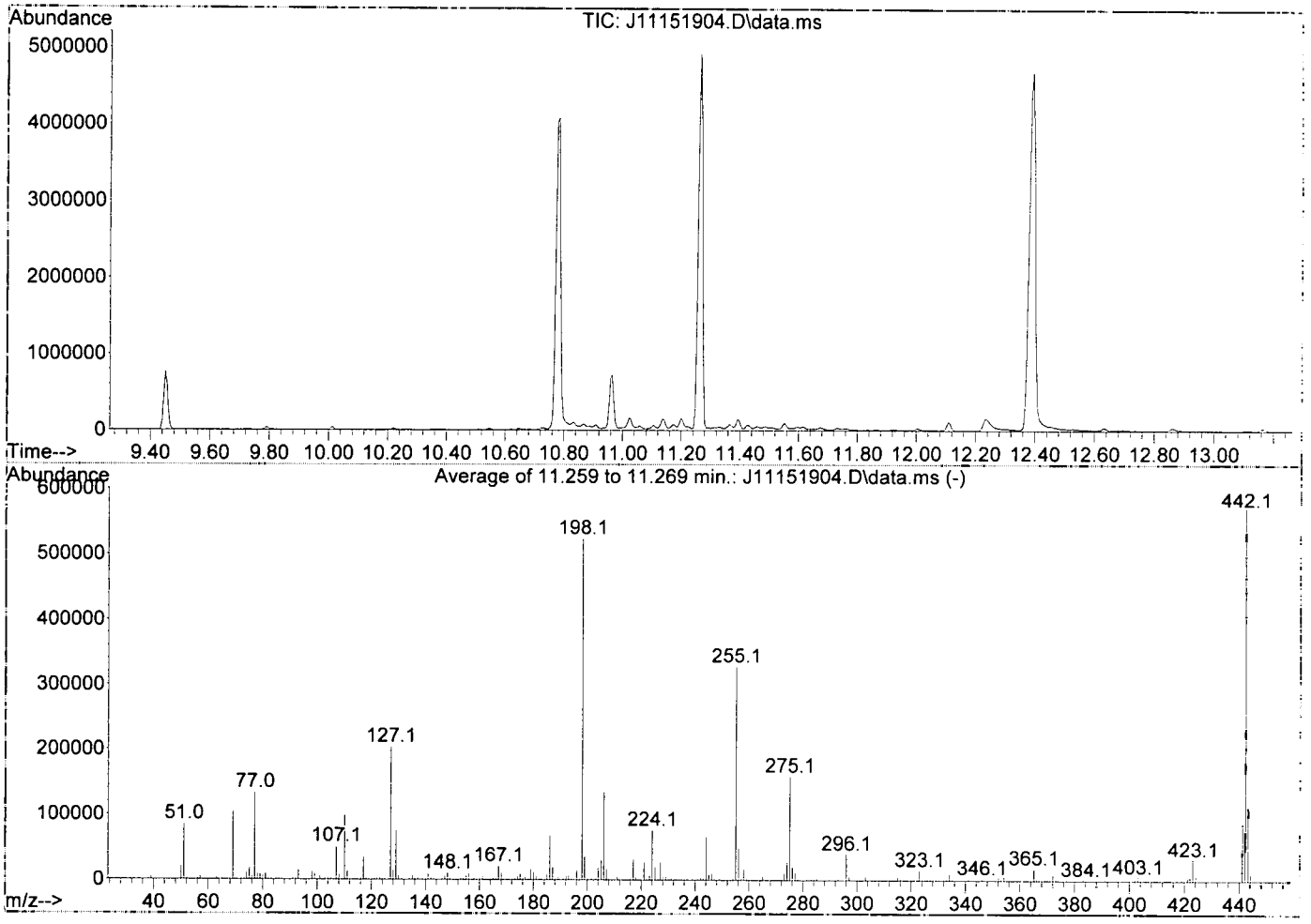


Data Path : R:\data\2019-11\9K15018\
Data File : J11151904.D
Acq On : 15 Nov 2019 10:14 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

DTH 11/15/19

Integration File: rteint.p

Method : R:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Nov 11 08:41:49 2019



AutoFind: Scans 1453, 1454, 1455; Background Corrected with Scan 1448

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.3	1382	PASS
69	198	0.01	100	20.0	104914	PASS
70	69	0.00	2	0.3	343	PASS
197	198	0.00	2	0.1	710	PASS
198	198	100	100	100.0	523435	PASS
199	198	5	9	7.0	36456	PASS
365	198	1	100	3.5	18517	PASS
441	443	0.01	150	75.3	86683	PASS
442	198	0.10	200	109.5	573269	PASS
443	442	15	24	20.1	115085	PASS

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151904.D
Acq On : 15 Nov 2019 10:14 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:29:00 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

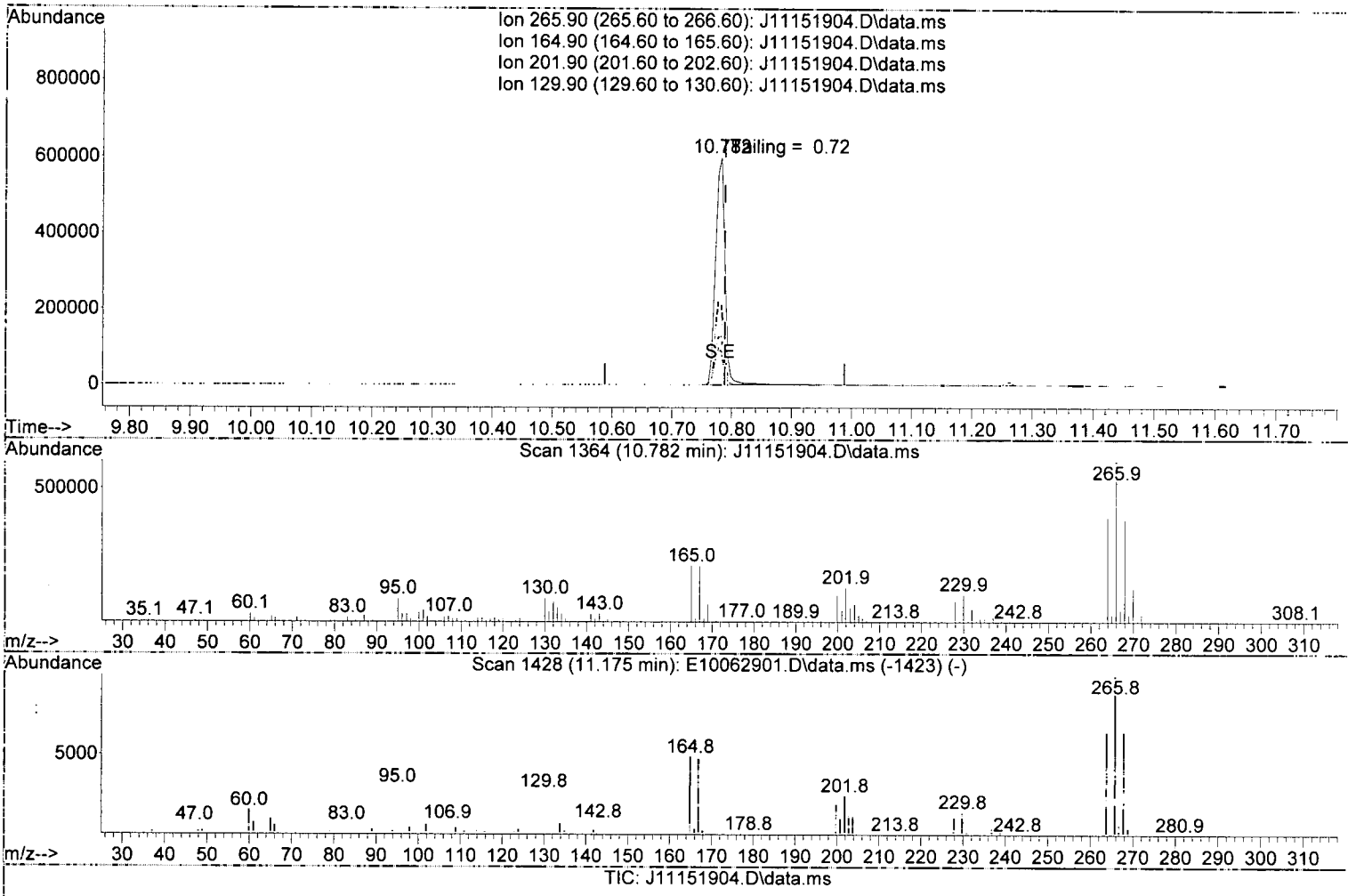
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.413	150	117603	2.00	ug/mL	0.00
2) Naphthalene-d8	7.675	136	325258	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.451	162	170217	2.00	ug/mL	0.00
5) Phenanthrene-d10	10.964	188	292610	2.00	ug/mL	0.00
11) Chrysene-d12	14.559	240	231401	2.00	ug/mL	-0.02
12) Perylene-d12	16.848	264	219489	2.00	ug/mL	#-0.06
Target Compounds						Qvalue
4) Pentachlorophenol	10.782	266	641931	39.94	ug/mL	81
6) DFTPP	11.269	442	670513	28.38	ug/mL	69
7) Benzidine	12.392	184	2911272	27.97	ug/mL	96
8) 4,4-DDE	12.633	TIC	35341	No Calib		
9) 4,4-DDD	13.114	TIC	13823	No Calib		
10) 4,4-DDT	13.639	TIC	8682808	28.94	ug/mL	94

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

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151904.D
Acq On : 15 Nov 2019 10:14 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:29:00 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(4) Pentachlorophenol

10.782min (-0.005) 39.94 ug/mL

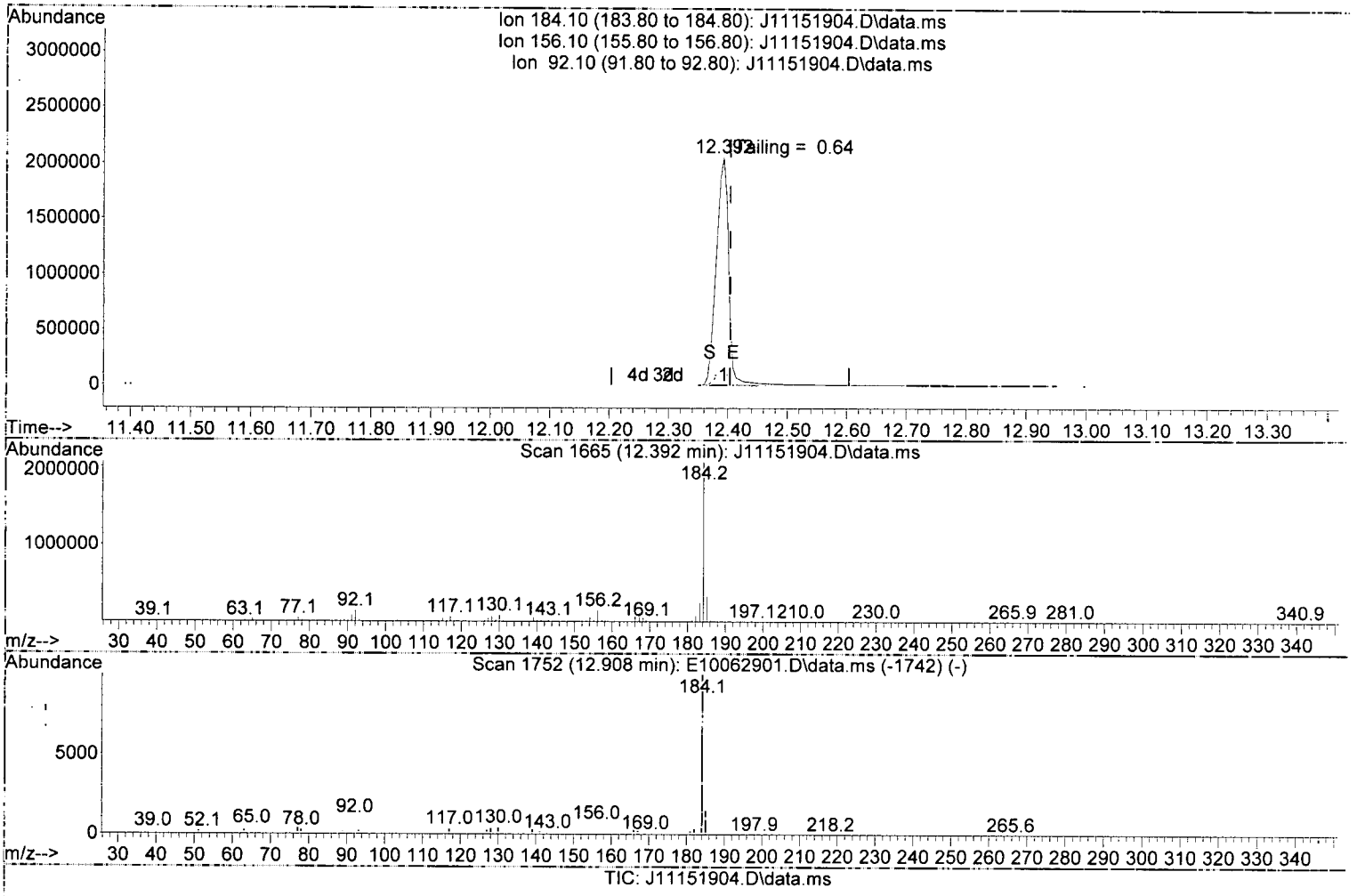
response 641931

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	35.06
201.90	25.80	21.33
129.90	27.30	14.74

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151904.D
Acq On : 15 Nov 2019 10:14 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:29:00 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(7) Benzidine

12.392min (-0.011) 27.97 ug/mL

response 2911272

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.10
92.10	8.20	6.82
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
9K15018-TUN2
SV-GCMS5

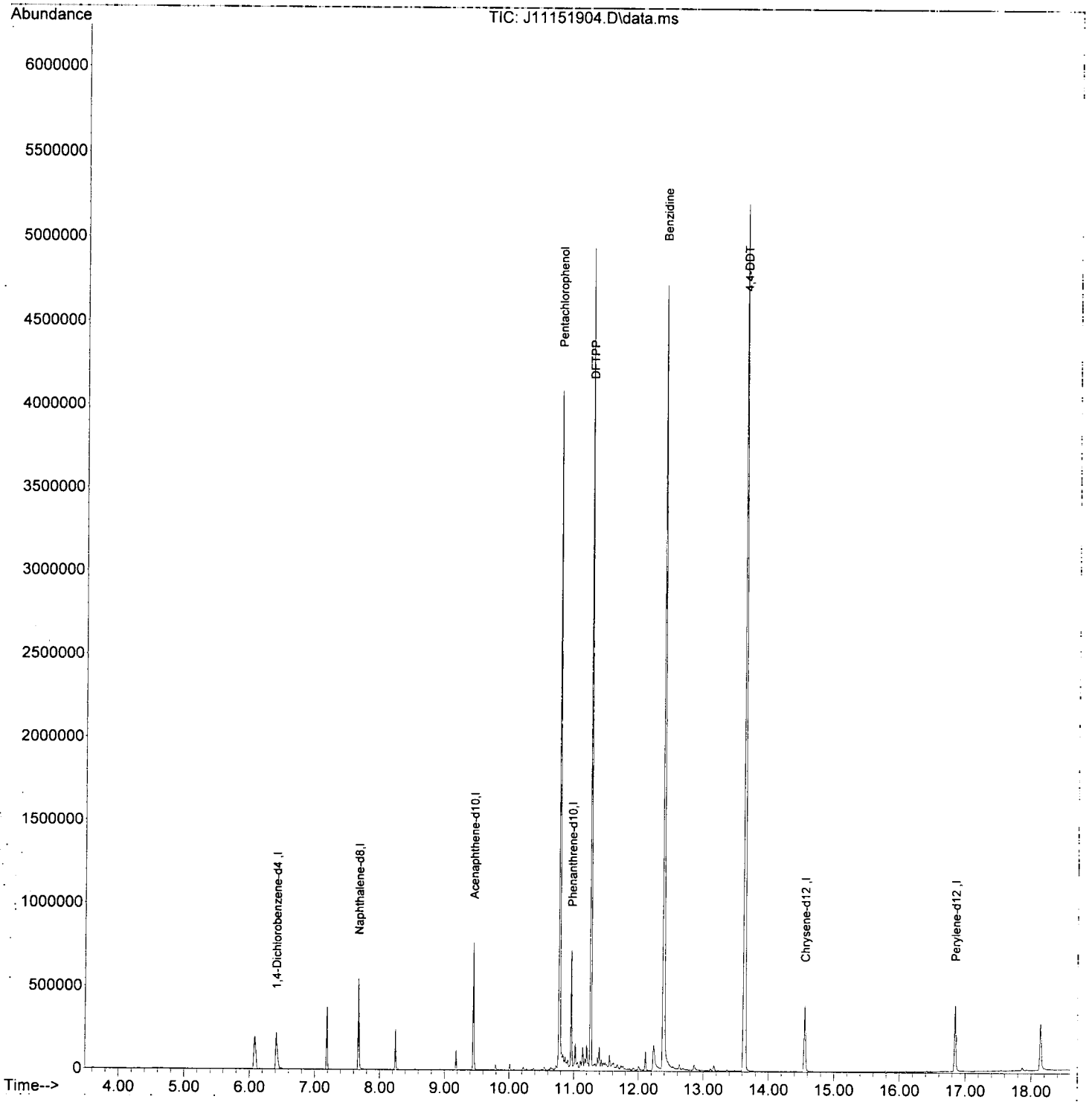
First Column Area Counts		Percent Breakdown	
DDE	35341		
DDD	13823		
DDT	8682808	0.56	PASS

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151904.D
Acq On : 15 Nov 2019 10:14 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-TUN2
Misc : 1x, A19K083 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Nov 15 15:29:00 2019
Quant Method : R:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Nov 11 08:41:49 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

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	113	0.00
2	TG	N-Nitrosodimethylamine	1000.000	939.097	6.1	109	-0.07
3	TG	Pyridine	1000.000	882.255	11.8	100	-0.08
4	S	2-Fluorophenol (Surr)	1000.000	1028.665	-2.9	111	-0.02
5	S	Phenol-d6(Surr)	1000.000	918.348	8.2	95	0.00
6	T	Phenol	1000.000	881.120	11.9	92	0.00
7	T	Aniline	1000.000	525.155	47.5#	65	-0.01
8	T	Bis(2-chloroethyl) ether	1000.000	1076.037	-7.6	111	0.00
9	T	2-Chlorophenol	1000.000	996.024	0.4	105	0.00
10	T	1,3-Dichlorobenzene	1000.000	1031.328	-3.1	114	-0.01
11	T	1,4-Dichlorobenzene	1000.000	1005.224	-0.5	109	-0.01
12	T	Benzyl alcohol	1000.000	915.587	8.4	98	0.00
13	T	1,2-Dichlorobenzene	1000.000	1033.246	-3.3	112	0.00
14	T	2-Methylphenol	1000.000	979.437	2.1	99	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	745.657	25.4#	79	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	864.807	13.5	90	0.00
17	T	3+4-Methylphenol	1000.000	1004.190	-0.4	99	0.00
18	T	Hexachloroethane	1000.000	1123.232	-12.3	126	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	935.294	6.5	96	0.00
20	T	Nitrobenzene	1000.000	903.671	9.6	94	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	106	0.00
22	T	Isophorone	1000.000	930.585	6.9	95	0.00
23	T	2-Nitrophenol	1000.000	1138.098	-13.8	114	0.00
24	T	2,4-Dimethylphenol	1000.000	1078.717	-7.9	107	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	985.135	1.5	98	0.00
26	T	Benzoic acid	2000.000	2058.331	-2.9	129	0.00
27	T	2,4-Dichlorophenol	1000.000	1056.313	-5.6	111	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1092.347	-9.2	112	0.00
29	T	Naphthalene	1000.000	1039.321	-3.9	104	0.00
30	T	4-Chloroaniline	1000.000	726.659	27.3#	73	0.00
31	T	Hexachlorobutadiene	1000.000	1077.996	-7.8	109	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1057.732	-5.8	105	0.00
33	T	2-Methylnaphthalene	1000.000	1089.401	-8.9	107	0.00
34	T	1-Methylnaphthalene	1000.000	1048.567	-4.9	105	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	113	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1304.922	-30.5#	133	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1145.463	-14.5	124	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1135.991	-13.6	125	0.00
39	T	1,1'-Biphenyl	1000.000	1037.280	-3.7	110	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1049.130	-4.9	112	0.00
41	T	2-Chloronaphthalene	1000.000	1108.395	-10.8	117	0.00
42	T	2-Nitroaniline	1000.000	1176.658	-17.7	127	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1046.430	-4.6	111	0.00
44	T	1,4-Dinitrobenzene	1000.000	1359.585	-36.0#	161	0.00
45	T	Dimethyl phthalate	1000.000	1069.541	-7.0	113	0.00
46	T	1,3-Dinitrobenzene	1000.000	1186.033	-18.6	136	0.00
47	T	2,6-Dinitrotoluene	1000.000	1085.835	-8.6	119	0.00
48	T	1,2-Dinitrobenzene	1000.000	1119.589	-12.0	119	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	1050.417	-5.0	110	0.00
50	T	3-Nitroaniline	1000.000	1103.157	-10.3	118	0.00
51	T	Acenaphthene	1000.000	996.959	0.3	109	0.00
52	T	2,4-Dinitrophenol	1000.000	1061.830	-6.2	148	0.00
53	T	4-Nitrophenol	1000.000	1026.036	-2.6	113	0.00
54	T	2,4-Dinitrotoluene	1000.000	1110.022	-11.0	128	0.00
55	T	Dibenzofuran	1000.000	1077.458	-7.7	114	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1108.302	-10.8	122	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1091.100	-9.1	119	0.00
58	T	Diethyl phthalate	1000.000	1068.949	-6.9	110	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1098.659	-9.9	115	0.00
60	T	Fluorene	1000.000	1028.026	-2.8	111	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1046.100	-4.6	112	0.00
62	T	4-Nitroaniline	1000.000	1178.326	-17.8	132	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1163.785	-16.4	143	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	115	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1106.578	-10.7	119	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	881.683	11.8	94	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	993.454	0.7	112	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1086.448	-8.6	119	0.00
69	T	Hexachlorobenzene	1000.000	1043.390	-4.3	113	0.00
70	T	Pentachlorophenol (PCP)	1000.000	946.832	5.3	120	0.00
71	T	Phenanthrene	1000.000	1000.501	-0.1	112	0.00
72	T	Anthracene	1000.000	1059.296	-5.9	115	0.00
73	T	Carbazole	1000.000	1239.386	-23.9#	130	0.00
74	T	Di-n-butyl phthalate	1000.000	1053.383	-5.3	111	0.00
75	T	Fluoranthene	1000.000	1101.285	-10.1	115	0.00
76	T	Benzidine	2000.000	1196.697	40.2#	64	0.00
77	T	Pyrene	1000.000	1100.041	-10.0	115	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	116	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1092.364	-9.2	120	0.00
80	T	Butyl benzyl phthalate	1000.000	1062.330	-6.2	118	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1081.490	-8.1	123	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1593.356	20.3#	91	0.01
83	T	Benz(a)anthracene	1000.000	1037.891	-3.8	122	0.00
84	T	Chrysene	1000.000	1076.763	-7.7	123	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1065.487	-6.5	119	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	118	0.01
87	T	Di-n-octyl phthalate	1000.000	1029.980	-3.0	123	0.00
88	T	Benzo(b)fluoranthene	1000.000	1070.651	-7.1	125	0.00
89	T	Benzo(k)fluoranthene	1000.000	1059.411	-5.9	124	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2116.332	-5.8	124	0.00
91	T	Benzo(e)pyrene	1000.000	1139.425	-13.9	125	0.00
92	T	Benzo(a)pyrene	1000.000	1093.012	-9.3	126	0.00
93	T	Perylene	1000.000	1083.432	-8.3	126	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	120	0.01

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	991.563	0.8	122	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1090.013	-9.0	129	0.01
97 T	Benzo(g,h,i)perylene	1000.000	1111.907	-11.2	125	0.01

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DAT 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	318957	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1215749	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	657030	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.937	188	1220335	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	1211801	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.976	264	1227655	2000.00 ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	20.362	292	1064363	2000.00 ng/ml	0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.134	112	199102	1028.66 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	227516	918.35 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	179762	935.29 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.739	172	539460	1049.13 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	73058	993.45 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	610025	1092.36 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.749	74	114094m	939.10 ng/ml	
3) Pyridine	3.765	79	182737m	882.26 ng/ml	
6) Phenol	6.054	94	240031	881.12 ng/ml	96
7) Aniline	6.070	93	123428	525.15 ng/ml	98
8) Bis(2-chloroethyl) ether	6.129	93	264548	1076.04 ng/ml	96
9) 2-Chlorophenol	6.188	128	224946	996.02 ng/ml	95
10) 1,3-Dichlorobenzene	6.332	146	261803	1031.33 ng/ml	97
11) 1,4-Dichlorobenzene	6.402	146	250798	1005.22 ng/ml	97
12) Benzyl alcohol	6.525	108	122162	915.59 ng/ml	95
13) 1,2-Dichlorobenzene	6.557	146	254230	1033.25 ng/ml	97
14) 2-Methylphenol	6.637	107	160907	979.44 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	161782	745.66 ng/ml	83
16) N-Nitrosodi-n-propylamine	6.782	70	123442	864.81 ng/ml	94
17) 3+4-Methylphenol	6.787	107	204564	1004.19 ng/ml	96
18) Hexachloroethane	6.889	201	86106	1123.23 ng/ml	93
20) Nitrobenzene	6.947	77	175971	903.67 ng/ml	94
22) Isophorone	7.183	82	360686	930.58 ng/ml	99
23) 2-Nitrophenol	7.268	139	131163	1138.10 ng/ml	86
24) 2,4-Dimethylphenol	7.311	122	175832	1078.72 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.397	93	232128	985.14 ng/ml	99
26) Benzoic acid	7.413	105	127853	2058.33 ng/ml	94
27) 2,4-Dichlorophenol	7.509	162	192522	1056.31 ng/ml	97
28) 1,2,4-Trichlorobenzene	7.595	180	232429	1092.35 ng/ml	99
29) Naphthalene	7.669	128	664702	1039.32 ng/ml	100
30) 4-Chloroaniline	7.734	127	145668	726.66 ng/ml	94
31) Hexachlorobutadiene	7.803	225	123949	1078.00 ng/ml	96
32) 4-Chloro-3-methylphenol	8.215	107	170633	1057.73 ng/ml	91
33) 2-Methylnaphthalene	8.365	142	486807	1089.40 ng/ml	99
34) 1-Methylnaphthalene	8.466	142	453596	1048.57 ng/ml	98
36) Hexachlorocyclopentadiene	8.536	237	132581	1304.92 ng/ml	98
37) 2,4,6-Trichlorophenol	8.654	196	145959	1145.46 ng/ml	99
38) 2,4,5-Trichlorophenol	8.691	198	142729	1135.99 ng/ml	98
39) 1,1'-Biphenyl	8.835	154	585780	1037.28 ng/ml	98
41) 2-Chloronaphthalene	8.857	162	452064	1108.39 ng/ml	97
42) 2-Nitroaniline	8.958	138	144022	1176.66 ng/ml	88
43) 2,6-Dimethylnaphthalene	8.996	156	433525	1046.43 ng/ml	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

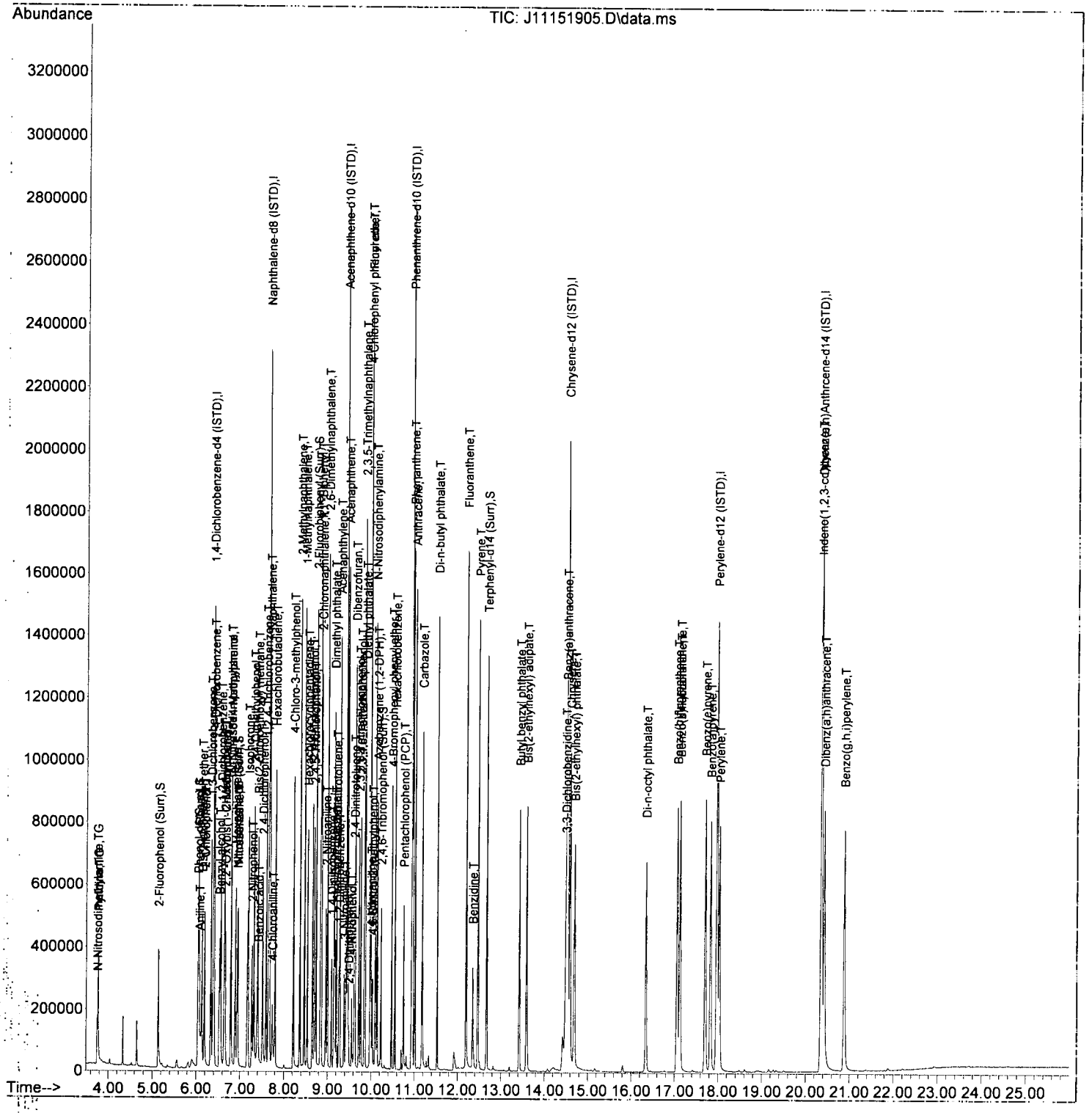
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.092	168	71144	1359.58	ng/ml	76
45) Dimethyl phthalate	9.146	163	507486	1069.54	ng/ml	99
46) 1,3-Dinitrobenzene	9.172	168	78038	1186.03	ng/ml	86
47) 2,6-Dinitrotoluene	9.204	165	116056	1085.84	ng/ml	87
48) 1,2-Dinitrobenzene	9.258	168	53819	1119.59	ng/ml	82
49) Acenaphthylene	9.279	152	701580	1050.42	ng/ml	100
50) 3-Nitroaniline	9.381	138	89686	1103.16	ng/ml	84
51) Acenaphthene	9.456	153	437255	996.96	ng/ml	100
52) 2,4-Dinitrophenol	9.483	184	26627	1061.83	ng/ml	86
53) 4-Nitrophenol	9.552	139	66236	1026.04	ng/ml	95
54) 2,4-Dinitrotoluene	9.611	165	148414	1110.02	ng/ml	88
55) Dibenzofuran	9.632	168	629939	1077.46	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.718	232	111874	1108.30	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.761	232	120534	1091.10	ng/ml	95
58) Diethyl phthalate	9.862	149	466888	1068.95	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	9.846	170	409033	1098.66	ng/ml	94
60) Fluorene	9.980	166	472995	1028.03	ng/ml	99
61) 4-Chlorophenyl phenyl ...	9.975	204	234645	1046.10	ng/ml	96
62) 4-Nitroaniline	9.996	138	83198	1178.33	ng/ml	92
63) 4,6-Dinitro-2-methylph...	10.028	198	55759	1163.78	ng/ml	89
65) N-Nitrosodiphenylamine	10.098	169	416372	1106.58	ng/ml	99
66) Azobenzene (1,2-DPH)	10.135	77	335722	881.68	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.477	248	149605	1086.45	ng/ml	93
69) Hexachlorobenzene	10.552	284	172362	1043.39	ng/ml	96
70) Pentachlorophenol (PCP)	10.750	266	77893	946.83	ng/ml	99
71) Phenanthrene	10.959	178	684957	1000.50	ng/ml	99
72) Anthracene	11.007	178	697100	1059.30	ng/ml	99
73) Carbazole	11.173	167	596010	1239.39	ng/ml	99
74) Di-n-butyl phthalate	11.526	149	760225	1053.38	ng/ml	99
75) Fluoranthene	12.194	202	772745	1101.29	ng/ml	98
76) Benzidine	12.344	184	193505	1196.70	ng/ml	99
77) Pyrene	12.467	202	785498	1100.04	ng/ml	99
80) Butyl benzyl phthalate	13.419	149	330415	1062.33	ng/ml	89
81) Bis(2-ethylhexyl) adipate	13.585	129	303960	1081.49	ng/ml	99
82) 3,3-Dichlorobenzidine	14.484	252	158430	1593.36	ng/ml	96
83) Benz(a)anthracene	14.500	228	702213	1037.89	ng/ml	97
84) Chrysene	14.585	228	682710	1076.76	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.687	149	464444	1065.49	ng/ml	98
87) Di-n-octyl phthalate	16.340	149	726471	1029.98	ng/ml	97
88) Benzo(b)fluoranthene	17.056	252	725329	1070.65	ng/ml	98
89) Benzo(k)fluoranthene	17.120	252	722340	1059.41	ng/ml	99
90) Benzo(b+k)fluoranthene	17.120	252	1471743	2116.33	ng/ml	99
91) Benzo(e)pyrene	17.703	252	718959	1139.43	ng/ml	98
92) Benzo(a)pyrene	17.821	252	672394	1093.01	ng/ml	99
93) Perylene	18.024	252	599847	1083.43	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.351	276	624088	991.56	ng/ml	99
96) Dibenz(a,h)anthracene	20.426	278	629887	1090.01	ng/ml	99
97) Benzo(g,h,i)perylene	20.886	276	672208	1111.91	ng/ml	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-11\9K15018\
Data File : J11151905.D
Acq On : 15 Nov 2019 10:42 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 16:52:47 2019
Quant Method : C:\msdchem\1\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151906.D
Acq On : 15 Nov 2019 11:18 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:36 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.386	152	321215	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1208283	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	646877	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1167921	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.521	240	1157402	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	17.960	264	1153781	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.351	292	975144	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	6.097	93	61	N.D.		
8) Bis(2-chloroethyl) ether	6.097	93	61	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	6.979	77	94	N.D.		
22) Isophorone	7.172	82	93	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.		

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151906.D
Acq On : 15 Nov 2019 11:18 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:36 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

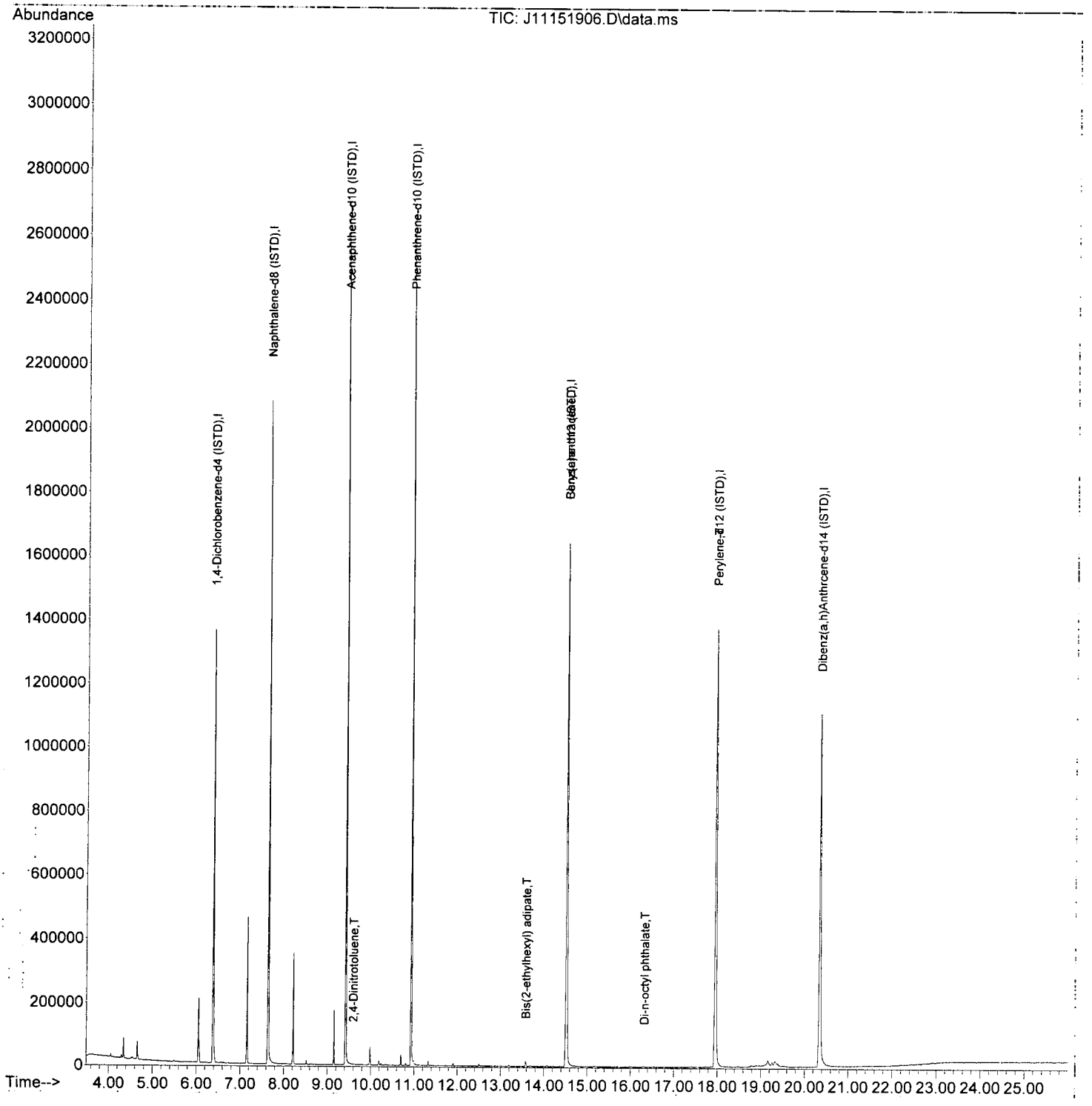
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.156	163	81	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.434	153	82	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.595	165	141	54.75 ng/ml#	27
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...	9.953	170	136	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)	10.140	77	75	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	10.932	178	376	N.D.	
72) Anthracene	10.932	178	376	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.526	149	65	N.D.	
75) Fluoranthene	12.200	202	57	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	13.580	129	5536	20.62 ng/ml	85
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.521	228	2776	4.30 ng/ml	56
84) Chrysene	14.575	228	69	N.D.	
85) Bis(2-ethylhexyl) phth...	14.687	149	205	N.D.	
87) Di-n-octyl phthalate	16.318	149	63	58.03 ng/ml	77
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	17.960	252	3795	7.29 ng/ml	64
95) Indeno(1,2,3-cd)pyrene	20.351	276	384	N.D.	
96) Dibenz(a,h)anthracene	20.346	278	293	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 : R:\data\2019-11\9K15018\
Data File : J11151906.D
Acq On : 15 Nov 2019 11:18 am
Operator : JK/ AMS/ DTH
Sample : 9K15018-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:36 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151907.D
Acq On : 15 Nov 2019 11:54 am
Operator : JK/ AMS/ DTH
Sample : 9110811-BLK3
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:42 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	349636	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1255800	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	661880	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1209709	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.526	240	1227473	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.971	264	1224806	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.356	292	1054135	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	389269	1834.70 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	421498	1552.05 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	340233	1614.89 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.739	172	976057	1884.31 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	134412	1834.43 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.670	244	1312028	2319.43 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.770	74	57	N.D.	
3) Pyridine	3.802	79	89	N.D.	
6) Phenol	6.049	94	339	N.D.	
7) Aniline	6.081	93	56	N.D.	
8) Bis(2-chloroethyl) ether	6.108	93	344	N.D.	
9) 2-Chlorophenol	6.188	128	131	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.552	108	135	25.38 ng/ml#	52
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.637	107	79	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.792	70	85	N.D.	
17) 3+4-Methylphenol	6.808	107	119	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.926	77	1063	4.98 ng/ml#	27
22) Isophorone	7.193	82	114	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.402	93	78	N.D.	
26) Benzoic acid	7.418	105	75	806.77 ng/ml#	22
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.670	128	1606	N.D.	
30) 4-Chloroaniline	7.670	127	251	14.42 ng/ml#	42
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.365	142	442	N.D.	
34) 1-Methylnaphthalene	8.472	142	261	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	8.841	154	1986	3.49 ng/ml	98
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	8.900	138	152	31.69 ng/ml#	19

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151907.D
Acq On : 15 Nov 2019 11:54 am
Operator : JK/ AMS/ DTH
Sample : 9110811-BLK3
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:42 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

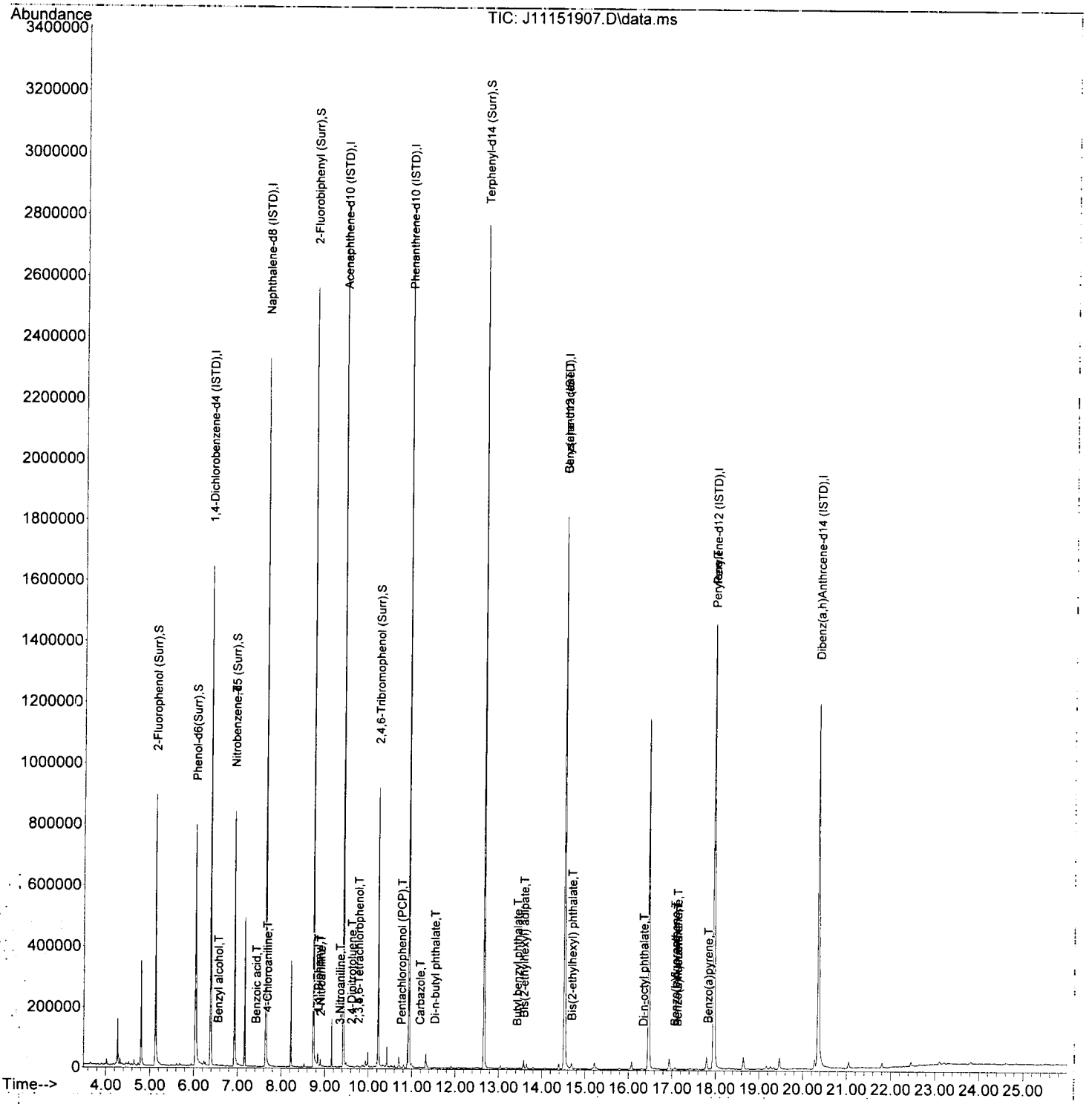
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.007	156	119	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.140	163	143	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.279	152	245	N.D.	
50) 3-Nitroaniline	9.338	138	52	30.21 ng/ml#	7
51) Acenaphthene	9.451	153	210	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.606	165	166	54.91 ng/ml#	27
55) Dibenzofuran	9.632	168	73	N.D.	
56) 2,3,5,6-Tetrachlorophenol	9.766	232	67	36.17 ng/ml#	1
57) 2,3,4,6-Tetrachlorophenol	9.766	232	67	28.98 ng/ml#	1
58) Diethyl phthalate	9.857	149	372	N.D.	
59) 2,3,5-Trimethylnaphtha...	9.836	170	80	N.D.	
60) Fluorene	9.980	166	136	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)	10.135	77	135	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.756	266	82	77.52 ng/ml#	70
71) Phenanthrene	10.954	178	1377	N.D.	
72) Anthracene	11.007	178	204	N.D.	
73) Carbazole	11.184	167	189	5.89 ng/ml#	43
74) Di-n-butyl phthalate	11.526	149	2016	2.82 ng/ml	87
75) Fluoranthene	12.200	202	524	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.467	202	724	N.D.	
80) Butyl benzyl phthalate	13.425	149	213	30.02 ng/ml	74
81) Bis(2-ethylhexyl) adipate	13.580	129	9234	32.44 ng/ml	92
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.526	228	3205	4.68 ng/ml	84
84) Chrysene	14.575	228	105	N.D.	
85) Bis(2-ethylhexyl) phth...	14.687	149	9422	21.34 ng/ml	94
87) Di-n-octyl phthalate	16.334	149	121	58.10 ng/ml#	37
88) Benzo(b)fluoranthene	17.062	252	302	8.40 ng/ml	57
89) Benzo(k)fluoranthene	17.121	252	203	8.77 ng/ml	57
90) Benzo(b+k)fluoranthene	17.121	252	203	16.02 ng/ml	57
91) Benzo(e)pyrene	17.709	252	214	N.D.	
92) Benzo(a)pyrene	17.821	252	156	10.09 ng/ml#	39
93) Perylene	17.960	252	3833	6.94 ng/ml	73
95) Indeno(1,2,3-cd)pyrene	20.330	276	876	N.D.	
96) Dibenz(a,h)anthracene	20.426	278	137	N.D.	
97) Benzo(g,h,i)perylene	20.870	276	163	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151907.D
Acq On : 15 Nov 2019 11:54 am
Operator : JK/ AMS/ DTH
Sample : 9110811-BLK3
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:42 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151908.D
Acq On : 15 Nov 2019 12:30 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:48 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DAT 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	361161	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1303052	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	679454	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1261882	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.521	240	1303862	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.960	264	1278337	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.351	292	1094010	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	437092	1994.35 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	486431	1733.99 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	384356	1766.10 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.739	172	1095625	2060.43 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	156119	2042.98 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	1440238	2396.92 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	6.049	94	537	N.D.	
7) Aniline	6.070	93	127	N.D.	
8) Bis(2-chloroethyl) ether	6.129	93	151	N.D.	
9) 2-Chlorophenol	6.188	128	289	N.D.	
10) 1,3-Dichlorobenzene	6.327	146	113	N.D.	
11) 1,4-Dichlorobenzene	6.402	146	160	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	6.551	146	167	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.658	45	61	N.D.	
16) N-Nitrosodi-n-propylamine	6.782	70	56	N.D.	
17) 3+4-Methylphenol	6.803	107	66	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.958	77	97	N.D.	
22) Isophorone	7.188	82	973	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	7.418	105	122	807.18 ng/ml#	8
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.669	128	2595	3.79 ng/ml	90
30) 4-Chloroaniline	7.664	127	347	14.81 ng/ml#	1
31) Hexachlorobutadiene	7.808	225	94	N.D.	
32) 4-Chloro-3-methylphenol	8.231	107	67	N.D.	
33) 2-Methylnaphthalene	8.370	142	549	N.D.	
34) 1-Methylnaphthalene	8.472	142	364	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	8.841	154	1844	3.16 ng/ml	91
41) 2-Chloronaphthalene	8.857	162	79	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151908.D
Acq On : 15 Nov 2019 12:30 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:48 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

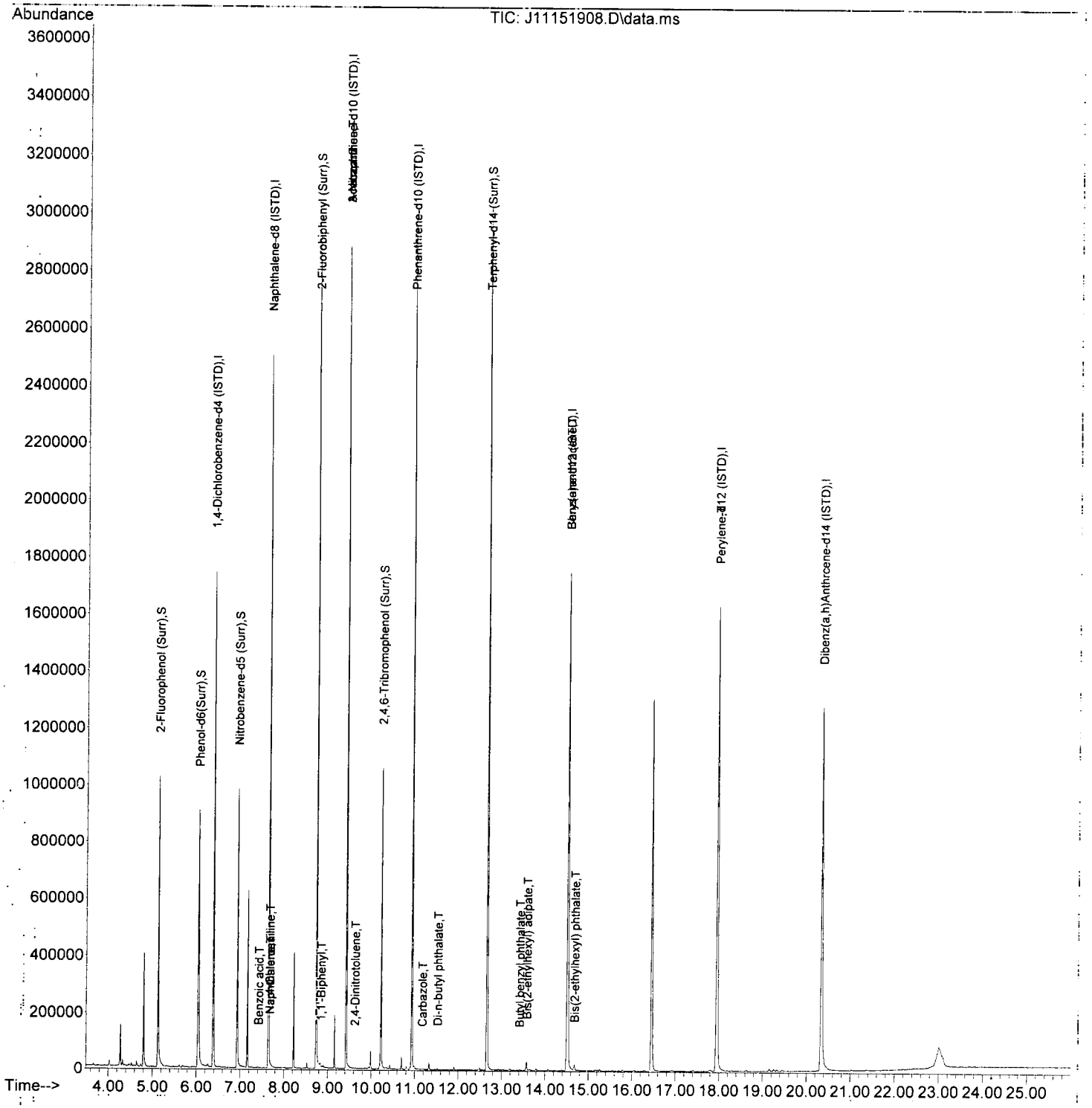
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.001	156	268	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.151	163	292	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.279	152	132	N.D.	
50) 3-Nitroaniline	9.424	138	65	30.32 ng/ml#	1
51) Acenaphthene	9.456	153	361	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.622	165	129	54.62 ng/ml#	27
55) Dibenzofuran	9.638	168	152	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	9.857	149	448	N.D.	
59) 2,3,5-Trimethylnaphtha...	9.841	170	202	N.D.	
60) Fluorene	9.975	166	140	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	10.098	169	178	N.D.	
66) Azobenzene (1,2-DPH)	10.135	77	211	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	10.953	178	813	N.D.	
72) Anthracene	11.012	178	269	N.D.	
73) Carbazole	11.173	167	85	5.72 ng/ml	60
74) Di-n-butyl phthalate	11.526	149	1955	2.62 ng/ml	94
75) Fluoranthene	12.194	202	557	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.462	202	469	N.D.	
80) Butyl benzyl phthalate	13.414	149	810	31.75 ng/ml#	56
81) Bis(2-ethylhexyl) adipate	13.580	129	10326	34.15 ng/ml	94
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.521	228	2989	4.11 ng/ml	61
84) Chrysene	14.574	228	77	N.D.	
85) Bis(2-ethylhexyl) phth...	14.676	149	10767	22.96 ng/ml	98
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	17.960	252	3793	6.58 ng/ml	71
95) Indeno(1,2,3-cd)pyrene	20.346	276	527	N.D.	
96) Dibenz(a,h)anthracene	20.351	278	169	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 : R:\data\2019-11\9K15018\
Data File : J11151908.D
Acq On : 15 Nov 2019 12:30 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BLK1
Misc : 1x, 8270D LL FULL LIST
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:48 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	355057	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1274876	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	665153	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1285385	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.527	240	1322546	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.966	264	1334402	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.351	292	1163670	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	120610	559.78 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	138147	500.92 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.926	82	104661	489.18 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	8.739	172	327719	629.56 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	46223	604.68 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.660	244	411738	675.56 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~3.861~~	~~74~~	~~269~~	~~N.D.~~	~~mI~~
3) Pyridine	~~3.888~~	~~79~~	~~1265m~~	~~5.49 ng/ml~~	~~mI~~
6) Phenol	6.049	94	237355	782.71 ng/ml	94
7) Aniline	~~6.065~~	~~93~~	~~158498~~	~~605.80 ng/ml~~	~~93~~ mI
8) Bis(2-chloroethyl) ether	~~6.124~~	~~93~~	~~195420~~	~~714.05 ng/ml~~	~~99~~ mI
9) 2-Chlorophenol	6.183	128	218797	870.30 ng/ml	98
10) 1,3-Dichlorobenzene	6.332	146	254729	901.44 ng/ml	96
11) 1,4-Dichlorobenzene	6.402	146	242334	872.54 ng/ml	97
12) Benzyl alcohol	6.525	108	119707	809.81 ng/ml	92
13) 1,2-Dichlorobenzene	6.552	146	240798	879.15 ng/ml	98
14) 2-Methylphenol	6.637	107	158516	866.78 ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.653	45	149236	617.90 ng/ml	84
16) N-Nitrosodi-n-propylamine	6.782	70	116735	734.67 ng/ml	95
17) 3+4-Methylphenol	6.787	107	198308	874.50 ng/ml	94
18) Hexachloroethane	6.889	201	83318	976.36 ng/ml	93
20) Nitrobenzene	6.948	77	167292	771.75 ng/ml	93
22) Isophorone	7.183	82	351648	865.19 ng/ml	99
23) 2-Nitrophenol	7.268	139	140163	1158.92 ng/ml	85
24) 2,4-Dimethylphenol	7.311	122	180312	1054.90 ng/ml	97
25) Bis(2-chloroethoxy) me...	7.397	93	220744	893.37 ng/ml	99
26) Benzoic acid	7.413	105	118499	1917.06 ng/ml	93
27) 2,4-Dichlorophenol	7.509	162	182330	955.31 ng/ml	96
28) 1,2,4-Trichlorobenzene	7.595	180	215976	967.95 ng/ml	97
29) Naphthalene	7.670	128	623979	930.40 ng/ml	100
30) 4-Chloroaniline	7.728	127	99857	476.27 ng/ml	94
31) Hexachlorobutadiene	7.803	225	114779	951.95 ng/ml	98
32) 4-Chloro-3-methylphenol	8.215	107	165484	978.24 ng/ml	91
33) 2-Methylnaphthalene	8.365	142	458419	978.29 ng/ml	99
34) 1-Methylnaphthalene	8.467	142	429467	946.74 ng/ml	99
36) Hexachlorocyclopentadiene	8.536	237	115870	1126.52 ng/ml	98
37) 2,4,6-Trichlorophenol	8.654	196	138086	1072.32 ng/ml	98
38) 2,4,5-Trichlorophenol	8.691	198	139874	1100.38 ng/ml	98
39) 1,1'-Biphenyl	8.836	154	562545	983.97 ng/ml	99
41) 2-Chloronaphthalene	8.857	162	428950	1038.88 ng/ml	97
42) 2-Nitroaniline	8.959	138	138548	1120.61 ng/ml	89

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

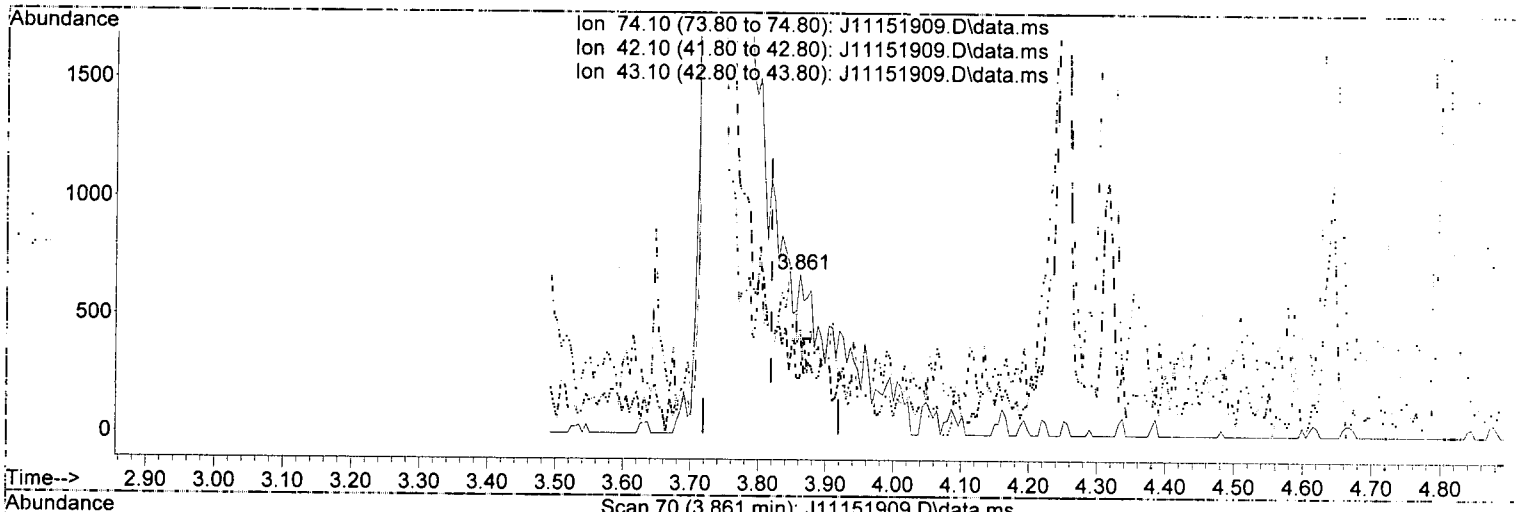
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	8.996	156	410382	978.47	ng/ml	97
44) 1,4-Dinitrobenzene	9.092	168	67569	1284.02	ng/ml	80
45) Dimethyl phthalate	9.146	163	503317	1047.80	ng/ml	99
46) 1,3-Dinitrobenzene	9.173	168	81113	1215.61	ng/ml	85
47) 2,6-Dinitrotoluene	9.205	165	113504	1049.60	ng/ml	89
48) 1,2-Dinitrobenzene	9.258	168	53048	1090.07	ng/ml	85
49) Acenaphthylene	9.280	152	671293	992.80	ng/ml	98
50) 3-Nitroaniline	9.376	138	82565	980.65	ng/ml	85
51) Acenaphthene	9.456	153	423332	953.43	ng/ml	99
52) 2,4-Dinitrophenol	9.483	184	34321	1261.55	ng/ml	87
53) 4-Nitrophenol	9.552	139	76943	1157.29	ng/ml	91
54) 2,4-Dinitrotoluene	9.616	165	152056	1122.88	ng/ml	80
55) Dibenzofuran	9.633	168	612348	1034.58	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.718	232	113988	1115.14	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.761	232	120726	1079.77	ng/ml	93
58) Diethyl phthalate	9.863	149	472071	1067.62	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	9.846	170	400668	1063.05	ng/ml	90
60) Fluorene	9.980	166	466987	1002.57	ng/ml	98
61) 4-Chlorophenyl phenyl ...	9.975	204	239599	1055.14	ng/ml	93
62) 4-Nitroaniline	9.996	138	100181	1401.53	ng/ml	92
63) 4,6-Dinitro-2-methylph...	10.028	198	67143	1342.95	ng/ml	92
65) N-Nitrosodiphenylamine	10.098	169	411662	1038.69	ng/ml	99
66) Azobenzene (1,2-DPH)	10.135	77	335191	835.74	ng/ml	91
68) 4-Bromophenyl phenyl e...	10.472	248	149373	1029.87	ng/ml	98
69) Hexachlorobenzene	10.553	284	170653	980.77	ng/ml	96
70) Pentachlorophenol (PCP)	10.745	266	78877	913.13	ng/ml	98
71) Phenanthrene	10.959	178	696437	965.79	ng/ml	100
72) Anthracene	11.007	178	716470	1033.63	ng/ml	99
73) Carbazole	11.173	167	627006	1236.99	ng/ml	99
74) Di-n-butyl phthalate	11.526	149	795126	1045.99	ng/ml	99
75) Fluoranthene	12.195	202	809486	1095.26	ng/ml	98
76) Benzidine	12.344	184	125045	783.71	ng/ml	97
77) Pyrene	12.462	202	828032	1100.92	ng/ml	99
80) Butyl benzyl phthalate	13.414	149	344063	1015.85	ng/ml	90
81) Bis(2-ethylhexyl) adipate	13.580	129	313354	1021.56	ng/ml	98
82) 3,3-Dichlorobenzidine	14.473	252	330000	3413.40	ng/ml	98
83) Benz(a)anthracene	14.500	228	782252	1059.38	ng/ml	97
84) Chrysene	14.580	228	722056	1043.46	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.682	149	495524	1041.60	ng/ml	97
87) Di-n-octyl phthalate	16.334	149	778292	1016.18	ng/ml	97
88) Benzo(b)fluoranthene	17.051	252	748930	1017.93	ng/ml	97
89) Benzo(k)fluoranthene	17.115	252	755550	1018.66	ng/ml	99
90) Benzo(b+k)fluoranthene	17.115	252	1536881	2033.33	ng/ml	99
91) Benzo(e)pyrene	17.698	252	747682	1090.15	ng/ml	98
92) Benzo(a)pyrene	17.816	252	671655	1005.29	ng/ml	98
93) Perylene	18.025	252	679346	1128.87	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.340	276	674898	980.78	ng/ml	98
96) Dibenz(a,h)anthracene	20.415	278	659029	1043.12	ng/ml	99
97) Benzo(g,h,i)perylene	20.881	276	715247	1082.13	ng/ml	98

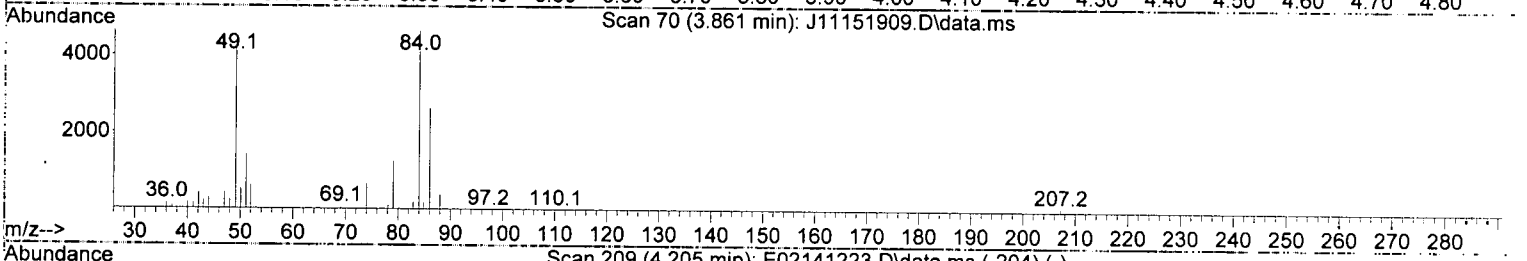
(#) = qualifier out of range (m) = manual integration (+) = signals summed

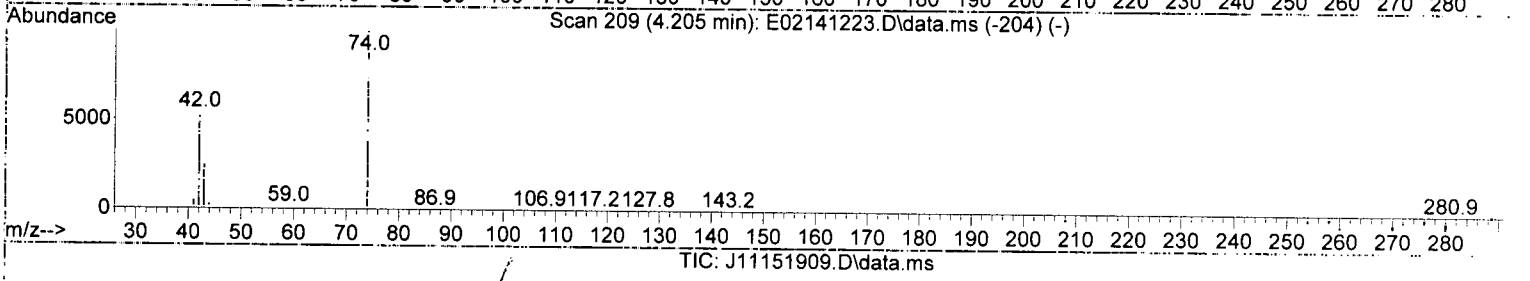
Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151909.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.861min (+ 0.043) 1.99 ng/ml

response 269

MF

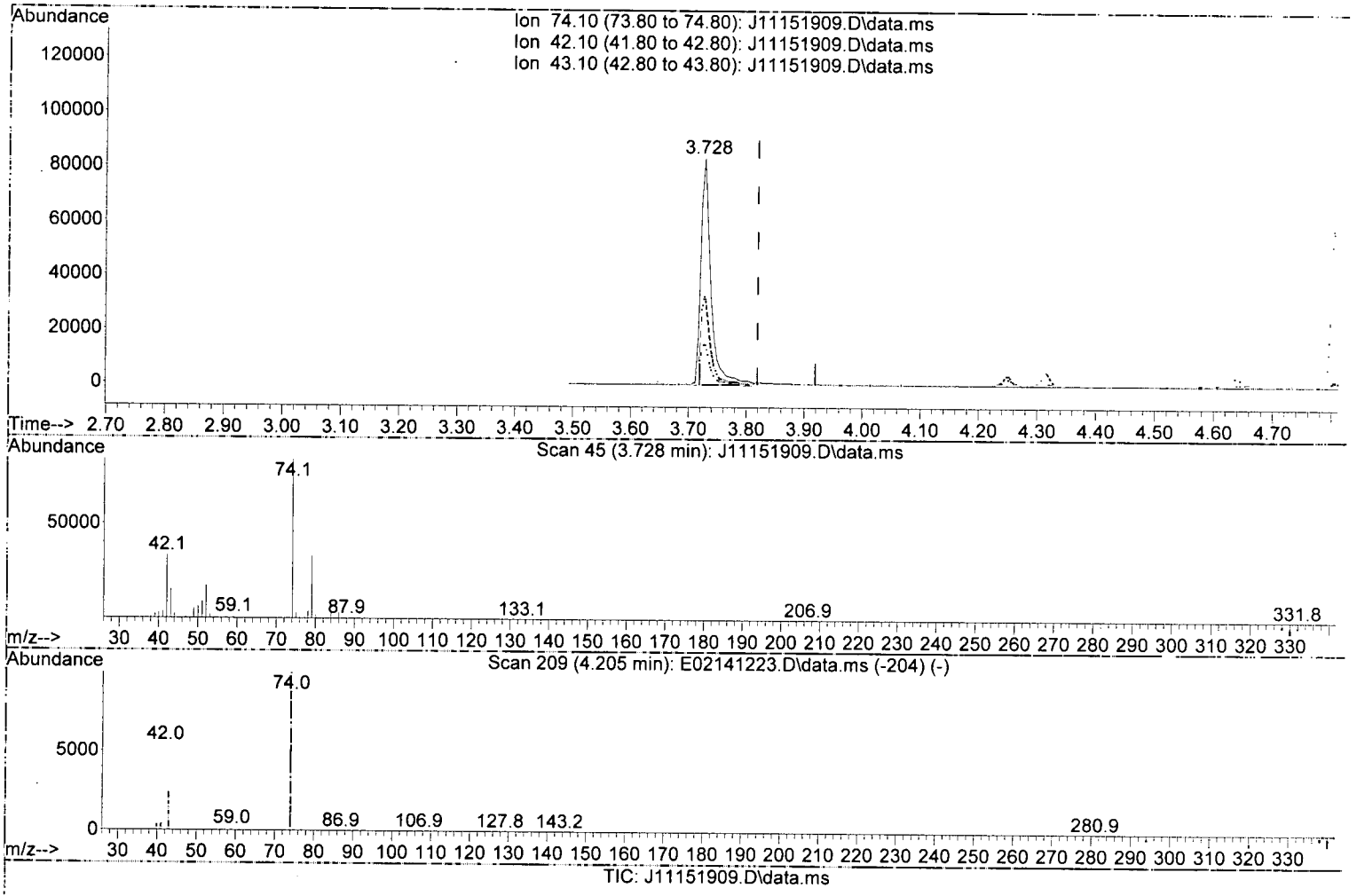
J

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	65.84
43.10	22.20	35.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(2) N-Nitrosodimethylamine (TG)

3.728min (-0.091) 757.04 ng/ml (m)

response 102385

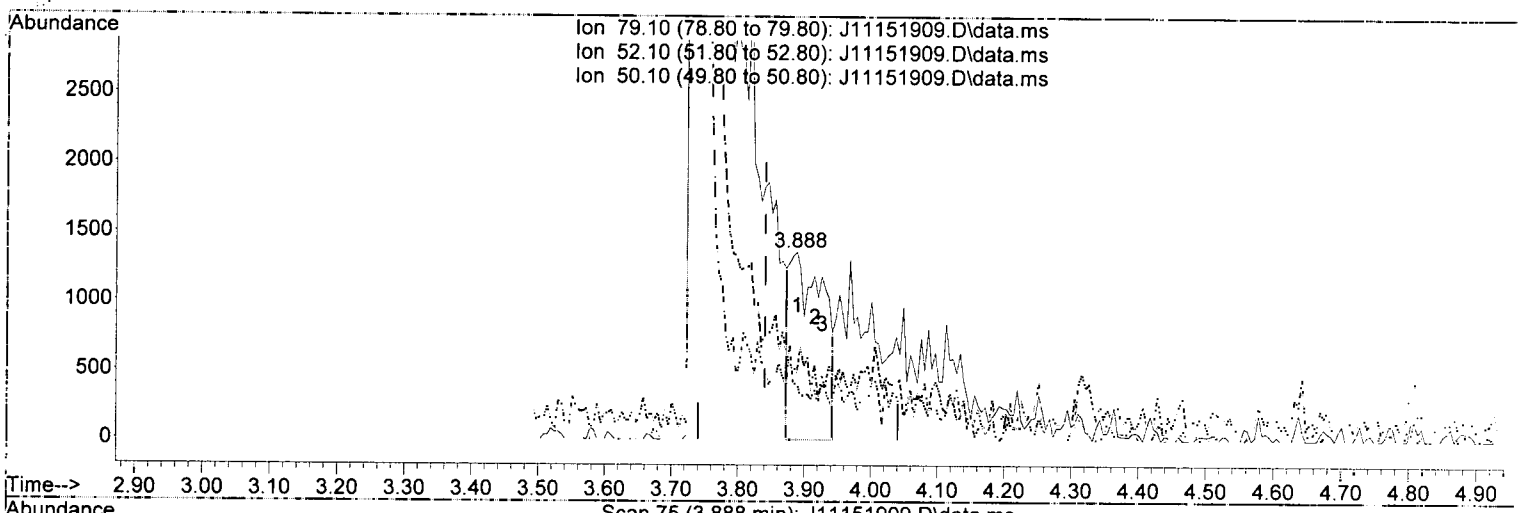
BTH 11/15/19

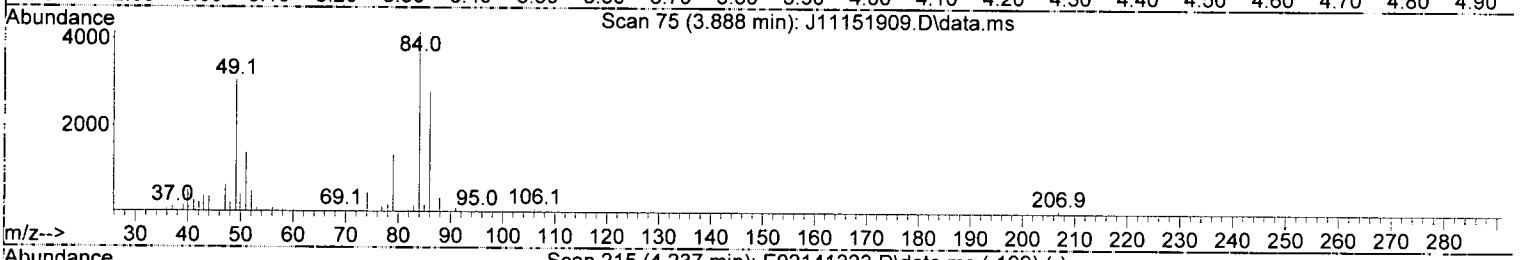
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	39.84
43.10	22.20	18.36
0.00	0.00	0.00

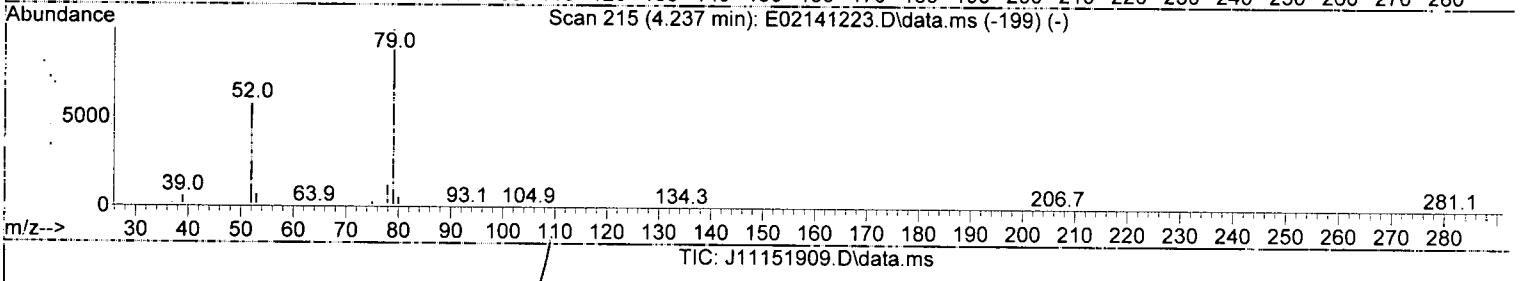
Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J11151909.D\data.ms

(3) Pyridine (TG)

3.888min (+ 0.048) 5.49 ng/ml m

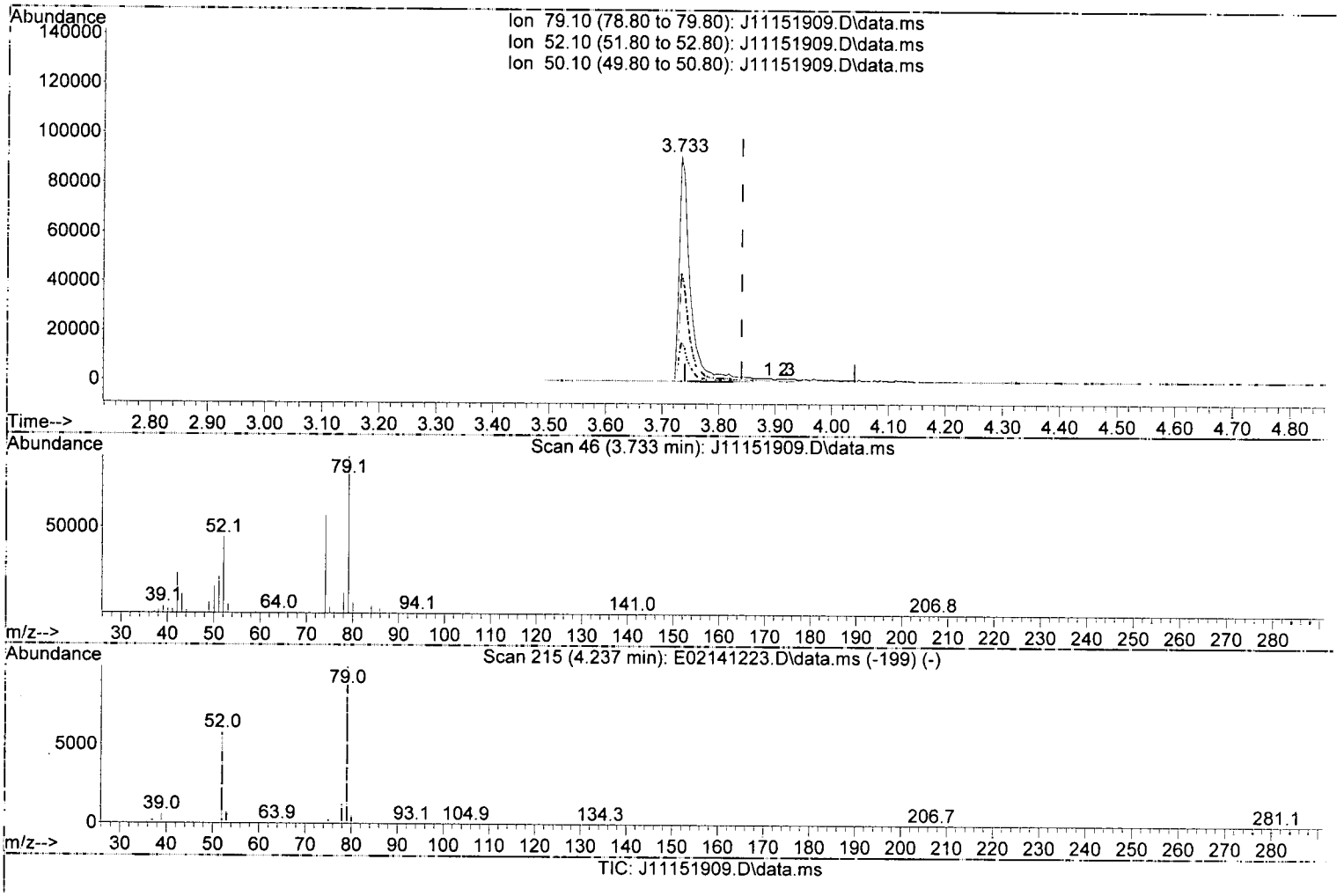
response 1265

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	38.08
50.10	18.70	33.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(3) Pyridine (TG)

3.733min (-0.107) 552.36 ng/ml m

DTH 11/15/19

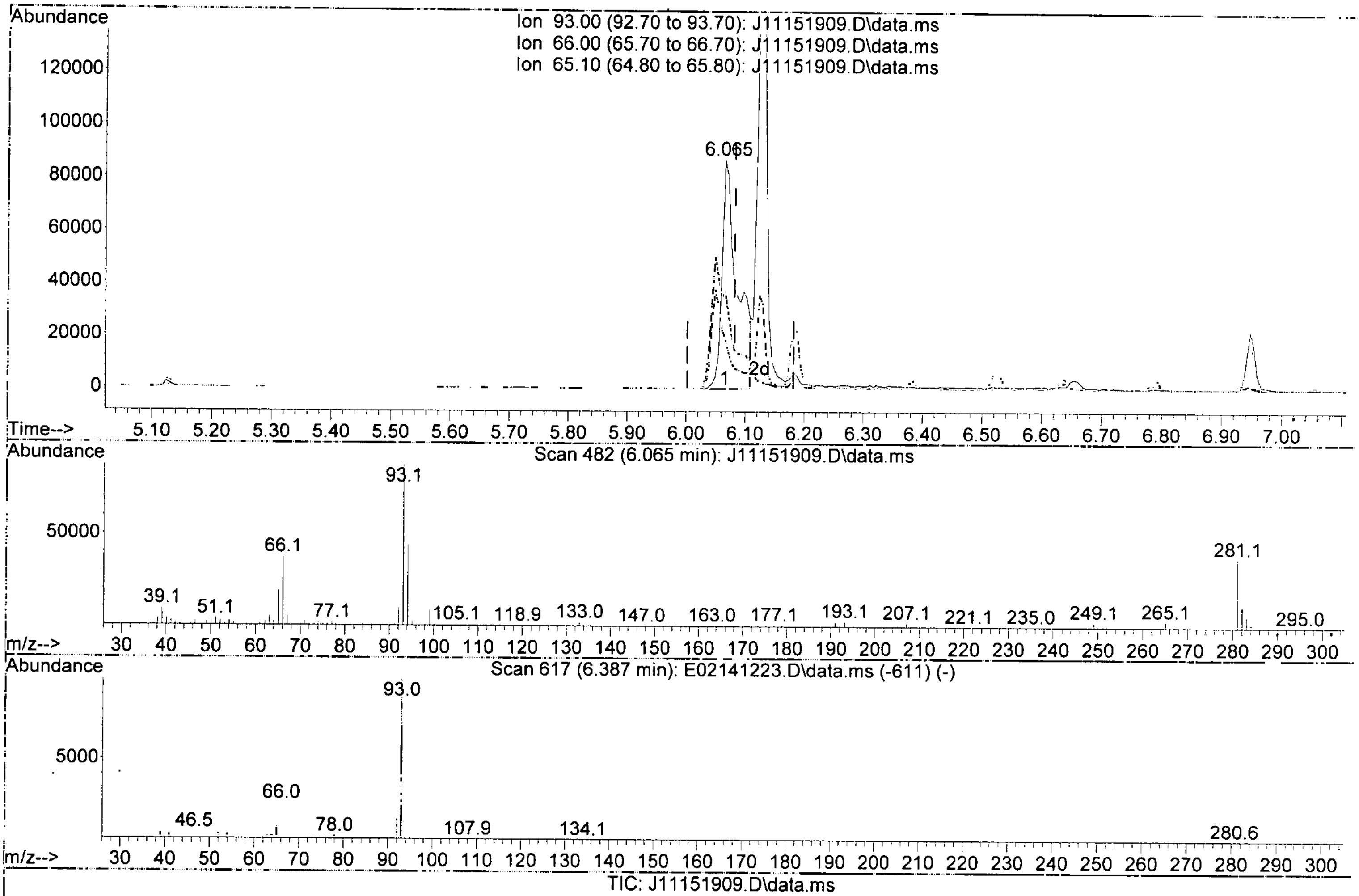
response 127356

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	48.39
50.10	18.70	16.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(7) Aniline (T)

6.065min (-0.016) 605.80 ng/ml

response 158498

Ion	Exp%	Act%
93.00	100.00	100.00
66.00	38.60	42.66
65.10	19.00	21.92
0.00	0.00	0.00

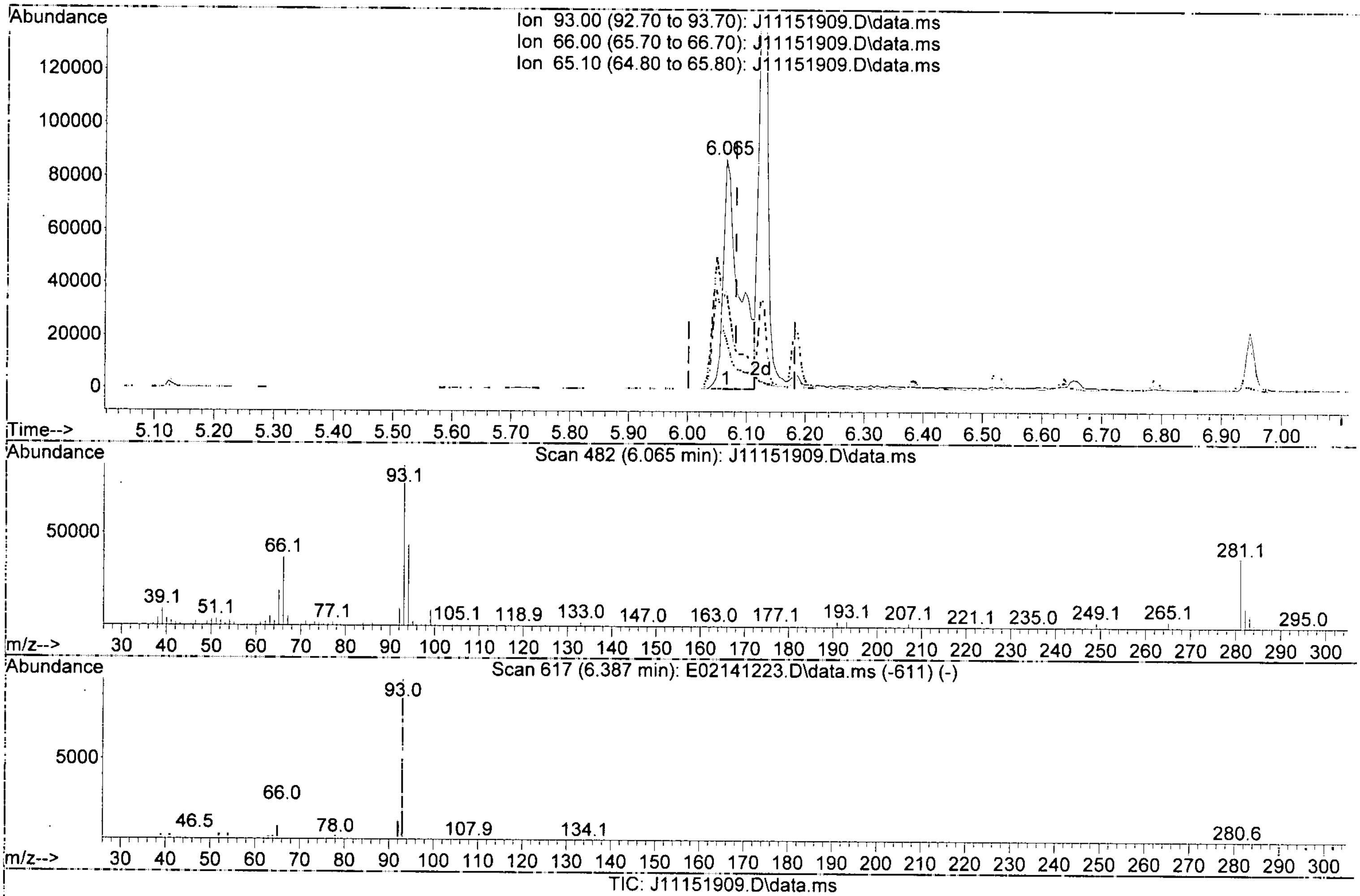
MI

J

Quantitation Report (Qedit)

```
Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On    : 15 Nov 2019   1:07 pm
Operator  : JK/ AMS/ DTH
Sample    : 9110825-BS1@4
Misc      : 4x, 8270D LL FULL LIST
ALS Vial  : 6   Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title  : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName   : SV-GCMS10
```



(7) Aniline (T)

6.065min (-0.016) 638.25 ng/ml m

response 166987

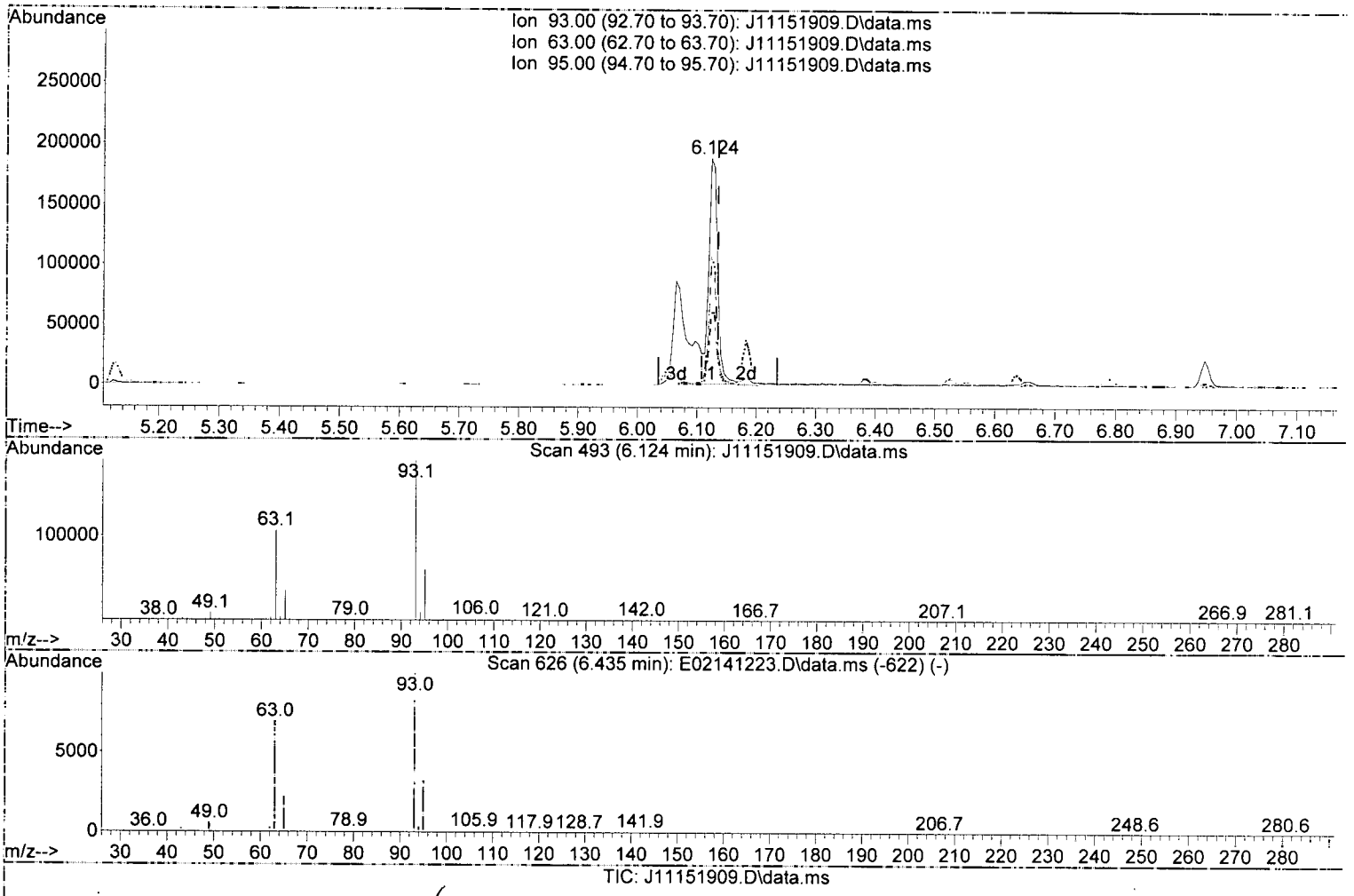
DTH 11/15/19

Ion	Exp%	Act%
93.00	100.00	100.00
66.00	38.60	42.66
65.10	19.00	21.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(8) Bis(2-chloroethyl) ether (T)

6.124min (-0.011) 714.05 ng/ml MI

response 195420

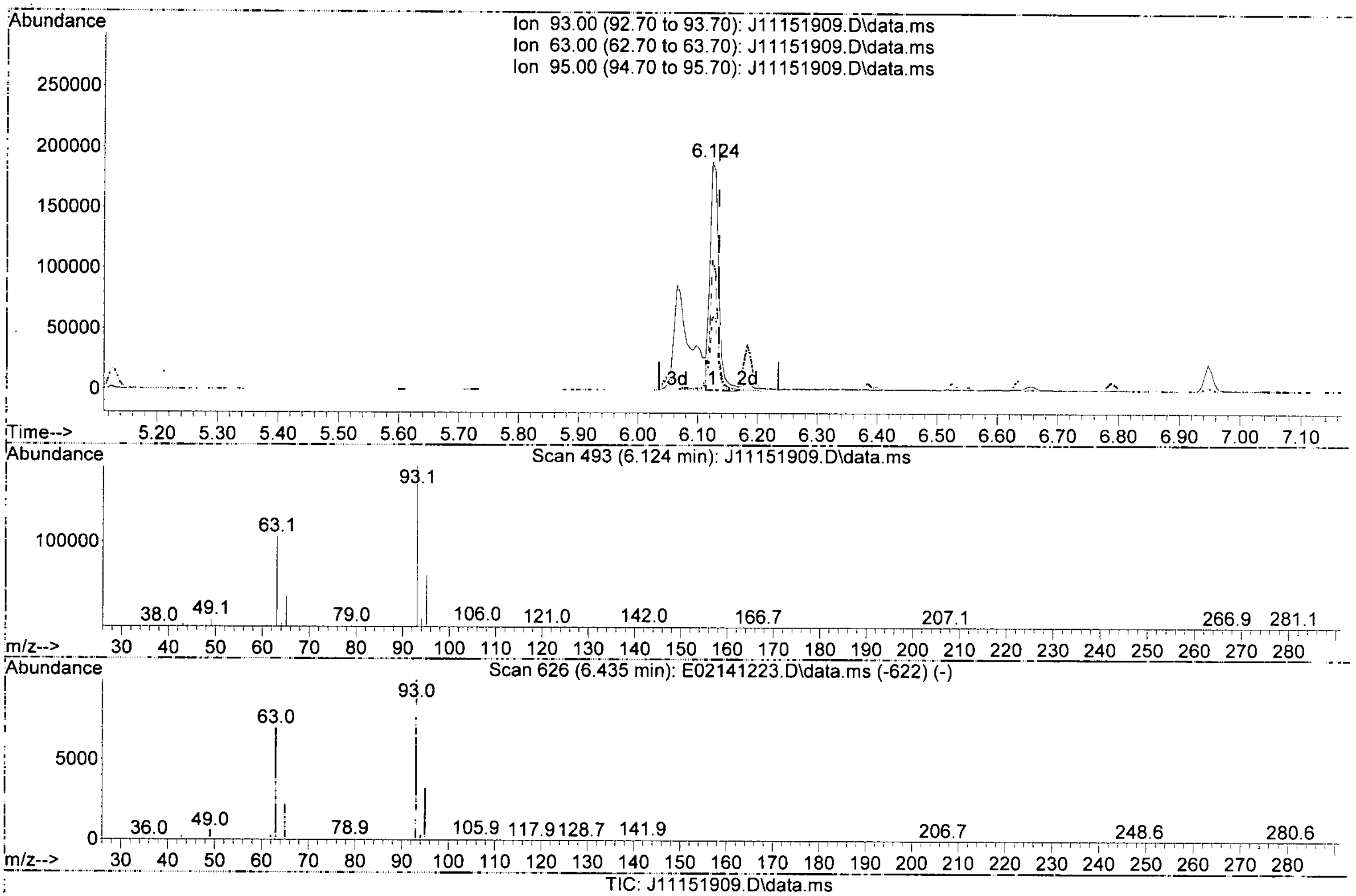
Ion	Exp%	Act%
93.00	100.00	100.00
63.00	56.60	56.40
95.00	30.70	31.89
0.00	0.00	0.00

J

Quantitation Report (Qedit)

```
Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On    : 15 Nov 2019   1:07 pm
Operator  : JK/ AMS/ DTH
Sample    : 9110825-BS1@4
Misc      : 4x, 8270D LL FULL LIST
ALS Vial  : 6   Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title  : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName   : SV-GCMS10
```



(8) Bis(2-chloroethyl) ether (T)

6.124min (-0.011) 699.36 ng/ml m

DTH 11/15/19

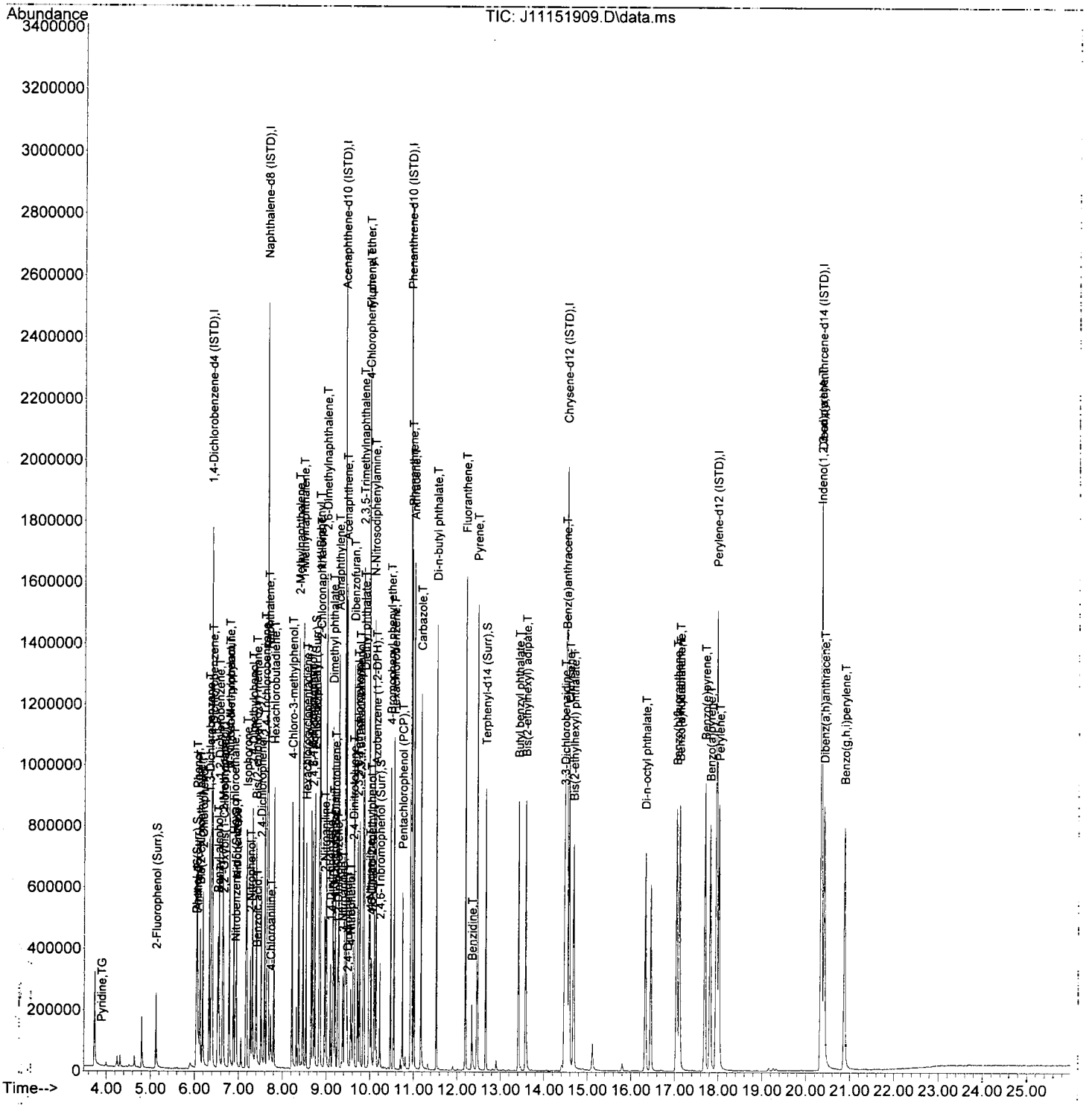
response 191401

Ion	Exp%	Act%
93.00	100.00	100.00
63.00	56.60	56.40
95.00	30.70	31.89
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151909.D
Acq On : 15 Nov 2019 1:07 pm
Operator : JK/ AMS/ DTH
Sample : 9110825-BS1@4
Misc : 4x, 8270D LL FULL LIST
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:18:54 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151912.D
Acq On : 15 Nov 2019 2:56 pm
Operator : JK/ AMS/ DTH
Sample : 9110781-BLK2
Misc : 1x, 8270D PAH/BEHP/2,4,5-TCP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:28:40 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 11/15/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.386	152	353825	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.648	136	1286462	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.424	162	683892	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	10.932	188	1286370	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.521	240	1334892	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	17.965	264	1317794	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.346	292	1159518	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.129	112	439648	2047.61 ng/ml	-0.02
5) Phenol-d6(Surr)	6.038	99	475679	1730.82 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	6.931	82	386701	1813.71 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.734	172	1093474	2043.04 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.226	330	162702	2088.76 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.665	244	1443661	2346.77 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.877	79	65	N.D.	
6) Phenol	6.054	94	328	N.D.	
7) Aniline	6.059	93	189	N.D.	
8) Bis(2-chloroethyl) ether	6.108	93	619	N.D.	
9) 2-Chlorophenol	6.188	128	127	N.D.	
10) 1,3-Dichlorobenzene	6.380	146	56	N.D.	
11) 1,4-Dichlorobenzene	6.380	146	56	N.D.	
12) Benzyl alcohol	6.546	108	81	25.01 ng/ml#	64
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.637	107	64	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	6.776	70	98	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	6.931	77	1120	5.18 ng/ml#	27
22) Isophorone	7.204	82	628	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	7.391	93	52	N.D.	
26) Benzoic acid	7.477	105	77	806.77 ng/ml#	28
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.669	128	3658	5.41 ng/ml	98
30) 4-Chloroaniline	7.669	127	442	15.26 ng/ml#	37
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.231	107	69	N.D.	
33) 2-Methylnaphthalene	8.370	142	643	N.D.	
34) 1-Methylnaphthalene	8.466	142	463	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	8.835	154	1724	2.93 ng/ml	91
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	8.894	138	94	31.19 ng/ml#	19

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-11\9K15018\
Data File : J11151912.D
Acq On : 15 Nov 2019 2:56 pm
Operator : JK/ AMS/ DTH
Sample : 9110781-BLK2
Misc : 1x, 8270D PAH/BEHP/2,4,5-TCP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:28:40 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10

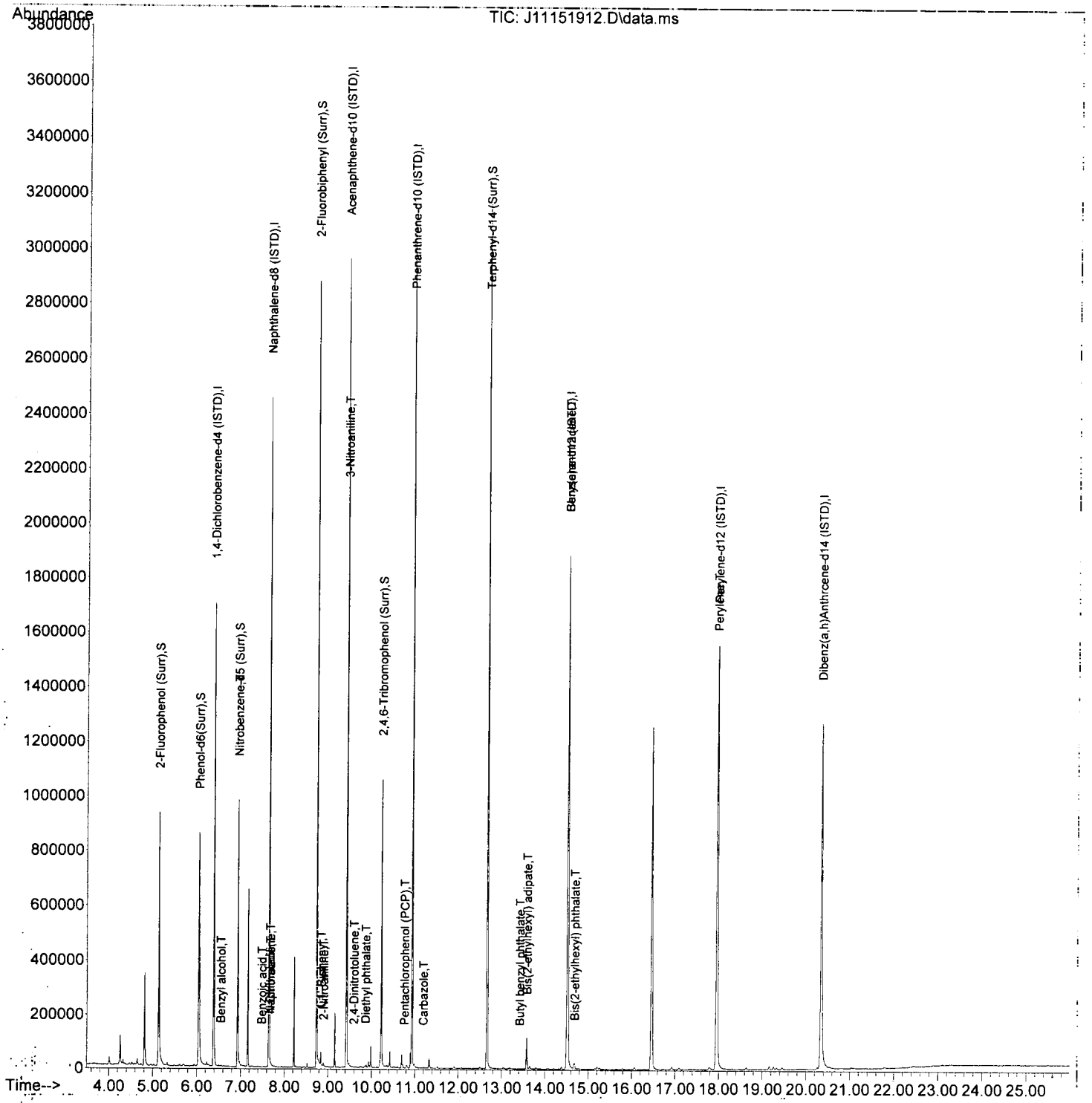
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.001	156	84	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.151	163	176	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.279	152	199	N.D.	
50) 3-Nitroaniline	9.429	138	105	30.69 ng/ml#	1
51) Acenaphthene	9.456	153	286	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.590	165	178	54.95 ng/ml#	27
55) Dibenzofuran	9.632	168	143	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	9.857	149	1158	2.55 ng/ml	94
59) 2,3,5-Trimethylnaphtha...	9.841	170	94	N.D.	
60) Fluorene	9.980	166	217	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	10.098	169	83	N.D.	
66) Azobenzene (1,2-DPH)	10.146	77	192	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.756	266	87	77.52 ng/ml#	18
71) Phenanthrene	10.959	178	1089	N.D.	
72) Anthracene	11.012	178	67	N.D.	
73) Carbazole	11.189	167	53	5.68 ng/ml	60
74) Di-n-butyl phthalate	11.526	149	1595	N.D.	
75) Fluoranthene	12.189	202	562	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.456	202	547	N.D.	
80) Butyl benzyl phthalate	13.414	149	312	30.25 ng/ml	76
81) Bis(2-ethylhexyl) adipate	13.580	129	39471	127.49 ng/ml	97
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.521	228	3272	4.39 ng/ml	68
84) Chrysene	14.569	228	171	N.D.	
85) Bis(2-ethylhexyl) phth...	14.681	149	12444	25.92 ng/ml	93
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	17.687	252	68	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	17.955	252	4185	7.04 ng/ml	71
95) Indeno(1,2,3-cd)pyrene	20.330	276	185	N.D.	
96) Dibenz(a,h)anthracene	20.340	278	286	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 : R:\data\2019-11\9K15018\
Data File : J11151912.D
Acq On : 15 Nov 2019 2:56 pm
Operator : JK/ AMS/ DTH
Sample : 9110781-BLK2
Misc : 1x, 8270D PAH/BEHP/2,4,5-TCP/PCP
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Nov 15 15:28:40 2019
Quant Method : R:\methods\SV10_091919R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Oct 25 11:15:50 2019
Response via : Initial Calibration
InstName : SV-GCMS10



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

Semivolatile Organic Compounds by EPA 8270D
Calibration Data

Sequence 9I19035 (Cal ID A9I2405) SV-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9I19035**	Instrument:	**SV-GCMS10**
Date:	**09/19/19 17:44**	Calibration:	**A9I2405**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9I19035-IBL1	Water	QC	QC			A19I086	
2	9I19035-TUN1	Water	QC	QC			A19I086	A19I165
3	9I19035-ICB1	Water	QC	QC			A19I086	
4	9I19035-CAL1	Water	QC	QC			A19I086	A19G238
5	9I19035-CAL2	Water	QC	QC			A19I086	A19G239
6	9I19035-CAL3	Water	QC	QC			A19I086	A19G240
7	9I19035-CAL4	Water	QC	QC			A19I086	A19G241
8	9I19035-CAL5	Water	QC	QC			A19I086	A19G242
9	9I19035-CAL6	Water	QC	QC			A19I086	A19G243
10	9I19035-CAL7	Water	QC	QC			A19I086	A19G244
11	9I19035-CAL8	Water	QC	QC			A19I086	A19G245
12	9I19035-CAL9	Water	QC	QC			A19I086	A19G246
13	9I19035-CALA	Water	QC	QC			A19I086	A19G247
14	9I19035-IBL2	Water	QC	QC			A19I086	
15	9I19035-ICV1	Water	QC	QC			A19I086	A19I254
16	9I19035-IBL3	Water	QC	QC			A19I086	

Data Entered By: 9/24/19

Data Reviewed By: 9/26/19

Comments:

Calibration Status Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

A9I 2405

9/23/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	C:\msdchem\1\data\2019-09\9I19035\J09191918.D
2	50	50	2000	C:\msdchem\1\data\2019-09\9I19035\J09191919.D
3	100	100	2000	C:\msdchem\1\data\2019-09\9I19035\J09191920.D
4	200	200	2000	C:\msdchem\1\data\2019-09\9I19035\J09191921.D
5	500	500	2000	C:\msdchem\1\data\2019-09\9I19035\J09191922.D
6	1000	1000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191923.D
7	2000	2000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191924.D
8	4000	4000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191925.D
9	6000	6000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191926.D
10	8000	8000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191927.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Sep 20 10:40 2019	Sep 20 10:14 2019	20 Sep 2019 1:24 am
2	50	Sep 20 10:40 2019	Sep 20 10:17 2019	20 Sep 2019 1:59 am
3	100	Sep 20 10:40 2019	Sep 20 10:18 2019	20 Sep 2019 2:34 am
4	200	Sep 20 10:40 2019	Sep 20 10:21 2019	20 Sep 2019 3:09 am
5	500	Sep 20 10:40 2019	Sep 20 10:22 2019	20 Sep 2019 3:44 am
6	1000	Sep 20 10:40 2019	Sep 20 09:46 2019	20 Sep 2019 4:19 am
7	2000	Sep 20 10:40 2019	Sep 20 09:46 2019	20 Sep 2019 4:54 am
8	4000	Sep 20 10:40 2019	Sep 20 10:28 2019	20 Sep 2019 5:29 am
9	6000	Sep 20 10:40 2019	Sep 20 10:29 2019	20 Sep 2019 6:04 am
10	8000	Sep 20 10:41 2019	Sep 20 10:30 2019	20 Sep 2019 6:39 am

SV10_091919.M Fri Sep 20 14:11:04 2019

Compound List Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

9/20/19

Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.568	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	3.883	0.591	A	2	A	A
3	T	Pyridine	79	3.904	0.594	A	2	A	A
4	S	2-Fluorophenol (Surr)	112	5.289	0.805	A	1	A	R
5	S	Phenol-d6(Surr)	99	6.204	0.945	A	2	A	R
6	T	Phenol	94	6.215	0.946	A	2	A	R
7	T	Aniline	93	6.241	0.950	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.305	0.960	A	2	A	R
9	T	2-Chlorophenol	128	6.364	0.969	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.514	0.992	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.584	1.002	A	2	A	R
12	T	Benzyl alcohol	108	6.701	1.020	Q	2	A	R
13	T	1,2-Dichlorobenzene	146	6.739	1.026	A	2	A	R
14	T	2-Methylphenol	107	6.808	1.037	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	6.835	1.041	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	6.963	1.060	A	2	A	R
17	T	3+4-Methylphenol	107	6.958	1.059	A	3	A	R
18	T	Hexachloroethane	201	7.076	1.077	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.113	1.083	A	2	A	R
20	T	Nitrobenzene	77	7.129	1.085	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	7.835	1.000	A	1	A	R
22	T	Isophorone	82	7.370	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.450	0.951	Q	2	A	R
24	T	2,4-Dimethylphenol	122	7.487	0.956	A	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.579	0.967	A	2	A	R
26	T	Benzoic acid	105	7.578	0.967	Q	2	A	R
27	T	2,4-Dichlorophenol	162	7.690	0.981	Q	2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.782	0.993	A	2	A	R
29	T	Naphthalene	128	7.857	1.003	A	1	A	R
30	T	4-Chloroaniline	127	7.904	1.009	Q	2	A	R
31	T	Hexachlorobutadiene	225	7.990	1.020	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.386	1.070	A	2	A	R
33	T	2-Methylnaphthalene	142	8.557	1.092	A	2	A	R
34	T	1-Methylnaphthalene	142	8.659	1.105	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.616	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.728	0.908	A	2	A	R
37	T	2,4,6-Trichlorophenol	196	8.840	0.919	Q	2	A	R
38	T	2,4,5-Trichlorophenol	198	8.872	0.923	Q	2	A	R
39	T	1,1'-Biphenyl	154	9.028	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	8.926	0.928	A	2	A	R
41	T	2-Chloronaphthalene	162	9.049	0.941	A	2	A	R
42	T	2-Nitroaniline	138	9.145	0.951	Q	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.188	0.955	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.274	0.964	Q	2	A	R
45	T	Dimethyl phthalate	163	9.333	0.971	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.354	0.973	Q	2	A	R
47	T	2,6-Dinitrotoluene	165	9.391	0.977	Q	2	A	R
48	T	1,2-Dinitrobenzene	168	9.445	0.982	A	2	A	R
49	T	Acenaphthylene	152	9.471	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.562	0.994	Q	2	A	R
51	T	Acenaphthene	153	9.648	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.664	1.005	Q	2	A	R
53	T	4-Nitrophenol	139	9.723	1.011	Q	2	A	R
54	T	2,4-Dinitrotoluene	165	9.798	1.019	Q	2	A	R

55	T	Dibenzofuran	168	9.825	1.022	A		2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	9.905	1.030	Q	1/a²	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	9.947	1.034	Q	1/a²	2	A	R
58	T	Diethyl phthalate	149	10.050	1.045	A		2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.039	1.044	A		2	A	R
60	T	Fluorene	166	10.172	1.058	A		2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.167	1.057	A		2	A	R
62	T	4-Nitroaniline	138	10.183	1.059	A		2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.215	1.062	Q	1/a²	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.135	1.000	A		2	A	R
65	T	N-Nitrosodiphenylamine	169	10.284	0.924	A		2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.327	0.927	A		2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.418	0.936	Q	1/a²	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.670	0.958	A		2	A	R
69	T	Hexachlorobenzene	284	10.745	0.965	A		2	A	R
70	T	Pentachlorophenol (PCP)	266	10.942	0.983	Q	1/a	2	A	R
71	T	Phenanthrene	178	11.156	1.002	A		2	A	R
72	T	Anthracene	178	11.210	1.007	A		2	A	R
73	T	Carbazole	167	11.365	1.021	Q	1/a²	2	A	R
74	T	Di-n-butyl phthalate	149	11.718	1.052	A		2	A	R
75	T	Fluoranthene	202	12.424	1.116	A		2	A	R
76	T	Benzidine	184	12.579	1.130	Q	1/a²	2	A	R
77	T	Pyrene	202	12.713	1.142	A		2	A	R
78	I	Chrysene-d12 (ISTD)	240	14.917	1.000	A		2	A	R
79	S	Terphenyl-d14 (Surr)	244	12.922	0.866	A		2	A	R
80	T	Butyl benzyl phthalate	149	13.734	0.921	Q	1/a²	2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	13.911	0.933	A		2	A	R
82	T	3,3-Dichlorobenzidine	252	14.863	0.996	Q	1/a²	2	A	R
83	T	Benz(a)anthracene	228	14.890	0.998	A		2	A	R
84	T	Chrysene	228	14.976	1.004	A		2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.071	1.010	A		2	A	R
86	I	Perylene-d12 (ISTD)	264	18.399	1.000	A		2	A	R
87	T	Di-n-octyl phthalate	149	16.746	0.910	Q	1/a²	2	A	R
88	T	Benzo(b)fluoranthene	252	17.478	0.950	Q	1/a²	2	A	R
89	T	Benzo(k)fluoranthene	252	17.548	0.954	Q	1/a²	2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.548	0.954	Q	1/a²	2	A	R
91	T	Benzo(e)pyrene	252	18.137	0.986	A		2	A	R
92	T	Benzo(a)pyrene	252	18.254	0.992	Q	1/a²	2	A	R
93	T	Perylene	252	18.458	1.003	A		2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	20.795	1.000	A		1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	20.790	1.000	A		1	A	R
96	T	Dibenz(a,h)anthracene	278	20.865	1.003	A		2	A	R
97	T	Benzo(g,h,i)perylene	276	21.325	1.025	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

SV10_091919.M Fri Sep 20 12:56:52 2019

Response Factor Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

9/23/19

Calibration Files
20 =J09191918.D 50 =J09191919.D 100 =J09191920.D 200 =J09191921.D 500 =J09191922.D 1000=J09191923.D 2000=J09191924.D
4000=J09191925.D 6000=J09191926.D 8000=J09191927.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
														3.51
1)	I	1,4-Dichlorobenzen...	----------ISTD----------											
2)	TG	N-Nitrosodimet...	0.759	0.758	0.808	0.697	0.702	0.739	0.762	0.786	0.804	0.804	0.762	5.28
3)	TG	Pyridine			1.053	1.277	1.346	1.118	1.285	1.376	1.417	1.443	1.375	1.299	10.27
4)	S	2-Fluorophenol...	0.940	1.045	0.952	1.217	1.280	1.263	1.333	1.381	1.371	1.354	1.214	14.15
5)	S	Phenol-d6(Surr)	1.197	1.305	1.446	1.602	1.667	1.682	1.674	1.705	1.659	1.598	1.553	11.41
6)	T	Phenol	1.542	1.562	1.608	1.797	1.827	1.843	1.776	1.794	1.708	1.625	1.708	6.71
7)	T	Aniline			1.505	1.592	1.714	1.671	1.336	1.129	1.375	1.569	1.374	1.474	12.65
8)	T	Bis(2-chloroet...	1.409	1.401	1.477	1.489	1.547	1.678	1.759	1.573			1.542	8.18
9)	T	2-Chlorophenol	1.231	1.299	1.339	1.474	1.520	1.505	1.485	1.475	1.445	1.389	1.416	6.89
10)	T	1,3-Dichlorobe...	1.526	1.590	1.641	1.679	1.688	1.625	1.631	1.578	1.503	1.457	1.592	4.80
11)	T	1,4-Dichlorobe...	1.540	1.656	1.606	1.633	1.652	1.622	1.590	1.515	1.433	1.397	1.564	5.83
12)	T	Benzyl alcohol		0.475	0.613	0.639	0.793	0.881	0.917	0.951	0.916	0.866	0.783	21.39
13)	T	1,2-Dichlorobe...	1.431	1.680	1.634	1.675	1.672	1.602	1.552	1.481	1.383	1.318	1.543	8.56
14)	T	2-Methylphenol	0.930	0.880	0.981	1.077	1.155	1.148	1.117	1.057	1.001	0.957	1.030	9.22
15)	T	2,2'-Oxybis(1-...	1.500	1.454	1.504	1.552	1.511	1.442	1.285	1.209	1.125	1.024	1.360	13.68
16)	T	N-Nitrosodi-n-...	0.922	0.898	0.938	0.991	0.999	0.963	0.901	0.825	0.768	0.745	0.895	9.91
17)	T	3+4-Methylphenol	1.065	1.133	1.160	1.345	1.441	1.458	1.401	1.305	1.189		1.277	11.32
18)	T	Hexachloroethane	0.434	0.455	0.452	0.472	0.494	0.484	0.503	0.510	0.500	0.503	0.481	5.45
19)	S	Nitrobenzene-d...	0.981	1.085	1.135	1.209	1.313	1.322	1.282	1.286	1.246	1.193	1.205	9.14
20)	T	Nitrobenzene	1.076	1.183	1.189	1.302	1.341	1.327	1.281	1.234	1.165	1.113	1.221	7.44
														4.83
21)	I	Naphthalene-d8 (ISTD)	----------ISTD----------											
22)	T	Isophorone	0.569	0.605	0.640	0.652	0.683	0.661	0.671	0.637	0.632	0.627	0.638	5.17
23)	T	2-Nitrophenol			0.122	0.135	0.180	0.201	0.189	0.201	0.201	0.195	0.178	17.69
24)	T	2,4-Dimethylph...		0.198	0.249	0.265	0.283	0.287	0.304	0.287	0.284	0.256	0.268	11.73
25)	T	Bis(2-chloroet...	0.388	0.385	0.394	0.408	0.432	0.413	0.411	0.376	0.348	0.321	0.388	8.46
26)	T	Benzoic acid					0.037	0.087	0.142	0.188	0.195	0.216	0.144	48.51
27)	T	2,4-Dichloroph...		0.170	0.214	0.252	0.295	0.303	0.320	0.305	0.287	0.272	0.269	18.30
28)	T	1,2,4-Trichlor...	0.357	0.371	0.359	0.374	0.372	0.362	0.355	0.336	0.317	0.297	0.350	7.29
29)	T	Naphthalene	1.146	1.151	1.167	1.173	1.186	1.117	1.076	0.925	0.826	0.754	1.052	15.05
30)	T	4-Chloroaniline	0.125	0.244	0.255	0.320	0.351	0.349	0.340	0.277	0.276	0.276	0.281	23.94
31)	T	Hexachlorobuta...	0.184	0.200	0.195	0.200	0.201	0.199	0.191	0.185	0.174	0.163	0.189	6.74
32)	T	4-Chloro-3-met...			0.197	0.220	0.278	0.284	0.309	0.291	0.278	0.266	0.265	14.24
33)	T	2-Methylnaphth...	0.706	0.774	0.776	0.819	0.833	0.793	0.783	0.679	0.620	0.570	0.735	12.00
34)	T	1-Methylnaphth...	0.737	0.770	0.777	0.793	0.804	0.752	0.740	0.635	0.577	0.532	0.712	13.43
														3.37
35)	I	Acenaphthene-d10 (...	----------ISTD----------											
36)	T	Hexachlorocycl...		0.218	0.261	0.286	0.327	0.342	0.363	0.328	0.338	0.320	0.309	14.82
37)	T	2,4,6-Trichlor...		0.237	0.257	0.307	0.384	0.402	0.423	0.419	0.401	0.389	0.358	19.99
38)	T	2,4,5-Trichlor...		0.237	0.270	0.301	0.381	0.390	0.418	0.406	0.393	0.366	0.351	18.51
39)	T	1,1'-Biphenyl	1.593	1.862	1.891	1.926	1.923	1.827	1.723	1.451	1.275		1.719	13.51

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.477	1.610	1.735	1.751	1.740	1.652	1.564	1.351	1.207		1.565	12.07
41)	T	2-Chloronaphth...	1.194	1.263	1.356	1.408	1.432	1.325	1.296	1.154	1.045	0.943	1.242	12.73
42)	T	2-Nitroaniline		0.177	0.224	0.264	0.357	0.389	0.424	0.415	0.416	0.398	0.340	27.55
43)	T	2,6-Dimethylna...	1.108	1.335	1.410	1.426	1.405	1.336	1.263	1.089	0.979		1.261	12.95
44)	T	1,4-Dinitroben...			0.065	0.084	0.127	0.151	0.184	0.203	0.205	0.206	0.153	36.62
45)	T	Dimethyl phtha...	1.435	1.460	1.596	1.570	1.600	1.540	1.481	1.346	1.249	1.166	1.444	10.30
46)	T	1,3-Dinitroben...			0.099	0.125	0.180	0.196	0.220	0.228	0.229	0.221	0.187	26.72
47)	T	2,6-Dinitrotol...		0.189	0.212	0.275	0.327	0.334	0.344	0.334	0.324	0.306	0.294	19.32
48)	T	1,2-Dinitroben...				0.119	0.146	0.155	0.160	0.159	0.150	0.136	0.146	10.12
49)	T	Acenaphthylene	1.944	2.090	2.211	2.226	2.309	2.184	2.067	1.748	1.519		2.033	12.60
50)	T	3-Nitroaniline		0.137	0.196	0.256	0.282	0.261	0.196				0.221	24.71
51)	T	Acenaphthene	1.387	1.465	1.444	1.458	1.436	1.370	1.314	1.127	1.013		1.335	12.00
52)	T	2,4-Dinitrophenol				0.013	0.029	0.062	0.100	0.137	0.153		0.082	69.44
53)	T	4-Nitrophenol			0.068	0.095	0.164	0.201	0.242	0.257	0.263		0.184	42.54
54)	T	2,4-Dinitrotol...			0.221	0.277	0.369	0.398	0.439	0.437	0.413	0.366	0.365	21.35
55)	T	Dibenzofuran	1.822	1.907	2.037	2.018	1.983	1.887	1.852	1.604	1.422	1.264	1.780	14.79
56)	T	2,3,5,6-Tetrac...		0.109	0.184	0.216	0.296	0.315	0.344	0.342	0.335	0.322	0.274	30.66
57)	T	2,3,4,6-Tetrac...		0.163	0.236	0.262	0.323	0.347	0.364	0.355	0.339	0.326	0.302	22.30
58)	T	Diethyl phthalate	1.254	1.388	1.556	1.505	1.488	1.460	1.384	1.206	1.077	0.976	1.330	14.62
59)	T	2,3,5-Trimethy...	1.191	1.238	1.255	1.278	1.274	1.217	1.168	1.004	0.895	0.813	1.133	14.83
60)	T	Fluorene	1.423	1.444	1.592	1.562	1.562	1.460	1.385	1.151	1.025		1.401	13.79
61)	T	4-Chlorophenyl...	0.710	0.743	0.775	0.749	0.750	0.718	0.704	0.618	0.558	0.502	0.683	13.46
62)	T	4-Nitroaniline			0.181	0.210	0.234	0.216	0.220	0.221	0.217	0.220	0.215	7.13
63)	T	4,6-Dinitro-2-...				0.041	0.091	0.133	0.174	0.203	0.212	0.212	0.152	43.85
														4.15
64)	I	Phenanthrene-d10 (...	----------	ISTD	----------									
65)	T	N-Nitrosodiphe...	0.518	0.605	0.660	0.703	0.703	0.658	0.604	0.483			0.617	13.21
66)	T	Azobenzene (1,...	0.596	0.640	0.676	0.698	0.710	0.667	0.627	0.537	0.465		0.624	12.85
67)	S	2,4,6-Tribromo...		0.071	0.086	0.099	0.120	0.122	0.130	0.125	0.118	0.112	0.109	18.24
68)	T	4-Bromophenyl ...	0.208	0.233	0.237	0.239	0.238	0.236	0.235	0.223	0.211	0.198	0.226	6.56
69)	T	Hexachlorobenzene	0.300	0.280	0.292	0.278	0.295	0.286	0.279	0.252	0.231	0.215	0.271	10.61
70)	T	Pentachlorophe...			0.078	0.070	0.108	0.122	0.142	0.148	0.145	0.138	0.119	26.11
71)	T	Phenanthrene	1.195	1.197	1.225	1.228	1.225	1.146	1.091	0.940	0.851		1.122	12.26
72)	T	Anthracene	0.995	1.126	1.166	1.205	1.196	1.143	1.088	0.944	0.844		1.079	11.55
73)	T	Carbazole	0.798	0.900	0.979	1.011	1.002	0.861	0.592				0.878	16.89
74)	T	Di-n-butyl pht...		1.071	1.257	1.259	1.318	1.283	1.235	1.082	0.958		1.183	10.85
75)	T	Fluoranthene	1.065	1.146	1.256	1.262	1.316	1.257	1.229	1.088	0.992	0.891	1.150	12.02
76)	T	Benzidine			0.114	0.197	0.271	0.284	0.275	0.307	0.320	0.323	0.261	27.45
77)	T	Pyrene	1.099	1.203	1.242	1.308	1.336	1.283	1.225	1.094	0.997	0.915	1.170	11.89
														4.74
78)	I	Chrysene-d12 (ISTD)	----------	ISTD	----------									
79)	S	Terphenyl-d14 ...	0.821	0.902	0.977	0.959	0.995	0.969	0.953	0.924	0.880	0.837	0.922	6.53
80)	T	Butyl benzyl p...		0.243	0.334	0.380	0.487	0.533	0.570	0.590	0.580	0.569	0.476	26.60
81)	T	Bis(2-ethylhex...				0.336	0.441	0.473	0.506	0.520	0.488	0.482	0.464	13.26
82)	T	3,3-Dichlorobe...				0.241	0.193	0.167	0.129	0.122	0.119	0.117	0.155	30.50
83)	T	Benz(a)anthracene	1.161	1.070	1.154	1.114	1.143	1.102	1.125	1.115	1.107	1.076	1.117	2.72
84)	T	Chrysene	0.995	1.051	1.094	1.080	1.094	1.062	1.054	1.041	1.009	0.985	1.046	3.74
85)	T	Bis(2-ethylhex...				0.521	0.706	0.743	0.776	0.790	0.763	0.737	0.719	12.78
														4.02
86)	I	Perylene-d12 (ISTD)	----------	ISTD	----------									
87)	T	Di-n-octyl pht...			0.597	0.694	0.979	1.136	1.337	1.352	1.295	1.229	1.077	27.27

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics

88)	T	Benzo(b)fluora...	0.716	0.795	1.016	1.038	1.109	1.109	1.178	1.183	1.177	1.128	1.045	15.65
89)	T	Benzo(k)fluora...	0.705	0.864	1.038	1.065	1.120	1.117	1.168	1.078	0.973	0.854	0.998	14.77
90)	T	Benzo(b+k)fluo...	0.734	0.871	1.068	1.079	1.136	1.134	1.191	1.148	1.113	1.060	1.053	13.45
91)	T	Benzo(e)pyrene	0.747	0.896	1.032	1.039	1.102	1.105	1.133	1.110	1.089	1.027	1.028	11.67
92)	T	Benzo(a)pyrene	0.574	0.677	0.889	0.917	1.028	1.027	1.091	1.049	1.010	0.968	0.923	18.38
93)	T	Perylene	0.801	0.900	0.892	0.920	0.951	0.914	0.954	0.913	0.908	0.867	0.902	4.87
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											6.05
95)	T	Indeno(1,2,3-c...	1.102	1.169	1.176	1.156	1.171	1.152	1.205	1.224	1.230	1.241	1.183	3.60
96)	T	Dibenz(a,h)ant...	0.958	1.019	1.091	1.097	1.135	1.105	1.145	1.152	1.103	1.054	1.086	5.57
97)	T	Benzo(g,h,i)pe...	0.850	0.944	1.107	1.165	1.222	1.214	1.250	1.243	1.204	1.158	1.136	11.87

(#) = Out of Range

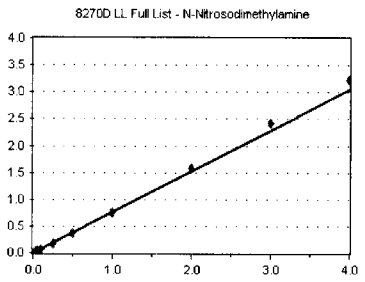
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

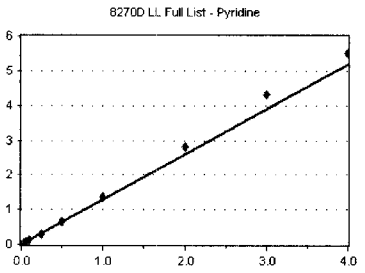


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2214	0.759	3.97
9I19035-CAL2	50	5516	0.758	3.95
9I19035-CAL3	100	11734	0.808	3.95
9I19035-CAL4	200	19941	0.697	3.92
9I19035-CAL5	500	52485	0.702	3.93
9I19035-CAL6	1000	104763	0.739	3.88
9I19035-CAL7	2000	217151	0.762	3.94
9I19035-CAL8	4000	480484	0.786	3.93
9I19035-CAL9	6000	674636	0.804	3.88
9I19035-CALA	8000	866525	0.804	3.96

AVE RF **0.762** RF RSD **5.28** AVE RT **3.93**

Pyridine

Curve Fit: **AVERAGE RF**

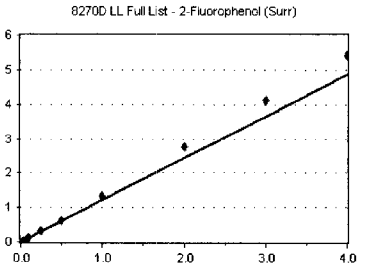


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2206~~	~~0.756~~	~~4.05~~
9I19035-CAL2	50	7667	1.053	4.00
9I19035-CAL3	100	18548	1.277	3.99
9I19035-CAL4	200	38499	1.346	3.95
9I19035-CAL5	500	83583	1.118	3.96
9I19035-CAL6	1000	182180	1.285	3.90
9I19035-CAL7	2000	392152	1.376	3.96
9I19035-CAL8	4000	866960	1.417	3.94
9I19035-CAL9	6000	1210013	1.443	3.89
9I19035-CALA	8000	1480958	1.375	3.96

AVE RF **1.299** RF RSD **10.27** AVE RT **3.95**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

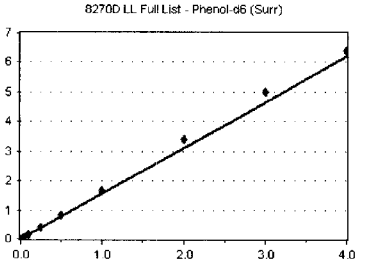


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2742	0.940	5.32
9I19035-CAL2	50	7611	1.045	5.31
9I19035-CAL3	100	13834	0.952	5.31
9I19035-CAL4	200	34817	1.217	5.30
9I19035-CAL5	500	95687	1.280	5.31
9I19035-CAL6	1000	179108	1.263	5.29
9I19035-CAL7	2000	379802	1.333	5.31
9I19035-CAL8	4000	844515	1.381	5.31
9I19035-CAL9	6000	1150405	1.371	5.30
9I19035-CALA	8000	1458990	1.354	5.32

AVE RF **1.214** RF RSD **14.15** AVE RT **5.31**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3493	1.197	6.20
9I19035-CAL2	50	9501	1.305	6.20
9I19035-CAL3	100	21003	1.446	6.20
9I19035-CAL4	200	45844	1.602	6.20
9I19035-CAL5	500	124621	1.667	6.20
9I19035-CAL6	1000	238398	1.682	6.20
9I19035-CAL7	2000	477001	1.674	6.21
9I19035-CAL8	4000	1043086	1.705	6.22
9I19035-CAL9	6000	1391310	1.659	6.22
9I19035-CALA	8000	1721904	1.598	6.23

AVE RF **1.553** RF RSD **11.41** AVE RT **6.21**

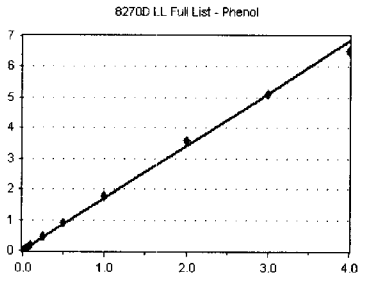
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Phenol

Curve Fit: **AVERAGE RF**

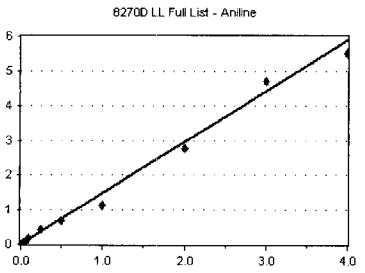


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4498	1.542	6.22
9I19035-CAL2	50	11373	1.562	6.22
9I19035-CAL3	100	23364	1.608	6.22
9I19035-CAL4	200	51417	1.797	6.22
9I19035-CAL5	500	136576	1.827	6.22
9I19035-CAL6	1000	261231	1.843	6.22
9I19035-CAL7	2000	506313	1.776	6.22
9I19035-CAL8	4000	1097096	1.794	6.23
9I19035-CAL9	6000	1432862	1.708	6.23
9I19035-CALA	8000	1750392	1.625	6.25

AVE RF **1.708** RF RSD **6.71** AVE RT **6.22**

Aniline

Curve Fit: **AVERAGE RF**

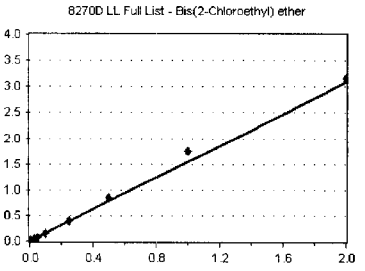


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2038~~	~~0.699~~	~~6.25~~
9I19035-CAL2	50	10955	1.505	6.25
9I19035-CAL3	100	23125	1.592	6.25
9I19035-CAL4	200	49031	1.714	6.25
9I19035-CAL5	500	124901	1.671	6.25
9I19035-CAL6	1000	189393	1.336	6.24
9I19035-CAL7	2000	321662	1.129	6.25
9I19035-CAL8	4000	840844	1.375	6.25
9I19035-CAL9	6000	1316393	1.569	6.25
9I19035-CALA	8000	1480736	1.374	6.26

AVE RF **1.474** RF RSD **12.65** AVE RT **6.25**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

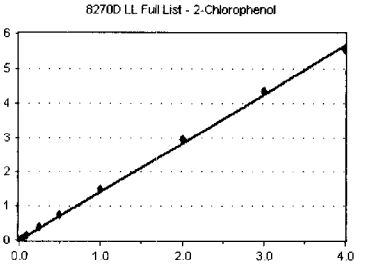


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4110	1.409	6.31
9I19035-CAL2	50	10198	1.401	6.31
9I19035-CAL3	100	21464	1.477	6.31
9I19035-CAL4	200	42595	1.489	6.31
9I19035-CAL5	500	115667	1.547	6.31
9I19035-CAL6	1000	237931	1.678	6.31
9I19035-CAL7	2000	501220	1.759	6.31
9I19035-CAL8	4000	962255	1.573	6.32
~~9I19035-CAL9~~	~~6000~~	~~1158478~~	~~1.381~~	~~6.32~~
~~9I19035-CALA~~	~~8000~~	~~1435010~~	~~1.332~~	~~6.32~~

AVE RF **1.542** RF RSD **8.18** AVE RT **6.31**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3591	1.231	6.37
9I19035-CAL2	50	9461	1.299	6.36
9I19035-CAL3	100	19462	1.339	6.37
9I19035-CAL4	200	42160	1.474	6.36
9I19035-CAL5	500	113634	1.520	6.37
9I19035-CAL6	1000	213396	1.505	6.36
9I19035-CAL7	2000	423147	1.485	6.37
9I19035-CAL8	4000	902056	1.475	6.37
9I19035-CAL9	6000	1211719	1.445	6.37
9I19035-CALA	8000	1496104	1.389	6.38

AVE RF **1.416** RF RSD **6.89** AVE RT **6.37**

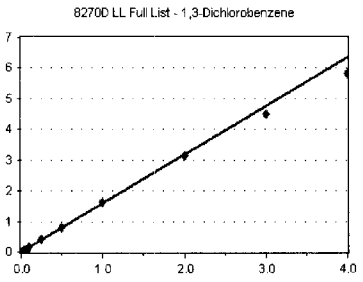
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

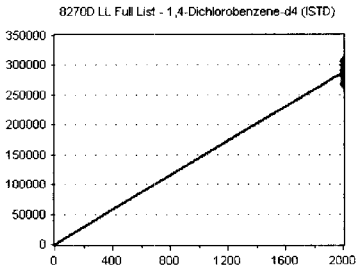


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4452	1.526	6.52
9I19035-CAL2	50	11576	1.590	6.52
9I19035-CAL3	100	23840	1.641	6.52
9I19035-CAL4	200	48050	1.679	6.51
9I19035-CAL5	500	126152	1.688	6.51
9I19035-CAL6	1000	230358	1.625	6.51
9I19035-CAL7	2000	464902	1.631	6.52
9I19035-CAL8	4000	965051	1.578	6.52
9I19035-CAL9	6000	1260484	1.503	6.52
9I19035-CALA	8000	1570022	1.457	6.53

AVE RF **1.592** RF RSD **4.80** AVE RT **6.52**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

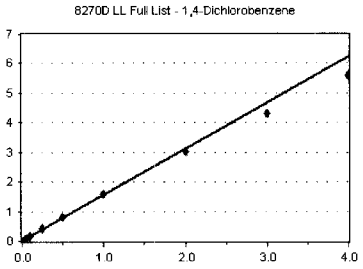


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	291746	145.873	6.57
9I19035-CAL2	2000	291253	145.626	6.57
9I19035-CAL3	2000	290594	145.297	6.57
9I19035-CAL4	2000	286105	143.053	6.57
9I19035-CAL5	2000	299020	149.510	6.57
9I19035-CAL6	2000	283511	141.755	6.57
9I19035-CAL7	2000	285023	142.511	6.57
9I19035-CAL8	2000	305814	152.907	6.57
9I19035-CAL9	2000	279602	139.801	6.57
9I19035-CALA	2000	269345	134.673	6.58

AVE RF **144.101** RF RSD **3.51** AVE RT **6.57**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

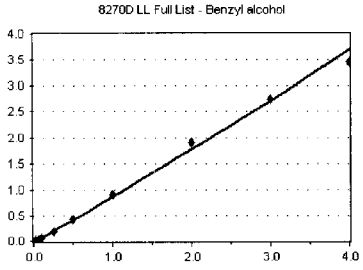


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4492	1.540	6.59
9I19035-CAL2	50	12059	1.656	6.59
9I19035-CAL3	100	23338	1.606	6.59
9I19035-CAL4	200	46724	1.633	6.58
9I19035-CAL5	500	123497	1.652	6.59
9I19035-CAL6	1000	229877	1.622	6.58
9I19035-CAL7	2000	453326	1.590	6.59
9I19035-CAL8	4000	926647	1.515	6.59
9I19035-CAL9	6000	1202300	1.433	6.59
9I19035-CALA	8000	1504749	1.397	6.59

AVE RF **1.564** RF RSD **5.83** AVE RT **6.59**

Benzyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1506~~	~~0.516~~	~~6.72~~
9I19035-CAL2	50	3460	0.475	6.71
9I19035-CAL3	100	8907	0.613	6.71
9I19035-CAL4	200	18281	0.639	6.70
9I19035-CAL5	500	59263	0.793	6.70
9I19035-CAL6	1000	124850	0.881	6.70
9I19035-CAL7	2000	261354	0.917	6.71
9I19035-CAL8	4000	581465	0.951	6.71
9I19035-CAL9	6000	768204	0.916	6.71
9I19035-CALA	8000	932774	0.866	6.72

AVE RF **0.783** RF RSD **21.39** AVE RT **6.71**

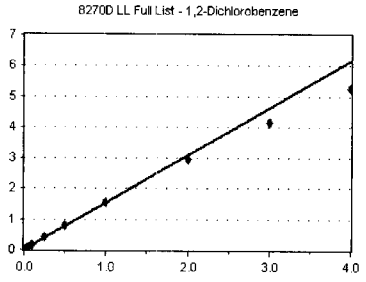
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

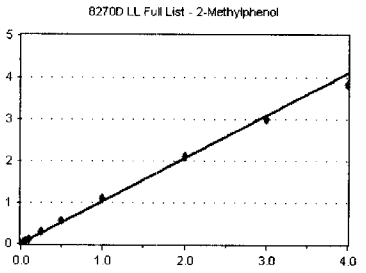


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4176	1.431	6.74
9I19035-CAL2	50	12229	1.680	6.74
9I19035-CAL3	100	23746	1.634	6.74
9I19035-CAL4	200	47924	1.675	6.74
9I19035-CAL5	500	124976	1.672	6.74
9I19035-CAL6	1000	227139	1.602	6.74
9I19035-CAL7	2000	442316	1.552	6.74
9I19035-CAL8	4000	906070	1.481	6.74
9I19035-CAL9	6000	1159865	1.383	6.74
9I19035-CALA	8000	1419977	1.318	6.74

AVE RF **1.543** RF RSD **8.56** AVE RT **6.74**

2-Methylphenol

Curve Fit: **AVERAGE RF**

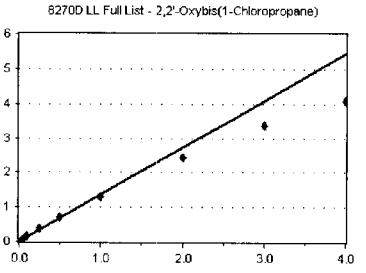


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2712	0.930	6.81
9I19035-CAL2	50	6405	0.880	6.81
9I19035-CAL3	100	14254	0.981	6.81
9I19035-CAL4	200	30801	1.077	6.81
9I19035-CAL5	500	86329	1.155	6.81
9I19035-CAL6	1000	162716	1.148	6.81
9I19035-CAL7	2000	318341	1.117	6.81
9I19035-CAL8	4000	646688	1.057	6.81
9I19035-CAL9	6000	839569	1.001	6.82
9I19035-CALA	8000	1030806	0.957	6.82

AVE RF **1.030** RF RSD **9.22** AVE RT **6.81**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

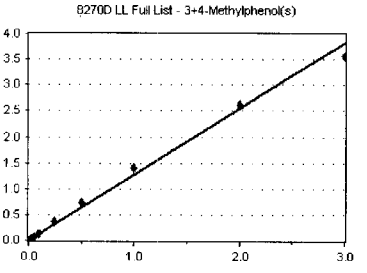


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4376	1.500	6.84
9I19035-CAL2	50	10585	1.454	6.84
9I19035-CAL3	100	21848	1.504	6.84
9I19035-CAL4	200	44401	1.552	6.84
9I19035-CAL5	500	112933	1.511	6.84
9I19035-CAL6	1000	204366	1.442	6.84
9I19035-CAL7	2000	366117	1.285	6.84
9I19035-CAL8	4000	739481	1.209	6.84
9I19035-CAL9	6000	943818	1.125	6.84
9I19035-CALA	8000	1103589	1.024	6.85

AVE RF **1.360** RF RSD **13.68** AVE RT **6.84**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3108	1.065	6.96
9I19035-CAL2	50	8248	1.133	6.96
9I19035-CAL3	100	16854	1.160	6.96
9I19035-CAL4	200	38484	1.345	6.96
9I19035-CAL5	500	107685	1.441	6.96
9I19035-CAL6	1000	206745	1.458	6.96
9I19035-CAL7	2000	399183	1.401	6.96
9I19035-CAL8	4000	797964	1.305	6.97
9I19035-CAL9	6000	997248	1.189	6.97
~~9I19035-CALA~~	~~8000~~	~~1205305~~	~~1.119~~	~~6.99~~

AVE RF **1.277** RF RSD **11.32** AVE RT **6.96**

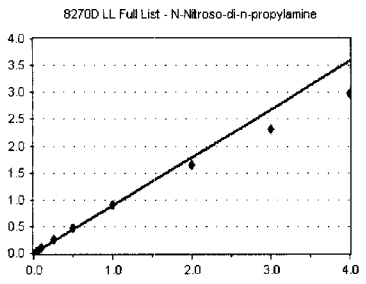
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

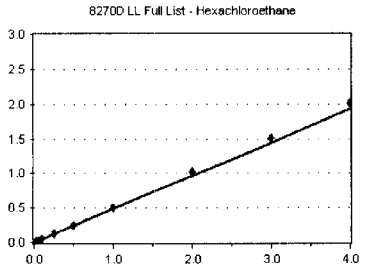


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2691	0.922	6.96
9I19035-CAL2	50	6538	0.898	6.96
9I19035-CAL3	100	13631	0.938	6.96
9I19035-CAL4	200	28365	0.991	6.96
9I19035-CAL5	500	74700	0.999	6.96
9I19035-CAL6	1000	136460	0.963	6.96
9I19035-CAL7	2000	256713	0.901	6.97
9I19035-CAL8	4000	504346	0.825	6.98
9I19035-CAL9	6000	644101	0.768	6.99
9I19035-CALA	8000	803148	0.745	7.00

AVE RF **0.895** RF RSD **9.91** AVE RT **6.97**

Hexachloroethane

Curve Fit: **AVERAGE RF**

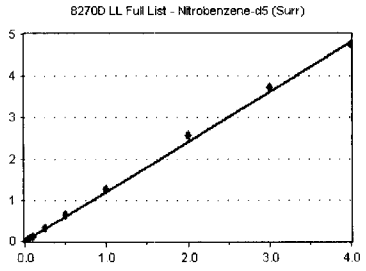


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	1267	0.434	7.08
9I19035-CAL2	50	3313	0.455	7.08
9I19035-CAL3	100	6562	0.452	7.08
9I19035-CAL4	200	13490	0.472	7.08
9I19035-CAL5	500	36961	0.494	7.08
9I19035-CAL6	1000	68545	0.484	7.08
9I19035-CAL7	2000	143490	0.503	7.08
9I19035-CAL8	4000	311702	0.510	7.08
9I19035-CAL9	6000	419784	0.500	7.08
9I19035-CALA	8000	541884	0.503	7.08

AVE RF **0.481** RF RSD **5.45** AVE RT **7.08**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

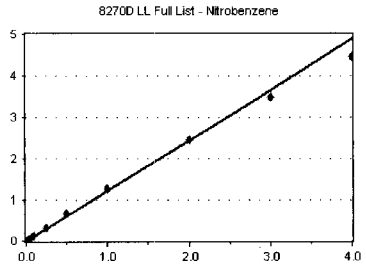


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2861	0.981	7.11
9I19035-CAL2	50	7903	1.085	7.11
9I19035-CAL3	100	16492	1.135	7.11
9I19035-CAL4	200	34591	1.209	7.11
9I19035-CAL5	500	98184	1.313	7.11
9I19035-CAL6	1000	187377	1.322	7.11
9I19035-CAL7	2000	365358	1.282	7.11
9I19035-CAL8	4000	786633	1.286	7.12
9I19035-CAL9	6000	1045001	1.246	7.12
9I19035-CALA	8000	1284804	1.193	7.13

AVE RF **1.205** RF RSD **9.14** AVE RT **7.12**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3138	1.076	7.14
9I19035-CAL2	50	8614	1.183	7.14
9I19035-CAL3	100	17280	1.189	7.14
9I19035-CAL4	200	37240	1.302	7.13
9I19035-CAL5	500	100238	1.341	7.13
9I19035-CAL6	1000	188065	1.327	7.13
9I19035-CAL7	2000	365107	1.281	7.14
9I19035-CAL8	4000	754990	1.234	7.14
9I19035-CAL9	6000	977466	1.165	7.15
9I19035-CALA	8000	1198679	1.113	7.15

AVE RF **1.221** RF RSD **7.44** AVE RT **7.14**

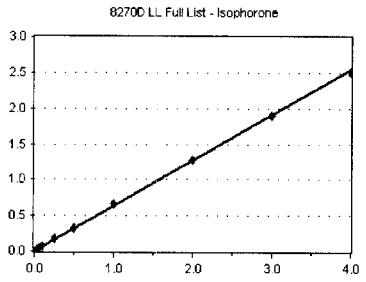
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Isophorone

Curve Fit: **AVERAGE RF**

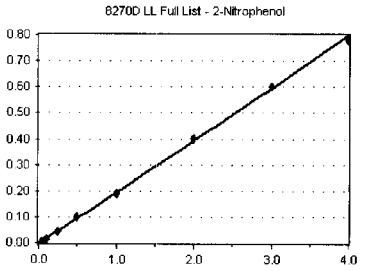


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6954	0.569	7.37
9I19035-CAL2	50	18082	0.605	7.37
9I19035-CAL3	100	37997	0.640	7.37
9I19035-CAL4	200	78525	0.652	7.37
9I19035-CAL5	500	207804	0.683	7.37
9I19035-CAL6	1000	377941	0.661	7.37
9I19035-CAL7	2000	734609	0.671	7.38
9I19035-CAL8	4000	1524753	0.637	7.38
9I19035-CAL9	6000	2075603	0.632	7.39
9I19035-CALA	8000	2693969	0.627	7.40

AVE RF **0.638** RF RSD **5.17** AVE RT **7.38**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

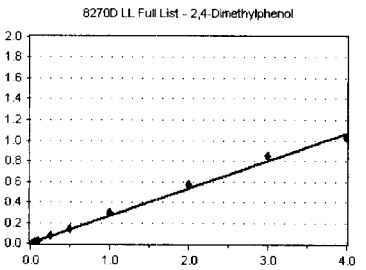


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1053~~	~~0.086~~	~~7.46~~
~~9I19035-CAL2~~	~~50~~	~~3400~~	~~0.114~~	~~7.46~~
9I19035-CAL3	100	7240	0.122	7.45
9I19035-CAL4	200	16298	0.135	7.45
9I19035-CAL5	500	54694	0.180	7.45
9I19035-CAL6	1000	114845	0.201	7.45
9I19035-CAL7	2000	207149	0.189	7.46
9I19035-CAL8	4000	481353	0.201	7.46
9I19035-CAL9	6000	659170	0.201	7.46
9I19035-CALA	8000	838038	0.195	7.46

AVE RF **0.178** RF RSD **17.69** AVE RT **7.45**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

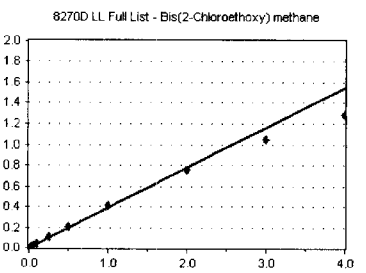


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2375~~	~~0.194~~	~~7.49~~
9I19035-CAL2	50	5922	0.198	7.49
9I19035-CAL3	100	14806	0.249	7.49
9I19035-CAL4	200	31880	0.265	7.49
9I19035-CAL5	500	86093	0.283	7.49
9I19035-CAL6	1000	164250	0.287	7.49
9I19035-CAL7	2000	333523	0.304	7.49
9I19035-CAL8	4000	686286	0.287	7.50
9I19035-CAL9	6000	932922	0.284	7.50
9I19035-CALA	8000	1099526	0.256	7.51

AVE RF **0.268** RF RSD **11.73** AVE RT **7.49**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4738	0.388	7.58
9I19035-CAL2	50	11523	0.385	7.58
9I19035-CAL3	100	23395	0.394	7.58
9I19035-CAL4	200	49149	0.408	7.58
9I19035-CAL5	500	131344	0.432	7.58
9I19035-CAL6	1000	236290	0.413	7.58
9I19035-CAL7	2000	449978	0.411	7.58
9I19035-CAL8	4000	900203	0.376	7.59
9I19035-CAL9	6000	1142883	0.348	7.59
9I19035-CALA	8000	1380842	0.321	7.60

AVE RF **0.388** RF RSD **8.46** AVE RT **7.58**

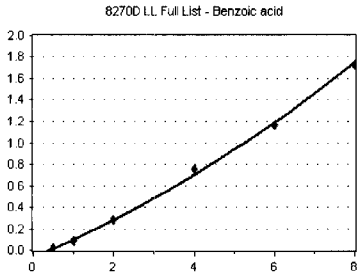
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

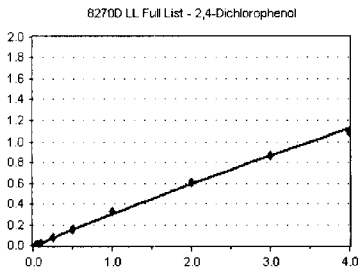


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~229~~	~~9.372~~	~~7.55~~
~~9I19035-CAL2~~	~~100~~	~~200~~	~~3.345~~	~~7.57~~
~~9I19035-CAL3~~	~~200~~	~~2086~~	~~0.018~~	~~7.54~~
~~9I19035-CAL4~~	~~400~~	~~3335~~	~~1.385~~	~~7.54~~
9I19035-CAL5	1000	22389	0.037	7.55
9I19035-CAL6	2000	99342	8.684	7.58
9I19035-CAL7	4000	311714	0.142	7.61
9I19035-CAL8	8000	902544	0.188	7.67
9I19035-CAL9	12000	1277463	0.195	7.69
9I19035-CALA	16000	1853462	0.216	7.73

AVE RF **0.144** RF RSD **48.51** AVE RT **7.64**

2,4-Dichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

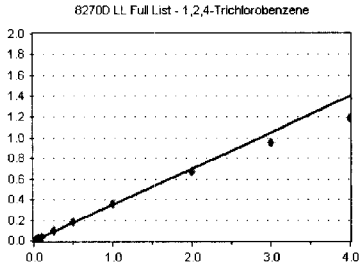


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1603~~	~~0.131~~	~~7.69~~
9I19035-CAL2	50	5068	0.170	7.69
9I19035-CAL3	100	12689	0.214	7.69
9I19035-CAL4	200	30346	0.252	7.69
9I19035-CAL5	500	89833	0.295	7.69
9I19035-CAL6	1000	173249	0.303	7.69
9I19035-CAL7	2000	350635	0.320	7.69
9I19035-CAL8	4000	731346	0.305	7.70
9I19035-CAL9	6000	943067	0.287	7.70
9I19035-CALA	8000	1167761	0.272	7.71

AVE RF **0.269** RF RSD **18.30** AVE RT **7.70**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

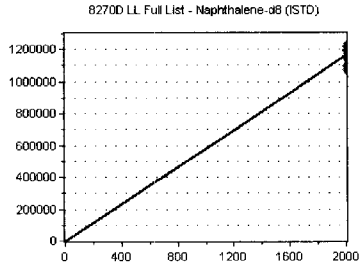


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4361	0.357	7.78
9I19035-CAL2	50	11103	0.371	7.78
9I19035-CAL3	100	21292	0.359	7.78
9I19035-CAL4	200	45007	0.374	7.78
9I19035-CAL5	500	113367	0.372	7.78
9I19035-CAL6	1000	206953	0.362	7.78
9I19035-CAL7	2000	388384	0.355	7.78
9I19035-CAL8	4000	805154	0.336	7.78
9I19035-CAL9	6000	1041502	0.317	7.79
9I19035-CALA	8000	1277566	0.297	7.79

AVE RF **0.350** RF RSD **7.29** AVE RT **7.78**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1221708	610.854	7.84
9I19035-CAL2	2000	1195757	597.878	7.84
9I19035-CAL3	2000	1186873	593.437	7.84
9I19035-CAL4	2000	1204364	602.182	7.84
9I19035-CAL5	2000	1217422	608.711	7.84
9I19035-CAL6	2000	1143968	571.984	7.84
9I19035-CAL7	2000	1095362	547.681	7.84
9I19035-CAL8	2000	1197569	598.784	7.84
9I19035-CAL9	2000	1094080	547.040	7.84
9I19035-CALA	2000	1074761	537.381	7.85

AVE RF **581.593** RF RSD **4.83** AVE RT **7.84**

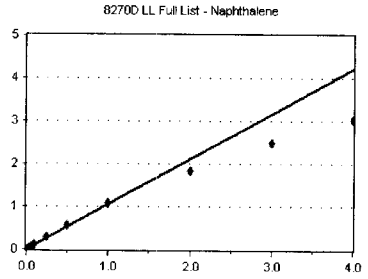
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Naphthalene

Curve Fit: **AVERAGE RF**

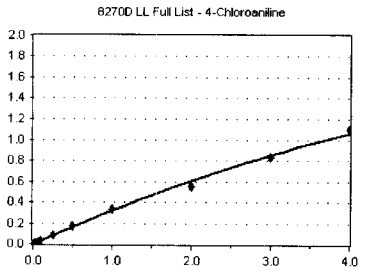


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	14004	1.146	7.86
9I19035-CAL2	50	34402	1.151	7.86
9I19035-CAL3	100	69263	1.167	7.86
9I19035-CAL4	200	141239	1.173	7.86
9I19035-CAL5	500	361018	1.186	7.86
9I19035-CAL6	1000	638989	1.117	7.86
9I19035-CAL7	2000	1178988	1.076	7.86
9I19035-CAL8	4000	2214900	0.925	7.86
9I19035-CAL9	6000	2711030	0.826	7.87
9I19035-CALA	8000	3240737	0.754	7.87

AVE RF **1.052** RF RSD **15.05** AVE RT **7.86**

4-Chloroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

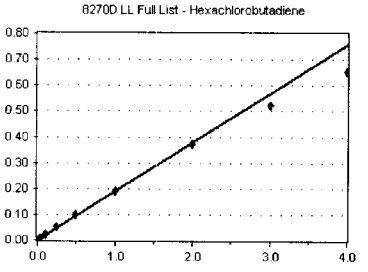


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	1531	0.125	7.91
9I19035-CAL2	50	7306	0.244	7.91
9I19035-CAL3	100	15139	0.255	7.91
9I19035-CAL4	200	38526	0.320	7.91
9I19035-CAL5	500	106945	0.351	7.91
9I19035-CAL6	1000	199585	0.349	7.91
9I19035-CAL7	2000	372183	0.340	7.92
9I19035-CAL8	4000	663200	0.277	7.93
9I19035-CAL9	6000	906180	0.276	7.93
9I19035-CALA	8000	1186251	0.276	7.93

AVE RF **0.281** RF RSD **23.94** AVE RT **7.91**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

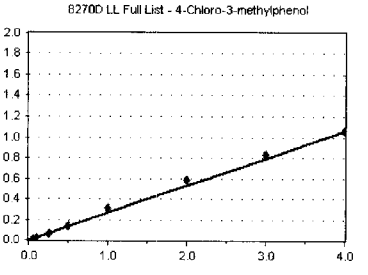


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2247	0.184	7.99
9I19035-CAL2	50	5972	0.200	7.99
9I19035-CAL3	100	11598	0.195	7.99
9I19035-CAL4	200	24136	0.200	7.99
9I19035-CAL5	500	61063	0.201	7.99
9I19035-CAL6	1000	113762	0.199	7.99
9I19035-CAL7	2000	208693	0.191	7.99
9I19035-CAL8	4000	442903	0.185	7.99
9I19035-CAL9	6000	570722	0.174	8.00
9I19035-CALA	8000	701350	0.163	8.00

AVE RF **0.189** RF RSD **6.74** AVE RT **7.99**

4-Chloro-3-methylphenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1917~~	~~0.157~~	~~8.39~~
~~9I19035-CAL2~~	~~50~~	~~5211~~	~~0.174~~	~~8.39~~
9I19035-CAL3	100	11698	0.197	8.39
9I19035-CAL4	200	26469	0.220	8.39
9I19035-CAL5	500	84667	0.278	8.39
9I19035-CAL6	1000	162469	0.284	8.39
9I19035-CAL7	2000	338452	0.309	8.39
9I19035-CAL8	4000	698064	0.291	8.39
9I19035-CAL9	6000	912303	0.278	8.40
9I19035-CALA	8000	1141605	0.266	8.40

AVE RF **0.265** RF RSD **14.24** AVE RT **8.39**

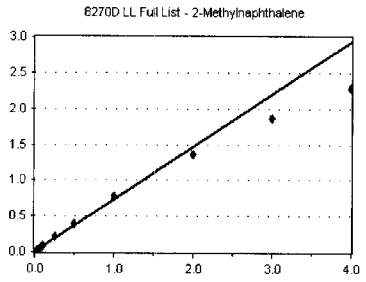
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

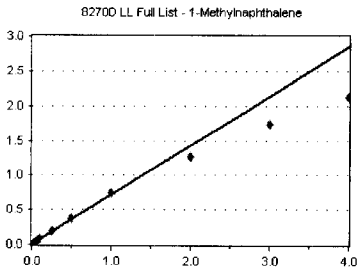


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8620	0.706	8.55
9I19035-CAL2	50	23135	0.774	8.56
9I19035-CAL3	100	46039	0.776	8.56
9I19035-CAL4	200	98607	0.819	8.56
9I19035-CAL5	500	253485	0.833	8.56
9I19035-CAL6	1000	453493	0.793	8.56
9I19035-CAL7	2000	857631	0.783	8.56
9I19035-CAL8	4000	1625949	0.679	8.56
9I19035-CAL9	6000	2034929	0.620	8.56
9I19035-CALA	8000	2448839	0.570	8.56

AVE RF **0.735** RF RSD **12.00** AVE RT **8.56**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

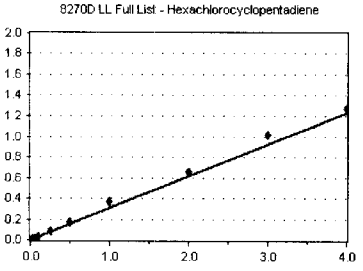


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9000	0.737	8.65
9I19035-CAL2	50	23006	0.770	8.65
9I19035-CAL3	100	46134	0.777	8.66
9I19035-CAL4	200	95459	0.793	8.65
9I19035-CAL5	500	244797	0.804	8.66
9I19035-CAL6	1000	430139	0.752	8.66
9I19035-CAL7	2000	810434	0.740	8.66
9I19035-CAL8	4000	1521185	0.635	8.66
9I19035-CAL9	6000	1893325	0.577	8.66
9I19035-CALA	8000	2286875	0.532	8.66

AVE RF **0.712** RF RSD **13.43** AVE RT **8.66**

Hexachlorocyclopentadiene

Curve Fit: **AVERAGE RF**

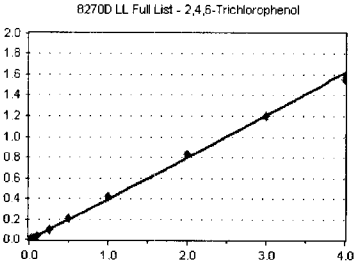


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1303~~	~~0.203~~	~~8.72~~
9I19035-CAL2	50	3356	0.218	8.72
9I19035-CAL3	100	8031	0.261	8.72
9I19035-CAL4	200	17504	0.286	8.73
9I19035-CAL5	500	51180	0.327	8.72
9I19035-CAL6	1000	99801	0.342	8.73
9I19035-CAL7	2000	213088	0.363	8.72
9I19035-CAL8	4000	417829	0.328	8.73
9I19035-CAL9	6000	601203	0.338	8.73
9I19035-CALA	8000	759063	0.320	8.73

AVE RF **0.309** RF RSD **14.82** AVE RT **8.73**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1119~~	~~0.175~~	~~8.84~~
9I19035-CAL2	50	3644	0.237	8.84
9I19035-CAL3	100	7912	0.257	8.84
9I19035-CAL4	200	18771	0.307	8.84
9I19035-CAL5	500	59985	0.384	8.84
9I19035-CAL6	1000	117480	0.402	8.84
9I19035-CAL7	2000	248218	0.423	8.84
9I19035-CAL8	4000	532499	0.419	8.85
9I19035-CAL9	6000	713503	0.401	8.85
9I19035-CALA	8000	922776	0.389	8.85

AVE RF **0.358** RF RSD **19.99** AVE RT **8.84**

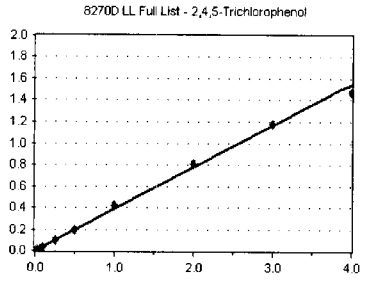
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

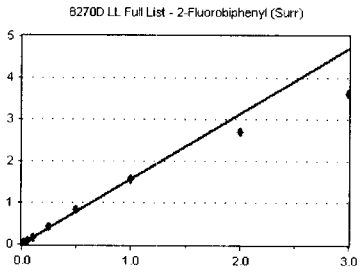


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1218~~	~~0.190~~	~~8.87~~
9I19035-CAL2	50	3657	0.237	8.87
9I19035-CAL3	100	8310	0.270	8.87
9I19035-CAL4	200	18422	0.301	8.87
9I19035-CAL5	500	59608	0.381	8.87
9I19035-CAL6	1000	113799	0.390	8.87
9I19035-CAL7	2000	245074	0.418	8.87
9I19035-CAL8	4000	516958	0.406	8.88
9I19035-CAL9	6000	699105	0.393	8.88
9I19035-CALA	8000	870124	0.366	8.88

AVE RF **0.351** RF RSD **18.51** AVE RT **8.88**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

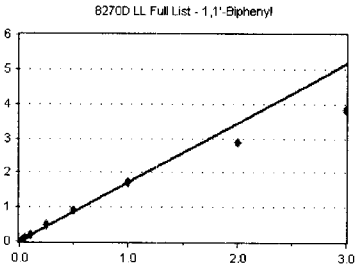


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9460	1.477	8.93
9I19035-CAL2	50	24802	1.610	8.93
9I19035-CAL3	100	53353	1.735	8.93
9I19035-CAL4	200	107137	1.751	8.93
9I19035-CAL5	500	272047	1.740	8.93
9I19035-CAL6	1000	482290	1.652	8.93
9I19035-CAL7	2000	917452	1.564	8.93
9I19035-CAL8	4000	1718307	1.351	8.93
9I19035-CAL9	6000	2148364	1.207	8.93
~~9I19035-CALA~~	~~8000~~	~~2595271~~	~~1.093~~	~~8.94~~

AVE RF **1.565** RF RSD **12.07** AVE RT **8.93**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

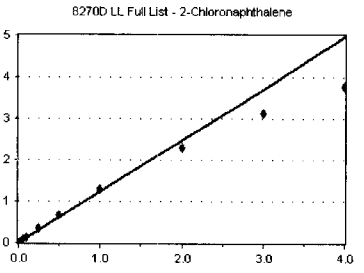


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	10205	1.593	9.03
9I19035-CAL2	50	28683	1.862	9.03
9I19035-CAL3	100	58168	1.891	9.03
9I19035-CAL4	200	117826	1.926	9.03
9I19035-CAL5	500	300735	1.923	9.03
9I19035-CAL6	1000	533233	1.827	9.03
9I19035-CAL7	2000	1010736	1.723	9.03
9I19035-CAL8	4000	1845876	1.451	9.03
9I19035-CAL9	6000	2268485	1.275	9.04
~~9I19035-CALA~~	~~8000~~	~~2706900~~	~~1.140~~	~~9.04~~

AVE RF **1.719** RF RSD **13.51** AVE RT **9.03**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7646	1.194	9.05
9I19035-CAL2	50	19450	1.263	9.05
9I19035-CAL3	100	41705	1.356	9.05
9I19035-CAL4	200	86117	1.408	9.05
9I19035-CAL5	500	223930	1.432	9.05
9I19035-CAL6	1000	386877	1.325	9.05
9I19035-CAL7	2000	759926	1.296	9.05
9I19035-CAL8	4000	1467799	1.154	9.06
9I19035-CAL9	6000	1860060	1.045	9.06
9I19035-CALA	8000	2240055	0.943	9.06

AVE RF **1.242** RF RSD **12.73** AVE RT **9.05**

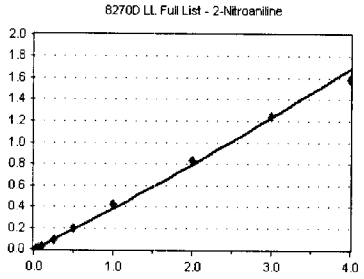
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

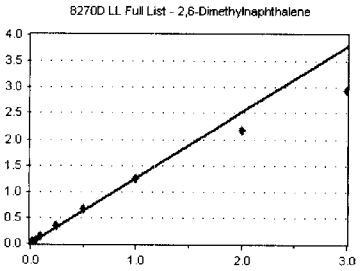


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~939~~	~~0.147~~	~~9.15~~
9I19035-CAL2	50	2728	0.177	9.15
9I19035-CAL3	100	6877	0.224	9.15
9I19035-CAL4	200	16161	0.264	9.15
9I19035-CAL5	500	55795	0.357	9.15
9I19035-CAL6	1000	113482	0.389	9.15
9I19035-CAL7	2000	248865	0.424	9.15
9I19035-CAL8	4000	528406	0.415	9.16
9I19035-CAL9	6000	739914	0.416	9.16
9I19035-CALA	8000	944974	0.398	9.17

AVE RF **0.340** RF RSD **27.55** AVE RT **9.15**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

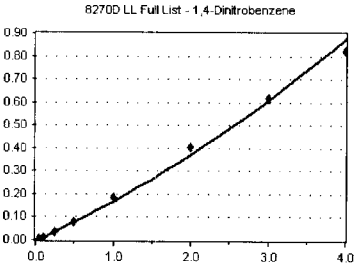


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7097	1.108	9.19
9I19035-CAL2	50	20566	1.335	9.19
9I19035-CAL3	100	43362	1.410	9.19
9I19035-CAL4	200	87215	1.426	9.19
9I19035-CAL5	500	219677	1.405	9.19
9I19035-CAL6	1000	389863	1.336	9.19
9I19035-CAL7	2000	740663	1.263	9.19
9I19035-CAL8	4000	1385514	1.089	9.19
9I19035-CAL9	6000	1742370	0.979	9.20
~~9I19035-CALA~~	~~8000~~	~~2089018~~	~~0.880~~	~~9.20~~

AVE RF **1.261** RF RSD **12.95** AVE RT **9.19**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

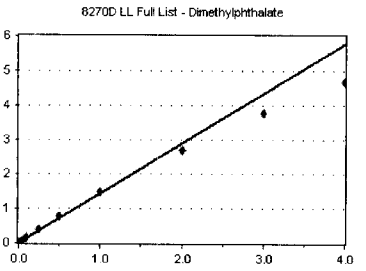


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~381~~	~~5.948~~	~~9.27~~
~~9I19035-CAL2~~	~~50~~	~~915~~	~~5.939~~	~~9.27~~
9I19035-CAL3	100	2006	0.065	9.27
9I19035-CAL4	200	5164	8.441	9.27
9I19035-CAL5	500	19841	0.127	9.27
9I19035-CAL6	1000	44207	0.151	9.27
9I19035-CAL7	2000	108019	0.184	9.28
9I19035-CAL8	4000	258106	0.203	9.29
9I19035-CAL9	6000	365105	0.205	9.29
9I19035-CALA	8000	488295	0.206	9.30

AVE RF **0.153** RF RSD **36.62** AVE RT **9.28**

Dimethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9190	1.435	9.33
9I19035-CAL2	50	22486	1.460	9.33
9I19035-CAL3	100	49089	1.596	9.33
9I19035-CAL4	200	96043	1.570	9.33
9I19035-CAL5	500	250192	1.600	9.33
9I19035-CAL6	1000	449574	1.540	9.33
9I19035-CAL7	2000	868820	1.481	9.34
9I19035-CAL8	4000	1712764	1.346	9.35
9I19035-CAL9	6000	2223667	1.249	9.35
9I19035-CALA	8000	2768841	1.166	9.36

AVE RF **1.444** RF RSD **10.30** AVE RT **9.34**

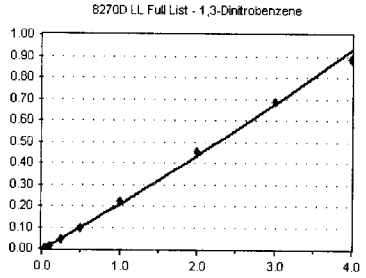
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,3-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

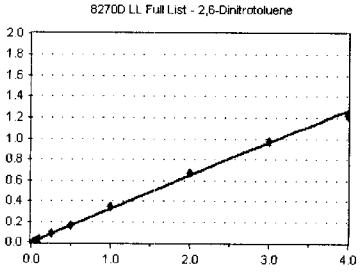


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~417~~	~~6.510~~	~~9.35~~
~~9I19035-CAL2~~	~~50~~	~~1390~~	~~9.023~~	~~9.35~~
9I19035-CAL3	100	3033	9.862	9.35
9I19035-CAL4	200	7621	0.125	9.35
9I19035-CAL5	500	28132	0.180	9.35
9I19035-CAL6	1000	57342	0.196	9.35
9I19035-CAL7	2000	128986	0.220	9.36
9I19035-CAL8	4000	289563	0.228	9.37
9I19035-CAL9	6000	407082	0.229	9.38
9I19035-CALA	8000	525829	0.221	9.39

AVE RF **0.187** RF RSD **26.72** AVE RT **9.36**

2,6-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

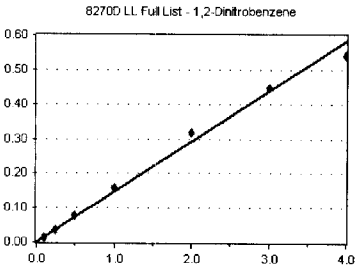


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1042~~	~~0.163~~	~~9.39~~
9I19035-CAL2	50	2915	0.189	9.39
9I19035-CAL3	100	6526	0.212	9.39
9I19035-CAL4	200	16812	0.275	9.39
9I19035-CAL5	500	51160	0.327	9.39
9I19035-CAL6	1000	97373	0.334	9.39
9I19035-CAL7	2000	201552	0.344	9.39
9I19035-CAL8	4000	424265	0.334	9.40
9I19035-CAL9	6000	575872	0.324	9.41
9I19035-CALA	8000	727325	0.306	9.41

AVE RF **0.294** RF RSD **19.32** AVE RT **9.39**

1,2-Dinitrobenzene

Curve Fit: **AVERAGE RF**

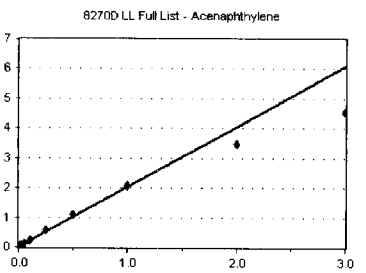


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~304~~	~~4.746~~	~~9.44~~
~~9I19035-CAL2~~	~~50~~	~~1349~~	~~8.757~~	~~9.44~~
~~9I19035-CAL3~~	~~100~~	~~2742~~	~~8.915~~	~~9.45~~
9I19035-CAL4	200	7269	0.119	9.44
9I19035-CAL5	500	22807	0.146	9.45
9I19035-CAL6	1000	45222	0.155	9.45
9I19035-CAL7	2000	94079	0.160	9.45
9I19035-CAL8	4000	202294	0.159	9.47
9I19035-CAL9	6000	266233	0.150	9.47
9I19035-CALA	8000	322227	0.136	9.48

AVE RF **0.146** RF RSD **10.12** AVE RT **9.46**

Acenaphthylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12450	1.944	9.47
9I19035-CAL2	50	32192	2.090	9.47
9I19035-CAL3	100	68008	2.211	9.47
9I19035-CAL4	200	136163	2.226	9.47
9I19035-CAL5	500	361152	2.309	9.47
9I19035-CAL6	1000	637470	2.184	9.47
9I19035-CAL7	2000	1211941	2.067	9.48
9I19035-CAL8	4000	2224222	1.748	9.48
9I19035-CAL9	6000	2704211	1.519	9.48
~~9I19035-CALA~~	~~8000~~	~~3146686~~	~~1.325~~	~~9.49~~

AVE RF **2.033** RF RSD **12.60** AVE RT **9.48**

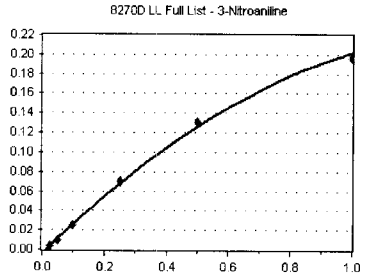
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

3-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

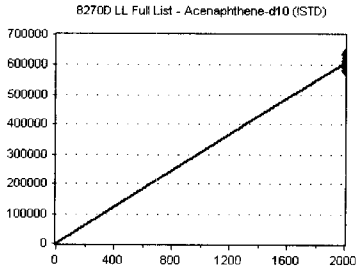


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~592~~	~~9.242~~	~~9.56~~
9I19035-CAL2	50	2106	0.137	9.56
9I19035-CAL3	100	6036	0.196	9.56
9I19035-CAL4	200	15637	0.256	9.56
9I19035-CAL5	500	44178	0.282	9.56
9I19035-CAL6	1000	76212	0.261	9.56
9I19035-CAL7	2000	114743	0.196	9.56
~~9I19035-CAL8~~	~~4000~~	~~123216~~	~~9.686~~	~~9.57~~
~~9I19035-CAL9~~	~~6000~~	~~180797~~	~~0.102~~	~~0.00~~
~~9I19035-CALA~~	~~8000~~	~~174843~~	~~7.362~~	~~0.00~~

AVE RF **0.221** RF RSD **24.71** AVE RT **9.56**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

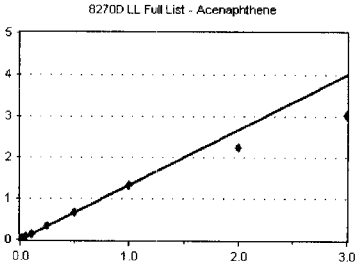


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	640527	320.263	9.62
9I19035-CAL2	2000	616226	308.113	9.62
9I19035-CAL3	2000	615111	307.555	9.62
9I19035-CAL4	2000	611745	305.873	9.62
9I19035-CAL5	2000	625555	312.778	9.62
9I19035-CAL6	2000	583825	291.913	9.62
9I19035-CAL7	2000	586466	293.233	9.62
9I19035-CAL8	2000	636039	318.020	9.62
9I19035-CAL9	2000	593235	296.618	9.62
9I19035-CALA	2000	593771	296.885	9.63

AVE RF **305.125** RF RSD **3.32** AVE RT **9.62**

Acenaphthene

Curve Fit: **AVERAGE RF**

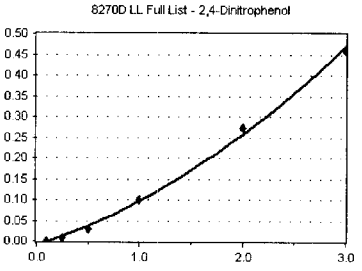


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8885	1.387	9.65
9I19035-CAL2	50	22572	1.465	9.65
9I19035-CAL3	100	44425	1.444	9.65
9I19035-CAL4	200	89211	1.458	9.65
9I19035-CAL5	500	224540	1.436	9.65
9I19035-CAL6	1000	399993	1.370	9.65
9I19035-CAL7	2000	770675	1.314	9.65
9I19035-CAL8	4000	1433796	1.127	9.66
9I19035-CAL9	6000	1803278	1.013	9.66
~~9I19035-CALA~~	~~8000~~	~~2204696~~	~~0.928~~	~~9.66~~

AVE RF **1.335** RF RSD **12.00** AVE RT **9.65**

2,4-Dinitrophenol

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



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL3~~	~~100~~	~~169~~	~~5.495~~	~~9.67~~
9I19035-CAL4	200	796	1.301	9.67
9I19035-CAL5	500	4568	2.921	9.67
9I19035-CAL6	1000	18042	6.181	9.66
9I19035-CAL7	2000	58400	9.958	9.67
9I19035-CAL8	4000	174238	0.137	9.68
9I19035-CAL9	6000	272053	0.153	9.68
~~9I19035-CALA~~	~~8000~~	~~388560~~	~~0.164~~	~~9.69~~

AVE RF **8.224** RF RSD **69.44** AVE RT **9.67**

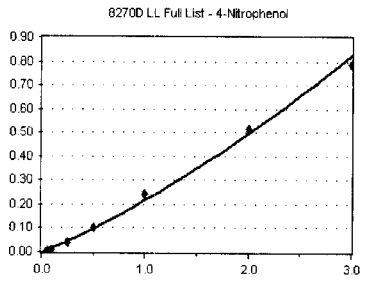
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

4-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

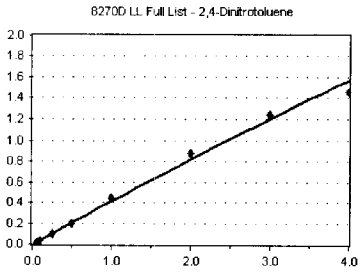


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~120~~	~~1.873~~	~~9.72~~
~~9I19035-CAL2~~	~~50~~	~~699~~	~~4.537~~	~~9.72~~
9I19035-CAL3	100	2106	6.848	9.72
9I19035-CAL4	200	5790	9.465	9.72
9I19035-CAL5	500	25654	0.164	9.72
9I19035-CAL6	1000	58727	0.201	9.72
9I19035-CAL7	2000	141903	0.242	9.73
9I19035-CAL8	4000	326661	0.257	9.74
9I19035-CAL9	6000	467183	0.263	9.75
~~9I19035-CALA~~	~~8000~~	~~610739~~	~~0.257~~	~~9.76~~

AVE RF **0.184** RF RSD **42.54** AVE RT **9.73**

2,4-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

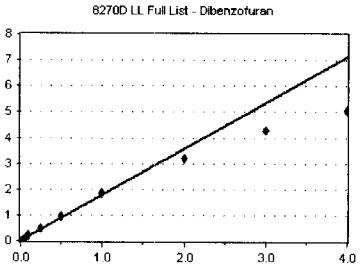


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1027~~	~~0.160~~	~~9.80~~
~~9I19035-CAL2~~	~~50~~	~~2508~~	~~0.163~~	~~9.80~~
9I19035-CAL3	100	6812	0.221	9.80
9I19035-CAL4	200	16915	0.277	9.80
9I19035-CAL5	500	57760	0.369	9.80
9I19035-CAL6	1000	116247	0.398	9.80
9I19035-CAL7	2000	257547	0.439	9.80
9I19035-CAL8	4000	555824	0.437	9.81
9I19035-CAL9	6000	734363	0.413	9.82
9I19035-CALA	8000	868405	0.366	9.83

AVE RF **0.365** RF RSD **21.35** AVE RT **9.81**

Dibenzofuran

Curve Fit: **AVERAGE RF**

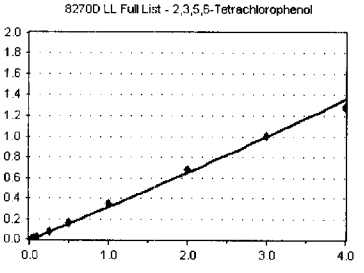


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11668	1.822	9.83
9I19035-CAL2	50	29377	1.907	9.83
9I19035-CAL3	100	62656	2.037	9.83
9I19035-CAL4	200	123476	2.018	9.83
9I19035-CAL5	500	310051	1.983	9.83
9I19035-CAL6	1000	550893	1.887	9.83
9I19035-CAL7	2000	1086183	1.852	9.83
9I19035-CAL8	4000	2040744	1.604	9.83
9I19035-CAL9	6000	2531005	1.422	9.84
9I19035-CALA	8000	3003141	1.264	9.84

AVE RF **1.780** RF RSD **14.79** AVE RT **9.83**

2,3,5,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~774~~	~~0.121~~	~~9.91~~
9I19035-CAL2	50	1678	0.109	9.91
9I19035-CAL3	100	5673	0.184	9.91
9I19035-CAL4	200	13193	0.216	9.91
9I19035-CAL5	500	46260	0.296	9.91
9I19035-CAL6	1000	91879	0.315	9.91
9I19035-CAL7	2000	201504	0.344	9.91
9I19035-CAL8	4000	434819	0.342	9.91
9I19035-CAL9	6000	597064	0.335	9.92
9I19035-CALA	8000	763806	0.322	9.92

AVE RF **0.274** RF RSD **30.66** AVE RT **9.91**

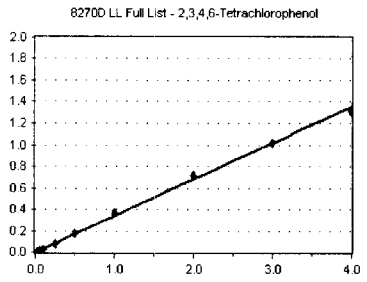
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

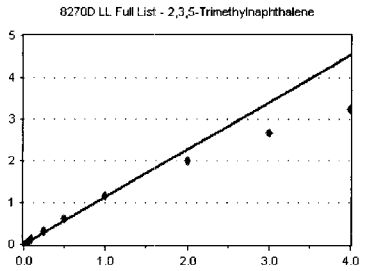


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~856~~	~~0.134~~	~~9.95~~
9I19035-CAL2	50	2513	0.163	9.95
9I19035-CAL3	100	7263	0.236	9.95
9I19035-CAL4	200	16040	0.262	9.95
9I19035-CAL5	500	50476	0.323	9.95
9I19035-CAL6	1000	101167	0.347	9.95
9I19035-CAL7	2000	213539	0.364	9.95
9I19035-CAL8	4000	451267	0.355	9.96
9I19035-CAL9	6000	603345	0.339	9.96
9I19035-CALA	8000	773723	0.326	9.96

AVE RF **0.302** RF RSD **22.30** AVE RT **9.95**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

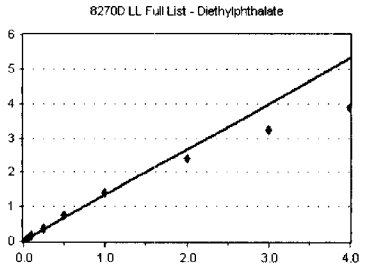


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7629	1.191	10.03
9I19035-CAL2	50	19066	1.238	10.03
9I19035-CAL3	100	38608	1.255	10.03
9I19035-CAL4	200	78195	1.278	10.04
9I19035-CAL5	500	199252	1.274	10.03
9I19035-CAL6	1000	355247	1.217	10.04
9I19035-CAL7	2000	685050	1.168	10.04
9I19035-CAL8	4000	1276533	1.004	10.04
9I19035-CAL9	6000	1592300	0.895	10.05
9I19035-CALA	8000	1931750	0.813	10.05

AVE RF **1.133** RF RSD **14.83** AVE RT **10.04**

Diethylphthalate

Curve Fit: **AVERAGE RF**

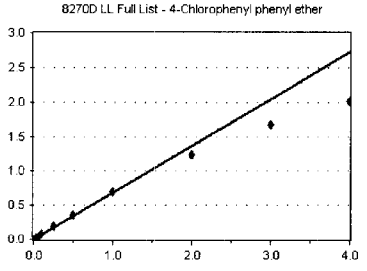


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8035	1.254	10.04
9I19035-CAL2	50	21378	1.388	10.04
9I19035-CAL3	100	47870	1.556	10.04
9I19035-CAL4	200	92047	1.505	10.04
9I19035-CAL5	500	232776	1.488	10.04
9I19035-CAL6	1000	426259	1.460	10.05
9I19035-CAL7	2000	811497	1.384	10.06
9I19035-CAL8	4000	1534521	1.206	10.06
9I19035-CAL9	6000	1916805	1.077	10.07
9I19035-CALA	8000	2319061	0.976	10.07

AVE RF **1.330** RF RSD **14.62** AVE RT **10.05**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4548	0.710	10.17
9I19035-CAL2	50	11449	0.743	10.17
9I19035-CAL3	100	23837	0.775	10.17
9I19035-CAL4	200	45790	0.749	10.17
9I19035-CAL5	500	117369	0.750	10.17
9I19035-CAL6	1000	209713	0.718	10.17
9I19035-CAL7	2000	412942	0.704	10.17
9I19035-CAL8	4000	786385	0.618	10.17
9I19035-CAL9	6000	992417	0.558	10.18
9I19035-CALA	8000	1192807	0.502	10.18

AVE RF **0.683** RF RSD **13.46** AVE RT **10.17**

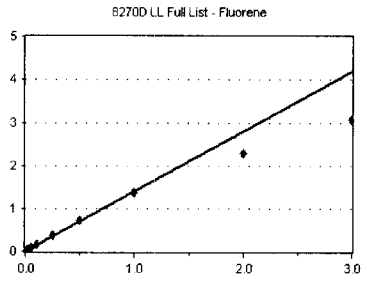
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Fluorene

Curve Fit: **AVERAGE RF**

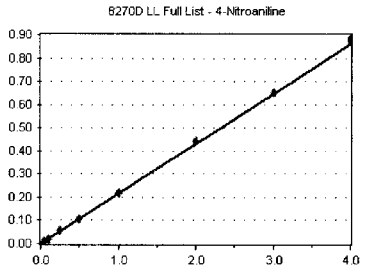


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9113	1.423	10.17
9I19035-CAL2	50	22247	1.444	10.17
9I19035-CAL3	100	48968	1.592	10.17
9I19035-CAL4	200	95574	1.562	10.17
9I19035-CAL5	500	244304	1.562	10.17
9I19035-CAL6	1000	426158	1.460	10.17
9I19035-CAL7	2000	812478	1.385	10.18
9I19035-CAL8	4000	1464263	1.151	10.18
9I19035-CAL9	6000	1824399	1.025	10.19
~~9I19035-CALA~~	~~8000~~	~~2171368~~	~~0.914~~	~~10.19~~

AVE RF **1.401** RF RSD **13.79** AVE RT **10.18**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

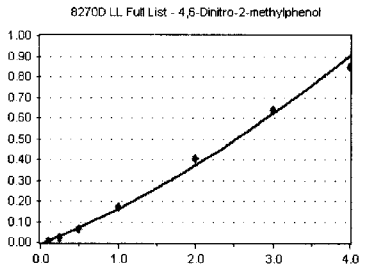


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~719~~	~~0.112~~	~~10.18~~
~~9I19035-CAL2~~	~~50~~	~~2192~~	~~0.142~~	~~10.18~~
9I19035-CAL3	100	5563	0.181	10.18
9I19035-CAL4	200	12832	0.210	10.18
9I19035-CAL5	500	36541	0.234	10.18
9I19035-CAL6	1000	63138	0.216	10.18
9I19035-CAL7	2000	129234	0.220	10.19
9I19035-CAL8	4000	281600	0.221	10.20
9I19035-CAL9	6000	385746	0.217	10.21
9I19035-CALA	8000	523369	0.220	10.21

AVE RF **0.215** RF RSD **7.13** AVE RT **10.19**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

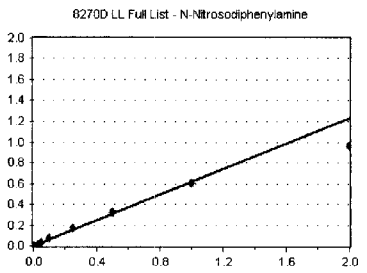


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL2~~	~~50~~	~~206~~	~~1.337~~	~~10.22~~
~~9I19035-CAL3~~	~~100~~	~~761~~	~~0.025~~	~~10.21~~
9I19035-CAL4	200	2504	4.093	10.22
9I19035-CAL5	500	14208	9.085	10.22
9I19035-CAL6	1000	38878	0.133	10.22
9I19035-CAL7	2000	101854	0.174	10.22
9I19035-CAL8	4000	258196	0.203	10.23
9I19035-CAL9	6000	377769	0.212	10.24
9I19035-CALA	8000	504056	0.212	10.24

AVE RF **0.152** RF RSD **43.85** AVE RT **10.23**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	5957	0.518	10.29
9I19035-CAL2	50	16461	0.605	10.29
9I19035-CAL3	100	36899	0.660	10.29
9I19035-CAL4	200	77183	0.703	10.29
9I19035-CAL5	500	197334	0.703	10.29
9I19035-CAL6	1000	350586	0.658	10.29
9I19035-CAL7	2000	659355	0.604	10.29
9I19035-CAL8	4000	1182676	0.483	10.30
~~9I19035-CAL9~~	~~6000~~	~~1569352~~	~~0.455~~	~~10.30~~
~~9I19035-CALA~~	~~8000~~	~~1760214~~	~~0.377~~	~~10.31~~

AVE RF **0.617** RF RSD **13.21** AVE RT **10.29**

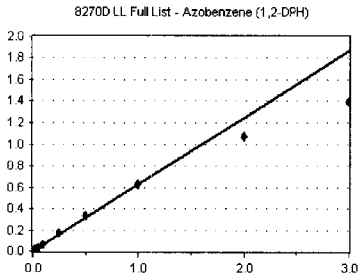
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

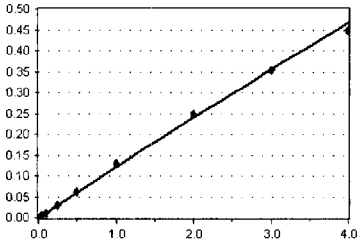


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6853	0.596	10.33
9I19035-CAL2	50	17404	0.640	10.33
9I19035-CAL3	100	37821	0.676	10.33
9I19035-CAL4	200	76676	0.698	10.33
9I19035-CAL5	500	199437	0.710	10.33
9I19035-CAL6	1000	355316	0.667	10.33
9I19035-CAL7	2000	684303	0.627	10.33
9I19035-CAL8	4000	1316342	0.537	10.34
9I19035-CAL9	6000	1601806	0.465	10.34
~~9I19035-CALA~~	~~8000~~	~~1950077~~	~~0.418~~	~~10.34~~

AVE RF **0.624** RF RSD **12.85** AVE RT **10.33**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

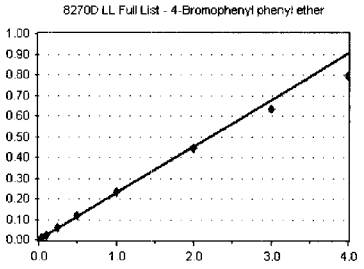


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~762~~	~~6.623~~	~~10.41~~
9I19035-CAL2	50	1929	7.093	10.42
9I19035-CAL3	100	4809	8.598	10.42
9I19035-CAL4	200	10829	9.862	10.42
9I19035-CAL5	500	33701	0.120	10.42
9I19035-CAL6	1000	65055	0.122	10.42
9I19035-CAL7	2000	142266	0.130	10.42
9I19035-CAL8	4000	305471	0.125	10.43
9I19035-CAL9	6000	407389	0.118	10.43
9I19035-CALA	8000	524653	0.112	10.44

AVE RF **0.109** RF RSD **18.24** AVE RT **10.42**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**

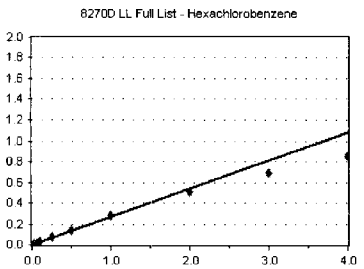


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2390	0.208	10.67
9I19035-CAL2	50	6326	0.233	10.67
9I19035-CAL3	100	13242	0.237	10.67
9I19035-CAL4	200	26212	0.239	10.67
9I19035-CAL5	500	66857	0.238	10.67
9I19035-CAL6	1000	125621	0.236	10.67
9I19035-CAL7	2000	256334	0.235	10.67
9I19035-CAL8	4000	546207	0.223	10.68
9I19035-CAL9	6000	726568	0.211	10.68
9I19035-CALA	8000	926306	0.198	10.68

AVE RF **0.226** RF RSD **6.56** AVE RT **10.67**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3454	0.300	10.75
9I19035-CAL2	50	7615	0.280	10.75
9I19035-CAL3	100	16314	0.292	10.75
9I19035-CAL4	200	30519	0.278	10.75
9I19035-CAL5	500	82813	0.295	10.75
9I19035-CAL6	1000	152211	0.286	10.75
9I19035-CAL7	2000	304969	0.279	10.75
9I19035-CAL8	4000	617226	0.252	10.75
9I19035-CAL9	6000	795928	0.231	10.76
9I19035-CALA	8000	1001688	0.215	10.76

AVE RF **0.271** RF RSD **10.61** AVE RT **10.75**

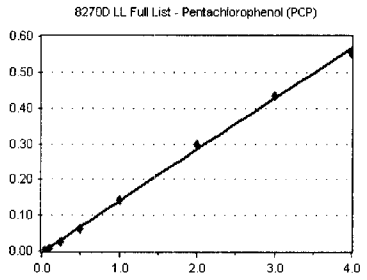
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Pentachlorophenol (PCP)

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

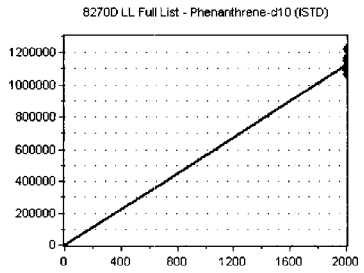


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1000~~	~~8.692~~	~~10.94~~
~~9I19035-CAL2~~	~~50~~	~~1392~~	~~5.118~~	~~10.94~~
9I19035-CAL3	100	4341	7.762	10.94
9I19035-CAL4	200	7638	6.956	10.94
9I19035-CAL5	500	30348	0.108	10.94
9I19035-CAL6	1000	65122	0.122	10.94
9I19035-CAL7	2000	154858	0.142	10.94
9I19035-CAL8	4000	363768	0.148	10.94
9I19035-CAL9	6000	500914	0.145	10.95
9I19035-CALA	8000	646595	0.138	10.95

AVE RF **0.119** RF RSD **26.11** AVE RT **10.94**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

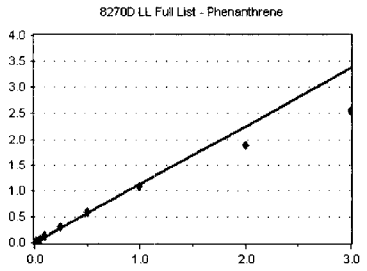


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1150535	575.268	11.13
9I19035-CAL2	2000	1087898	543.949	11.13
9I19035-CAL3	2000	1118597	559.298	11.13
9I19035-CAL4	2000	1098102	549.051	11.13
9I19035-CAL5	2000	1123094	561.547	11.13
9I19035-CAL6	2000	1065192	532.596	11.14
9I19035-CAL7	2000	1091855	545.928	11.14
9I19035-CAL8	2000	1224924	612.462	11.14
9I19035-CAL9	2000	1148482	574.241	11.14
9I19035-CALA	2000	1167219	583.609	11.14

AVE RF **563.795** RF RSD **4.15** AVE RT **11.13**

Phenanthrene

Curve Fit: **AVERAGE RF**

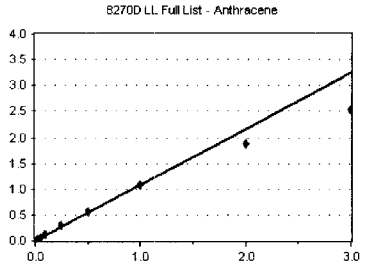


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	13749	1.195	11.16
9I19035-CAL2	50	32566	1.197	11.16
9I19035-CAL3	100	68493	1.225	11.15
9I19035-CAL4	200	134878	1.228	11.15
9I19035-CAL5	500	343840	1.225	11.16
9I19035-CAL6	1000	610421	1.146	11.16
9I19035-CAL7	2000	1191270	1.091	11.16
9I19035-CAL8	4000	2302690	0.940	11.16
9I19035-CAL9	6000	2932288	0.851	11.17
~~9I19035-CALA~~	~~8000~~	~~3584429~~	~~0.768~~	~~11.17~~

AVE RF **1.122** RF RSD **12.26** AVE RT **11.16**

Anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11450	0.995	11.21
9I19035-CAL2	50	30636	1.126	11.21
9I19035-CAL3	100	65192	1.166	11.21
9I19035-CAL4	200	132343	1.205	11.21
9I19035-CAL5	500	335865	1.196	11.21
9I19035-CAL6	1000	608748	1.143	11.21
9I19035-CAL7	2000	1187408	1.088	11.21
9I19035-CAL8	4000	2312152	0.944	11.22
9I19035-CAL9	6000	2907155	0.844	11.22
~~9I19035-CALA~~	~~8000~~	~~3477728~~	~~0.745~~	~~11.22~~

AVE RF **1.079** RF RSD **11.55** AVE RT **11.21**

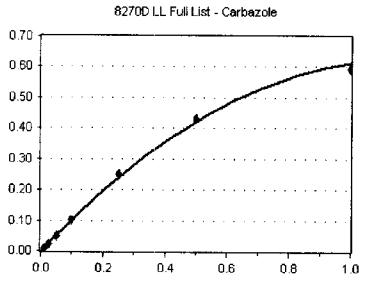
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Carbazole

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

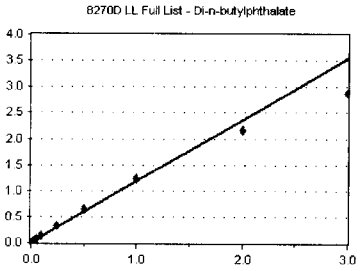


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9186	0.798	11.37
9I19035-CAL2	50	24489	0.900	11.37
9I19035-CAL3	100	54742	0.979	11.37
9I19035-CAL4	200	110985	1.011	11.37
9I19035-CAL5	500	281210	1.002	11.37
9I19035-CAL6	1000	458747	0.861	11.37
9I19035-CAL7	2000	646631	0.592	11.37
~~9I19035-CAL8~~	~~4000~~	~~858655~~	~~0.350~~	~~11.37~~
~~9I19035-CAL9~~	~~6000~~	~~1156567~~	~~0.336~~	~~11.37~~
~~9I19035-CALA~~	~~8000~~	~~1165062~~	~~0.250~~	~~11.37~~

AVE RF **0.878** RF RSD **16.89** AVE RT **11.37**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

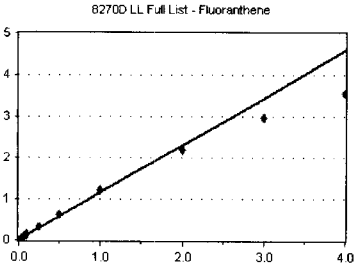


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~11697~~	~~1.017~~	~~11.72~~
9I19035-CAL2	50	29117	1.071	11.72
9I19035-CAL3	100	70280	1.257	11.72
9I19035-CAL4	200	138215	1.259	11.72
9I19035-CAL5	500	369981	1.318	11.72
9I19035-CAL6	1000	683398	1.283	11.72
9I19035-CAL7	2000	1348435	1.235	11.72
9I19035-CAL8	4000	2651399	1.082	11.72
9I19035-CAL9	6000	3301933	0.958	11.73
~~9I19035-CALA~~	~~8000~~	~~4037361~~	~~0.865~~	~~11.72~~

AVE RF **1.183** RF RSD **10.85** AVE RT **11.72**

Fluoranthene

Curve Fit: **AVERAGE RF**

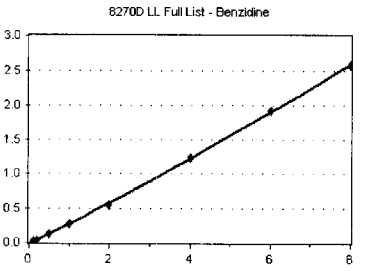


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12248	1.065	12.43
9I19035-CAL2	50	31166	1.146	12.42
9I19035-CAL3	100	70234	1.256	12.42
9I19035-CAL4	200	138551	1.262	12.42
9I19035-CAL5	500	369455	1.316	12.43
9I19035-CAL6	1000	669325	1.257	12.42
9I19035-CAL7	2000	1341415	1.229	12.43
9I19035-CAL8	4000	2665095	1.088	12.44
9I19035-CAL9	6000	3417993	0.992	12.44
9I19035-CALA	8000	4158773	0.891	12.44

AVE RF **1.150** RF RSD **12.02** AVE RT **12.43**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~3398~~	~~0.148~~	~~12.58~~
~~9I19035-CAL2~~	~~100~~	~~5652~~	~~0.104~~	~~12.58~~
9I19035-CAL3	200	12748	0.114	12.58
9I19035-CAL4	400	43242	0.197	12.58
9I19035-CAL5	1000	152022	0.271	12.58
9I19035-CAL6	2000	302104	0.284	12.58
9I19035-CAL7	4000	601547	0.275	12.59
9I19035-CAL8	8000	1506619	0.307	12.60
9I19035-CAL9	12000	2204013	0.320	12.60
9I19035-CALA	16000	3017555	0.323	12.60

AVE RF **0.261** RF RSD **27.45** AVE RT **12.59**

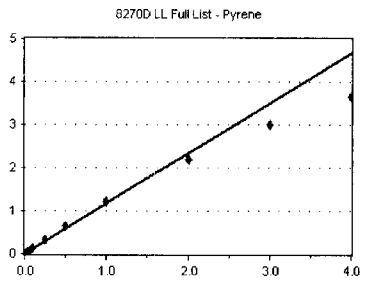
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Pyrene

Curve Fit: **AVERAGE RF**

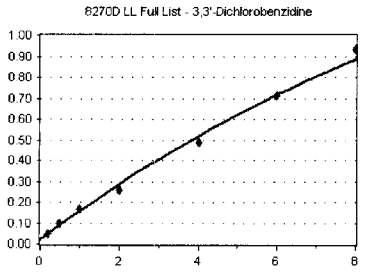


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12641	1.099	12.71
9I19035-CAL2	50	32717	1.203	12.71
9I19035-CAL3	100	69474	1.242	12.71
9I19035-CAL4	200	143586	1.308	12.71
9I19035-CAL5	500	375136	1.336	12.71
9I19035-CAL6	1000	683508	1.283	12.71
9I19035-CAL7	2000	1337637	1.225	12.72
9I19035-CAL8	4000	2681088	1.094	12.73
9I19035-CAL9	6000	3436590	0.997	12.74
9I19035-CALA	8000	4271888	0.915	12.73

AVE RF **1.170** RF RSD **11.89** AVE RT **12.72**

3,3'-Dichlorobenzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

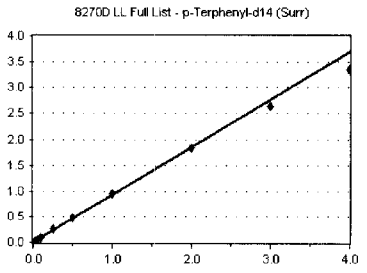


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~3617~~	~~0.156~~	~~0.00~~
~~9I19035-CAL2~~	~~100~~	~~11318~~	~~0.203~~	~~0.00~~
~~9I19035-CAL3~~	~~200~~	~~24584~~	~~0.219~~	~~14.85~~
9I19035-CAL4	400	53778	0.241	14.86
9I19035-CAL5	1000	110907	0.193	14.86
9I19035-CAL6	2000	174855	0.167	14.86
9I19035-CAL7	4000	281736	0.129	14.86
9I19035-CAL8	8000	555604	0.122	14.88
9I19035-CAL9	12000	730056	0.119	14.89
9I19035-CALA	16000	945543	0.117	0.00

AVE RF **0.155** RF RSD **30.50** AVE RT **12.74**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

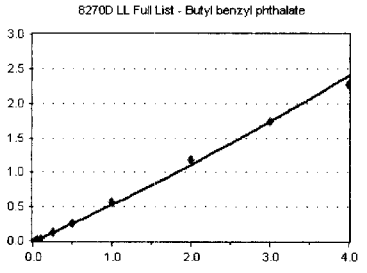


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9512	0.821	12.92
9I19035-CAL2	50	25113	0.902	12.92
9I19035-CAL3	100	54871	0.977	12.92
9I19035-CAL4	200	107135	0.959	12.92
9I19035-CAL5	500	285146	0.995	12.92
9I19035-CAL6	1000	507926	0.969	12.92
9I19035-CAL7	2000	1038865	0.953	12.93
9I19035-CAL8	4000	2102593	0.924	12.94
9I19035-CAL9	6000	2699067	0.880	12.94
9I19035-CALA	8000	3392009	0.837	12.93

AVE RF **0.922** RF RSD **6.53** AVE RT **12.93**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2535~~	~~0.219~~	~~13.73~~
9I19035-CAL2	50	6765	0.243	13.74
9I19035-CAL3	100	18774	0.334	13.74
9I19035-CAL4	200	42397	0.380	13.74
9I19035-CAL5	500	139695	0.487	13.74
9I19035-CAL6	1000	279356	0.533	13.74
9I19035-CAL7	2000	621242	0.570	13.74
9I19035-CAL8	4000	1344154	0.590	13.75
9I19035-CAL9	6000	1779167	0.580	13.76
9I19035-CALA	8000	2308181	0.569	13.75

AVE RF **0.476** RF RSD **26.60** AVE RT **13.74**

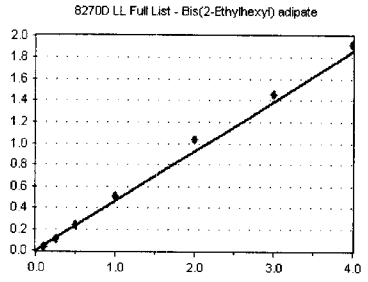
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**

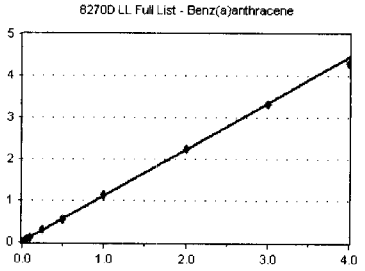


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2762~~	~~0.238~~	~~13.91~~
~~9I19035-CAL2~~	~~50~~	~~6924~~	~~0.249~~	~~13.91~~
~~9I19035-CAL3~~	~~100~~	~~18358~~	~~0.327~~	~~13.91~~
9I19035-CAL4	200	37581	0.336	13.91
9I19035-CAL5	500	126449	0.441	13.91
9I19035-CAL6	1000	247877	0.473	13.91
9I19035-CAL7	2000	551677	0.506	13.92
9I19035-CAL8	4000	1183408	0.520	13.92
9I19035-CAL9	6000	1497303	0.488	13.93
9I19035-CALA	8000	1955106	0.482	13.92

AVE RF **0.464** RF RSD **13.26** AVE RT **13.92**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

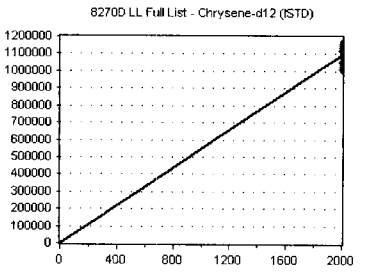


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	13459	1.161	14.89
9I19035-CAL2	50	29779	1.070	14.89
9I19035-CAL3	100	64818	1.154	14.89
9I19035-CAL4	200	124472	1.114	14.89
9I19035-CAL5	500	327557	1.143	14.89
9I19035-CAL6	1000	577553	1.102	14.89
9I19035-CAL7	2000	1225586	1.125	14.90
9I19035-CAL8	4000	2538581	1.115	14.91
9I19035-CAL9	6000	3394067	1.107	14.92
9I19035-CALA	8000	4360504	1.076	14.91

AVE RF **1.117** RF RSD **2.72** AVE RT **14.90**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

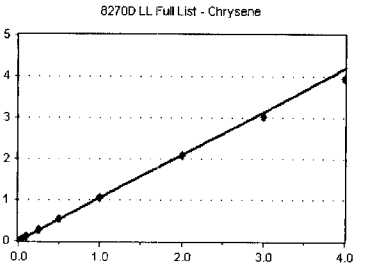


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1159268	579.634	14.91
9I19035-CAL2	2000	1113286	556.643	14.91
9I19035-CAL3	2000	1122909	561.454	14.91
9I19035-CAL4	2000	1116848	558.424	14.91
9I19035-CAL5	2000	1146727	573.363	14.92
9I19035-CAL6	2000	1048464	524.232	14.92
9I19035-CAL7	2000	1089712	544.856	14.92
9I19035-CAL8	2000	1138264	569.132	14.94
9I19035-CAL9	2000	1022230	511.115	14.94
9I19035-CALA	2000	1013392	506.696	14.93

AVE RF **548.555** RF RSD **4.74** AVE RT **14.92**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11530	0.995	14.97
9I19035-CAL2	50	29254	1.051	14.96
9I19035-CAL3	100	61418	1.094	14.97
9I19035-CAL4	200	120574	1.080	14.97
9I19035-CAL5	500	313539	1.094	14.97
9I19035-CAL6	1000	556735	1.062	14.98
9I19035-CAL7	2000	1148470	1.054	14.98
9I19035-CAL8	4000	2370714	1.041	15.00
9I19035-CAL9	6000	3095456	1.009	15.01
9I19035-CALA	8000	3992263	0.985	15.00

AVE RF **1.046** RF RSD **3.74** AVE RT **14.98**

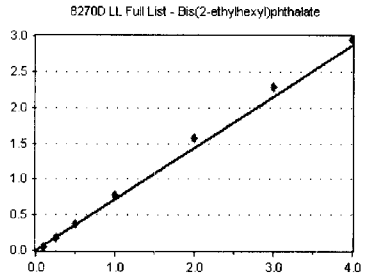
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

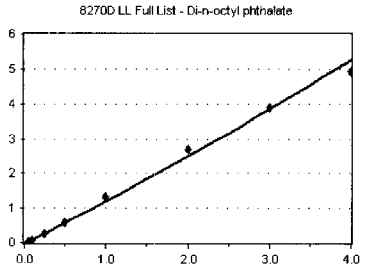


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2659~~	~~0.229~~	~~15.08~~
~~9I19035-CAL2~~	~~50~~	~~8694~~	~~0.312~~	~~15.07~~
~~9I19035-CAL3~~	~~100~~	~~26668~~	~~0.475~~	~~15.07~~
9I19035-CAL4	200	58143	0.521	15.07
9I19035-CAL5	500	202494	0.706	15.08
9I19035-CAL6	1000	389483	0.743	15.07
9I19035-CAL7	2000	846014	0.776	15.08
9I19035-CAL8	4000	1799096	0.790	15.09
9I19035-CAL9	6000	2338505	0.763	15.09
9I19035-CALA	8000	2986931	0.737	15.08

AVE RF **0.719** RF RSD **12.78** AVE RT **15.08**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

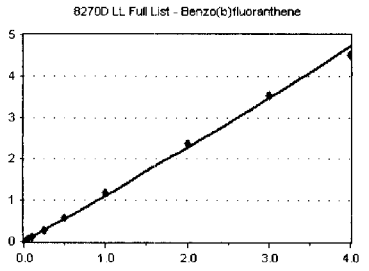


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~3334~~	~~0.288~~	~~16.74~~
~~9I19035-CAL2~~	~~50~~	~~9861~~	~~0.359~~	~~16.74~~
9I19035-CAL3	100	33665	0.597	16.74
9I19035-CAL4	200	75567	0.694	16.74
9I19035-CAL5	500	281414	0.979	16.75
9I19035-CAL6	1000	592055	1.136	16.75
9I19035-CAL7	2000	1439135	1.337	16.75
9I19035-CAL8	4000	3203842	1.352	16.76
9I19035-CAL9	6000	4149203	1.295	16.77
9I19035-CALA	8000	5450180	1.229	16.75

AVE RF **1.077** RF RSD **27.27** AVE RT **16.75**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

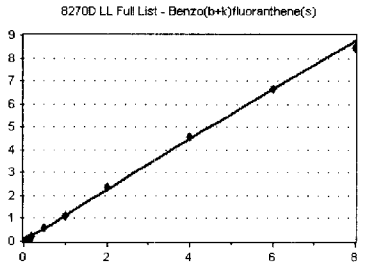


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8297	0.716	17.46
9I19035-CAL2	50	21819	0.795	17.47
9I19035-CAL3	100	57260	1.016	17.47
9I19035-CAL4	200	113080	1.038	17.48
9I19035-CAL5	500	318669	1.109	17.48
9I19035-CAL6	1000	578435	1.109	17.48
9I19035-CAL7	2000	1267321	1.178	17.49
9I19035-CAL8	4000	2803227	1.183	17.52
9I19035-CAL9	6000	3768759	1.177	17.52
9I19035-CALA	8000	5003892	1.128	17.52

AVE RF **1.045** RF RSD **15.65** AVE RT **17.49**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	40	17019	0.734	17.46
9I19035-CAL2	100	47809	0.871	17.47
9I19035-CAL3	200	120376	1.068	17.54
9I19035-CAL4	400	234995	1.079	17.48
9I19035-CAL5	1000	653019	1.136	17.54
9I19035-CAL6	2000	1182652	1.134	17.55
9I19035-CAL7	4000	2563432	1.191	17.55
9I19035-CAL8	8000	5439284	1.148	17.59
9I19035-CAL9	12000	7129046	1.113	17.60
9I19035-CALA	16000	9407940	1.060	17.59

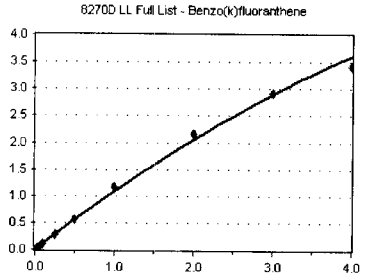
AVE RF **1.053** RF RSD **13.45** AVE RT **17.54**

Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Benzo(k)fluoranthene

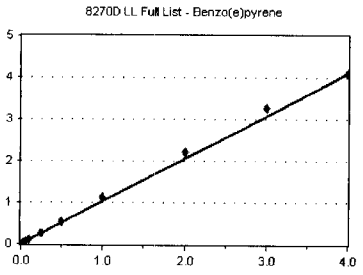


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8174	0.705	17.54
9I19035-CAL2	50	23687	0.864	17.54
9I19035-CAL3	100	58523	1.038	17.54
9I19035-CAL4	200	115987	1.065	17.54
9I19035-CAL5	500	321918	1.120	17.54
9I19035-CAL6	1000	582389	1.117	17.55
9I19035-CAL7	2000	1256906	1.168	17.55
9I19035-CAL8	4000	2555733	1.078	17.59
9I19035-CAL9	6000	3115398	0.973	17.60
9I19035-CALA	8000	3789489	0.854	17.59

AVE RF **0.998** RF RSD **14.77** AVE RT **17.56**

Benzo(e)pyrene

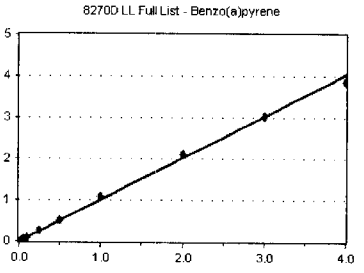


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8657	0.747	18.13
9I19035-CAL2	50	24570	0.896	18.12
9I19035-CAL3	100	58165	1.032	18.12
9I19035-CAL4	200	113143	1.039	18.13
9I19035-CAL5	500	316818	1.102	18.13
9I19035-CAL6	1000	576088	1.105	18.14
9I19035-CAL7	2000	1218818	1.133	18.14
9I19035-CAL8	4000	2630004	1.110	18.17
9I19035-CAL9	6000	3489142	1.089	18.19
9I19035-CALA	8000	4556103	1.027	18.17

AVE RF **1.028** RF RSD **11.67** AVE RT **18.14**

Benzo(a)pyrene

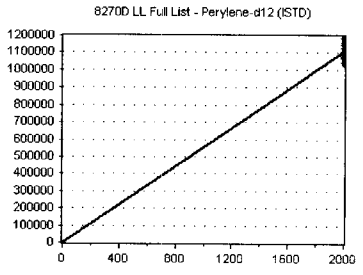


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6648	0.574	18.24
9I19035-CAL2	50	18583	0.677	18.24
9I19035-CAL3	100	50114	0.889	18.24
9I19035-CAL4	200	99882	0.917	18.24
9I19035-CAL5	500	295305	1.028	18.25
9I19035-CAL6	1000	535317	1.027	18.25
9I19035-CAL7	2000	1174506	1.091	18.26
9I19035-CAL8	4000	2485829	1.049	18.29
9I19035-CAL9	6000	3235783	1.010	18.31
9I19035-CALA	8000	4292201	0.968	18.30

AVE RF **0.923** RF RSD **18.38** AVE RT **18.26**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1158997	579.498	18.39
9I19035-CAL2	2000	1097209	548.604	18.39
9I19035-CAL3	2000	1127380	563.690	18.39
9I19035-CAL4	2000	1089238	544.619	18.40
9I19035-CAL5	2000	1149483	574.742	18.40
9I19035-CAL6	2000	1042709	521.354	18.40
9I19035-CAL7	2000	1076142	538.071	18.40
9I19035-CAL8	2000	1185024	592.512	18.42
9I19035-CAL9	2000	1067597	533.798	18.43
9I19035-CALA	2000	1108960	554.480	18.41

AVE RF **555.137** RF RSD **4.02** AVE RT **18.40**

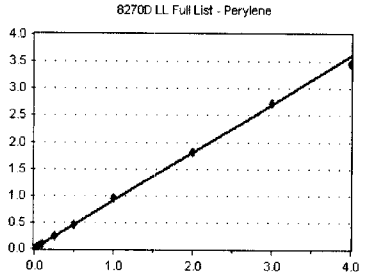
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Perylene

Curve Fit: **AVERAGE RF**

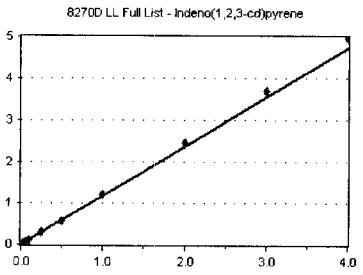


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9278	0.801	18.45
9I19035-CAL2	50	24689	0.900	18.45
9I19035-CAL3	100	50289	0.892	18.45
9I19035-CAL4	200	100217	0.920	18.45
9I19035-CAL5	500	273199	0.951	18.45
9I19035-CAL6	1000	476752	0.914	18.46
9I19035-CAL7	2000	1026574	0.954	18.47
9I19035-CAL8	4000	2164033	0.913	18.50
9I19035-CAL9	6000	2908580	0.908	18.51
9I19035-CALA	8000	3844220	0.867	18.50

AVE RF **0.902** RF RSD **4.87** AVE RT **18.47**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

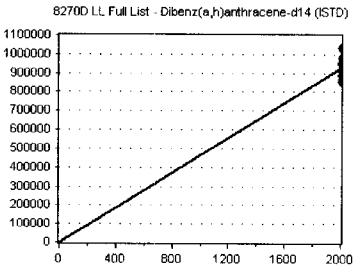


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	10072	1.102	20.77
9I19035-CAL2	50	25006	1.169	20.78
9I19035-CAL3	100	52504	1.176	20.78
9I19035-CAL4	200	100411	1.156	20.78
9I19035-CAL5	500	279363	1.171	20.78
9I19035-CAL6	1000	510691	1.152	20.79
9I19035-CAL7	2000	1143875	1.205	20.80
9I19035-CAL8	4000	2539375	1.224	20.84
9I19035-CAL9	6000	3489319	1.230	20.85
9I19035-CALA	8000	4879339	1.241	20.84

AVE RF **1.183** RF RSD **3.60** AVE RT **20.80**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

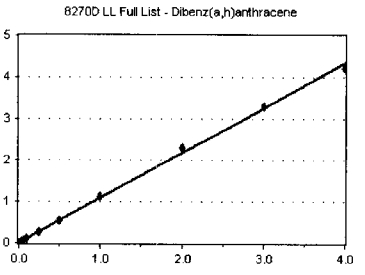


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	913932	456.966	20.80
9I19035-CAL2	2000	855339	427.669	20.79
9I19035-CAL3	2000	892958	446.479	20.79
9I19035-CAL4	2000	868590	434.295	20.80
9I19035-CAL5	2000	954508	477.254	20.80
9I19035-CAL6	2000	886236	443.118	20.80
9I19035-CAL7	2000	949148	474.574	20.80
9I19035-CAL8	2000	1037191	518.596	20.83
9I19035-CAL9	2000	945822	472.911	20.84
9I19035-CALA	2000	982889	491.444	20.82

AVE RF **464.331** RF RSD **6.05** AVE RT **20.80**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8754	0.958	20.85
9I19035-CAL2	50	21791	1.019	20.85
9I19035-CAL3	100	48705	1.091	20.85
9I19035-CAL4	200	95316	1.097	20.85
9I19035-CAL5	500	270778	1.135	20.86
9I19035-CAL6	1000	489557	1.105	20.87
9I19035-CAL7	2000	1087002	1.145	20.88
9I19035-CAL8	4000	2389624	1.152	20.90
9I19035-CAL9	6000	3129173	1.103	20.91
9I19035-CALA	8000	4143300	1.054	20.90

AVE RF **1.086** RF RSD **5.57** AVE RT **20.87**

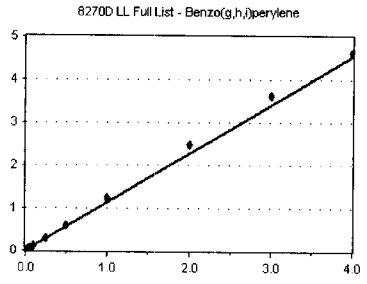
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

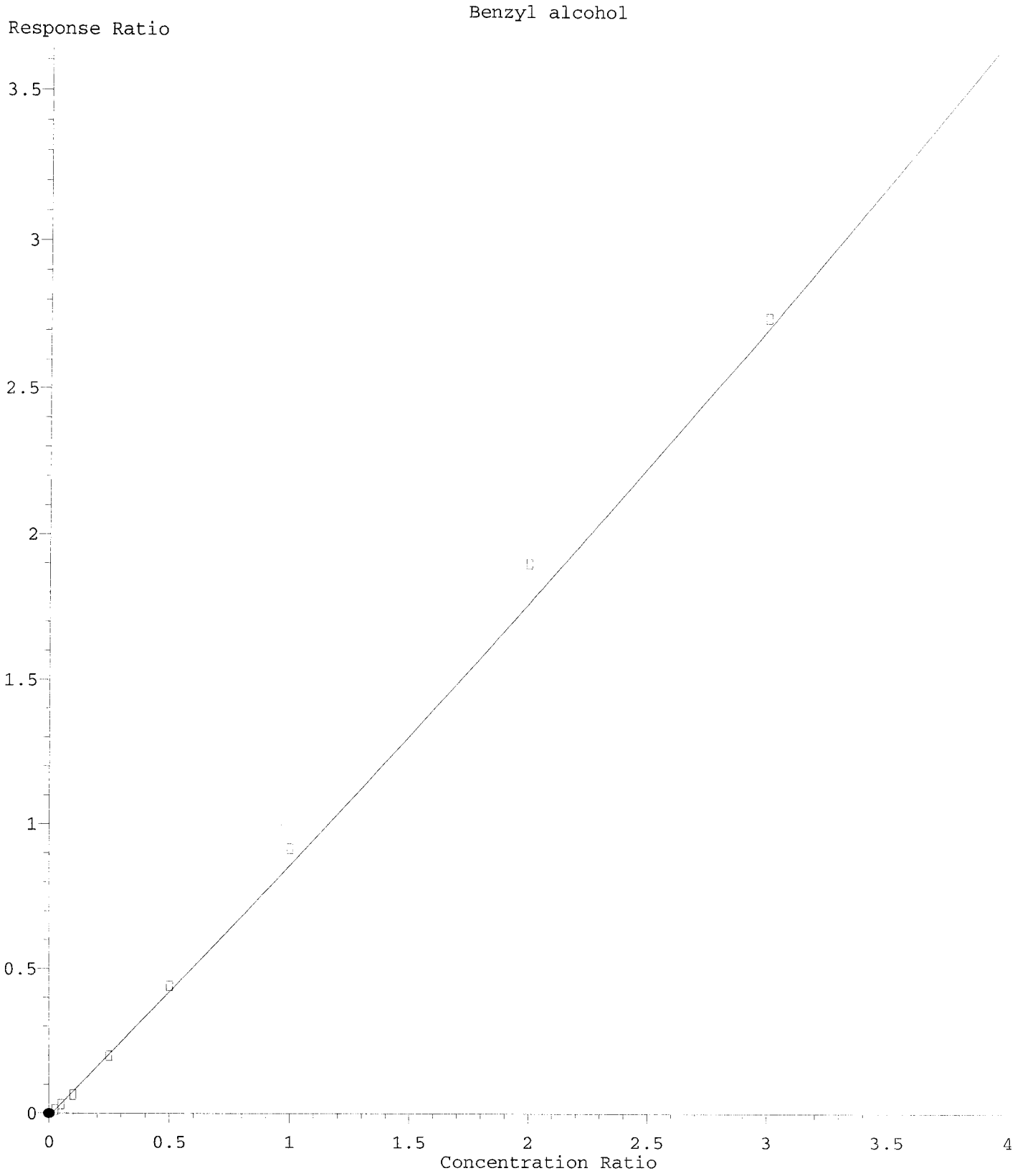
Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7772	0.850	21.32
9I19035-CAL2	50	20181	0.944	21.31
9I19035-CAL3	100	49447	1.107	21.31
9I19035-CAL4	200	101188	1.165	21.32
9I19035-CAL5	500	291609	1.222	21.33
9I19035-CAL6	1000	538150	1.214	21.33
9I19035-CAL7	2000	1186793	1.250	21.34
9I19035-CAL8	4000	2579448	1.243	21.38
9I19035-CAL9	6000	3417702	1.204	21.39
9I19035-CALA	8000	4554601	1.158	21.38

AVE RF **1.136** RF RSD **11.87** AVE RT **21.34**

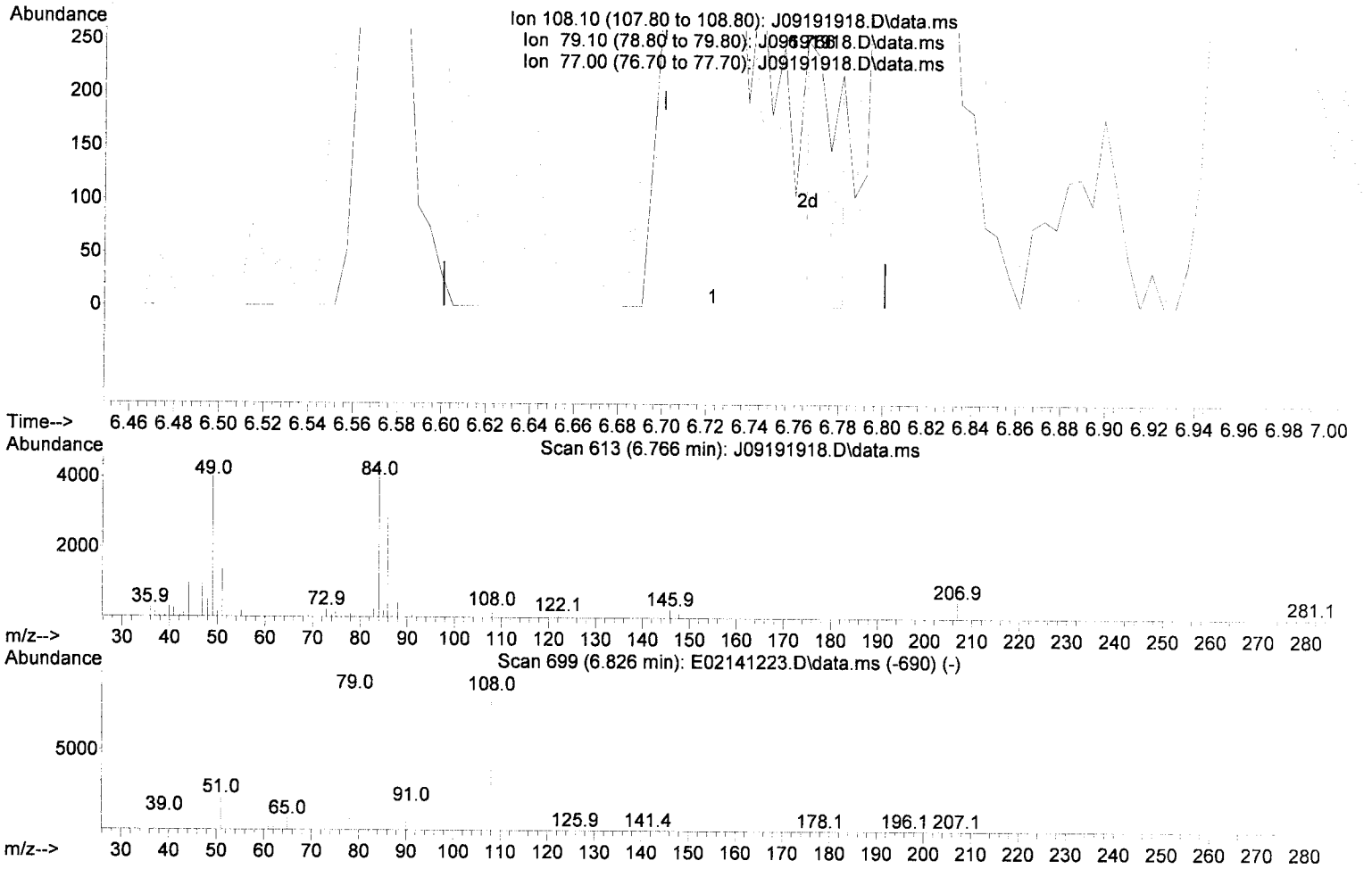


R = 1.89e-002 A*A + 8.51e-001 A - 1.04e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



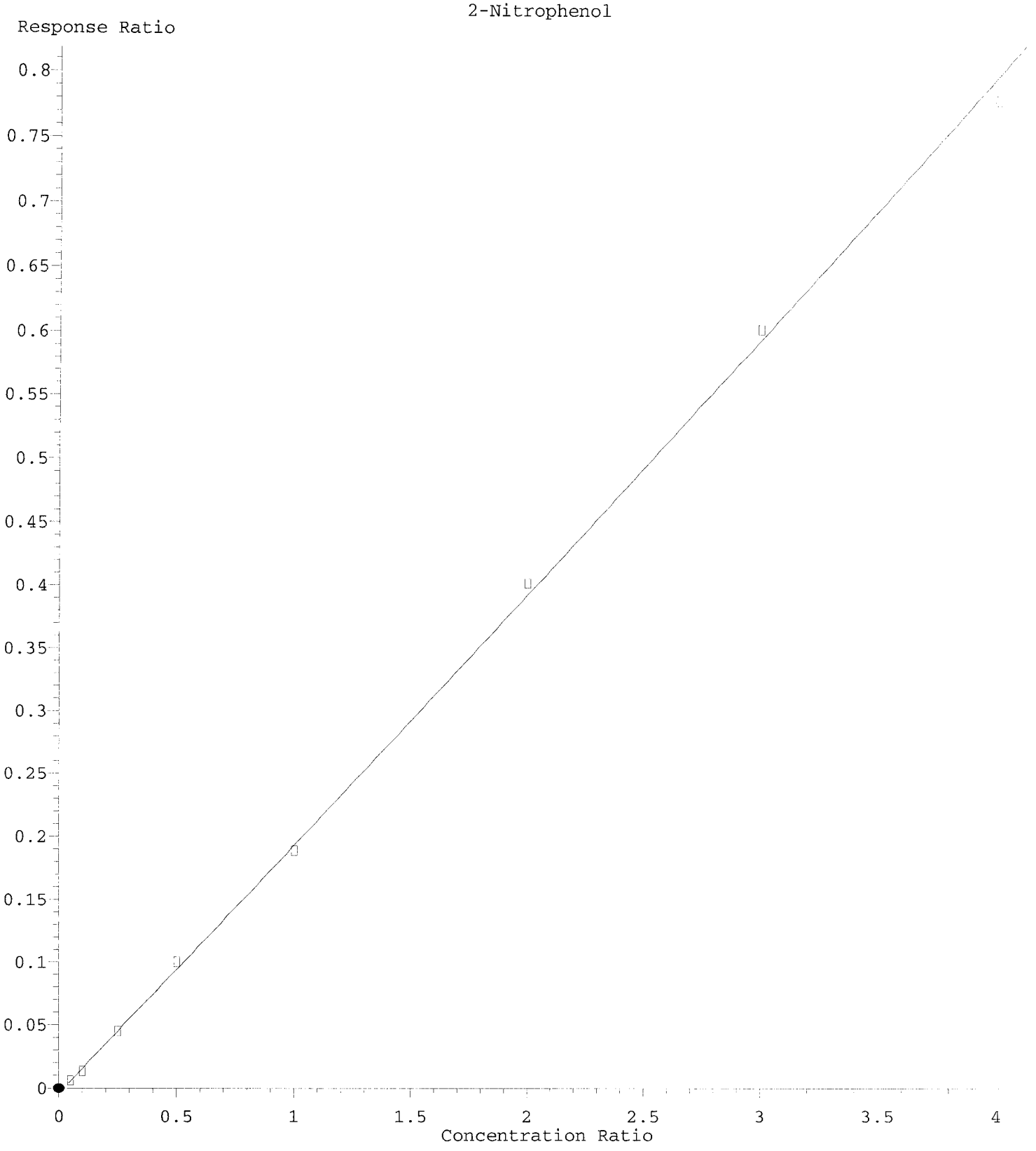
TIC: J09191918.D\data.ms

(12) Benzyl alcohol (T)

6.766min (+ 0.065) 26.03 ng/ml m

response 193

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	108.60	31.35#
77.00	68.40	50.40
0.00	0.00	0.00

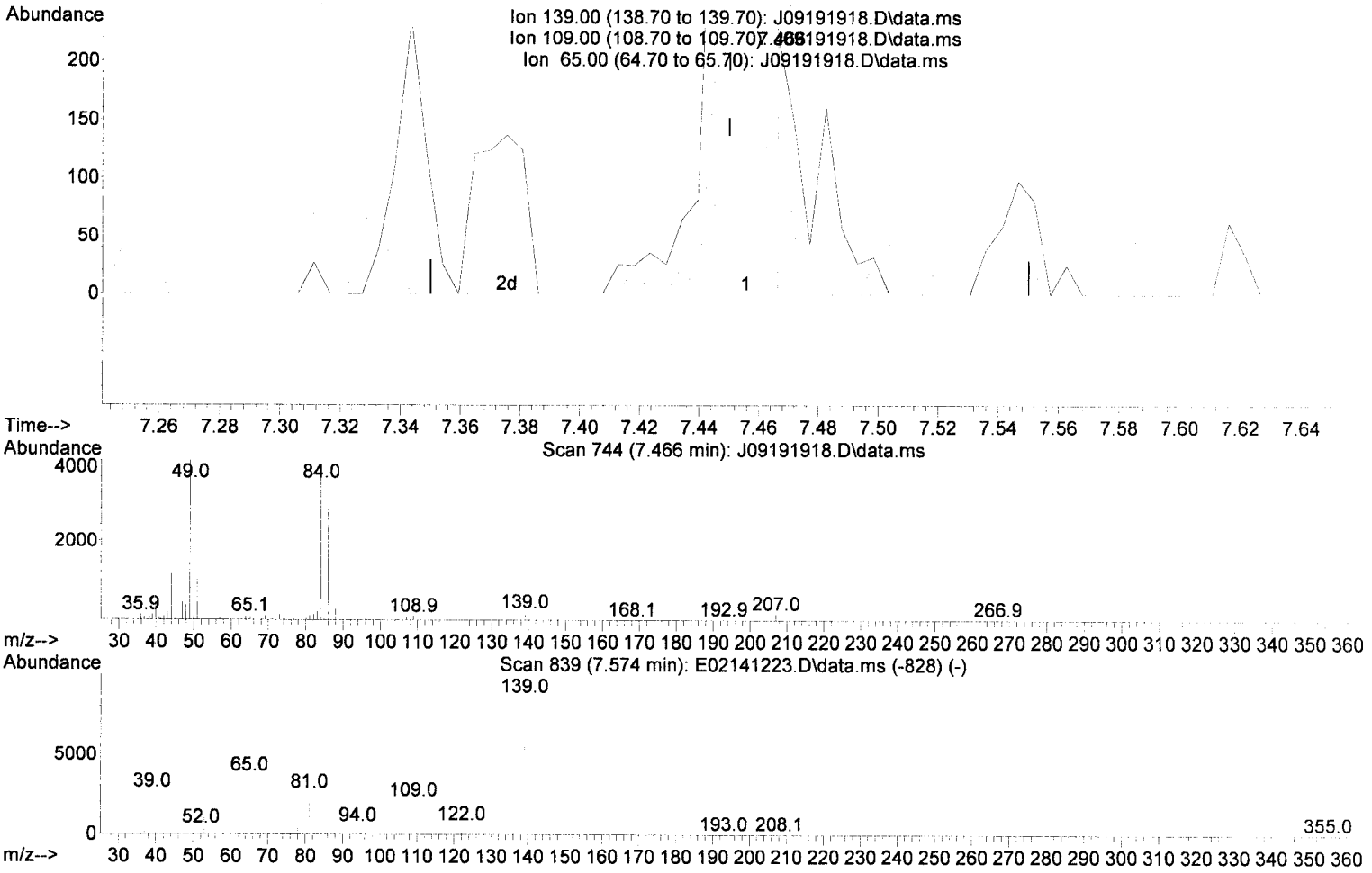


R = 1.05e-003 A*A + 1.96e-001 A - 4.15e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



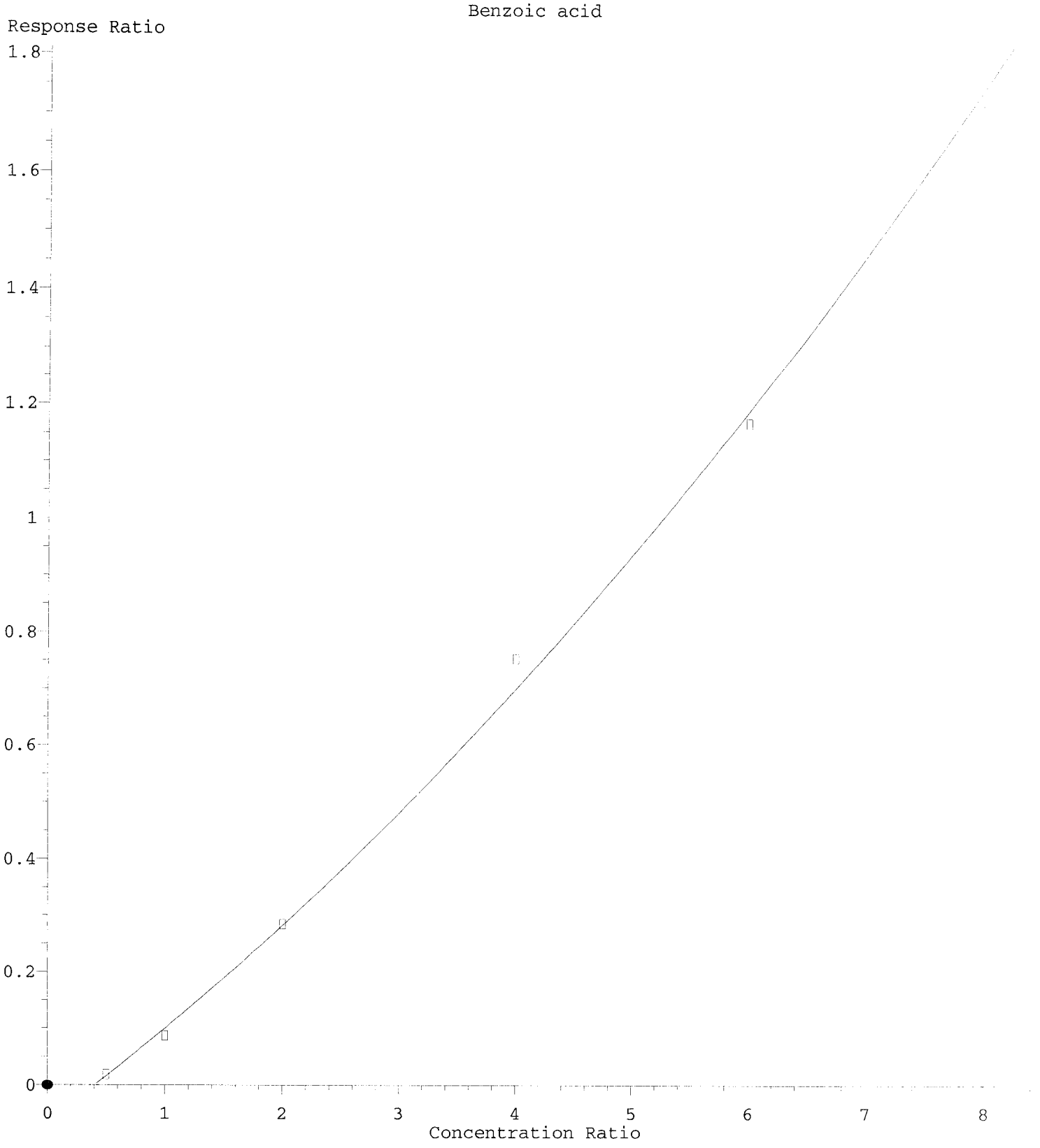
TIC: J09191918.D\data.ms

(23) 2-Nitrophenol (T)

7.466min (+ 0.016) 43.56 ng/ml m

response 151

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	25.20	53.85
65.00	38.40	58.82
0.00	0.00	0.00

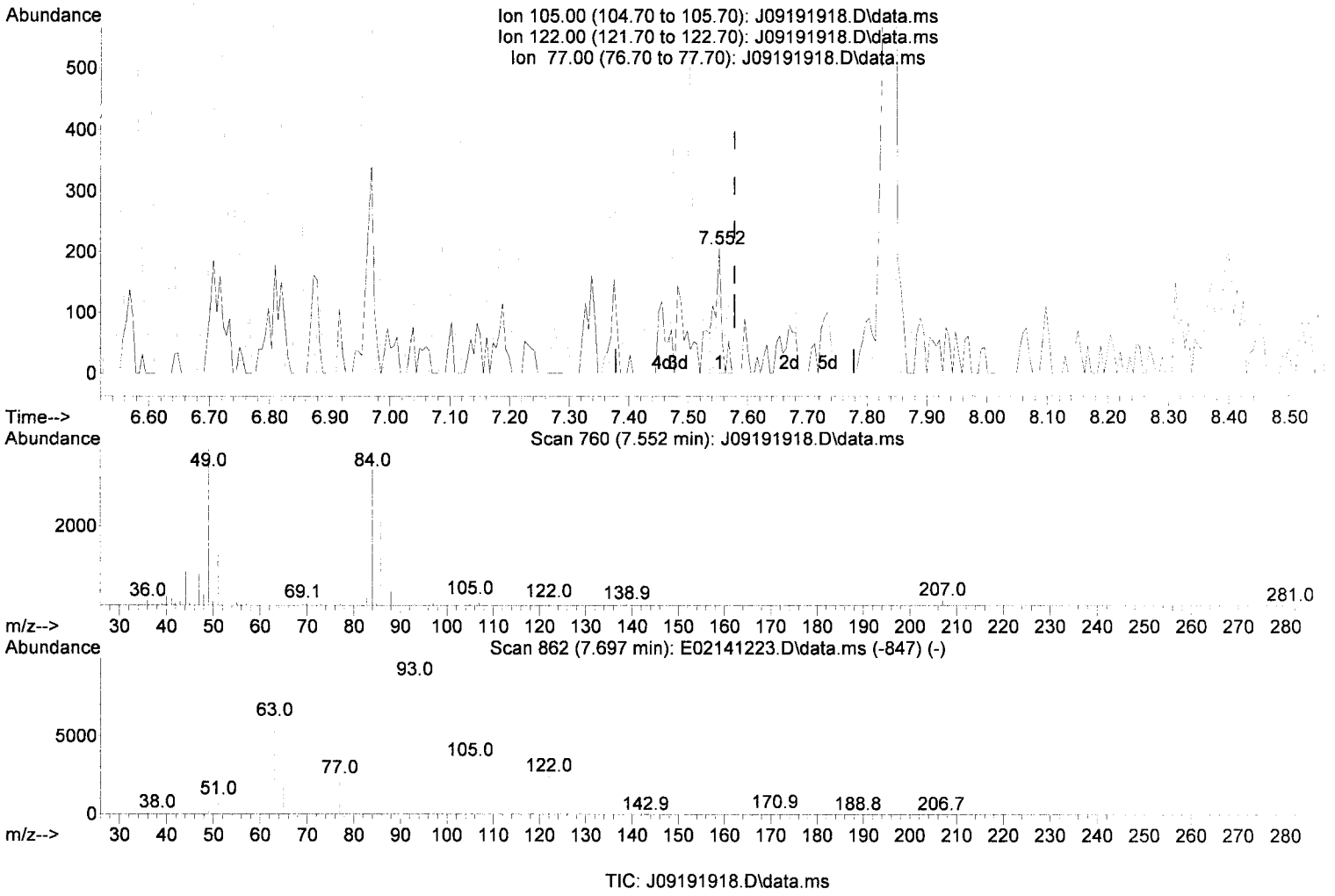


R = 8.94e-003 A*A + 1.55e-001 A - 6.40e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_0919I9.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



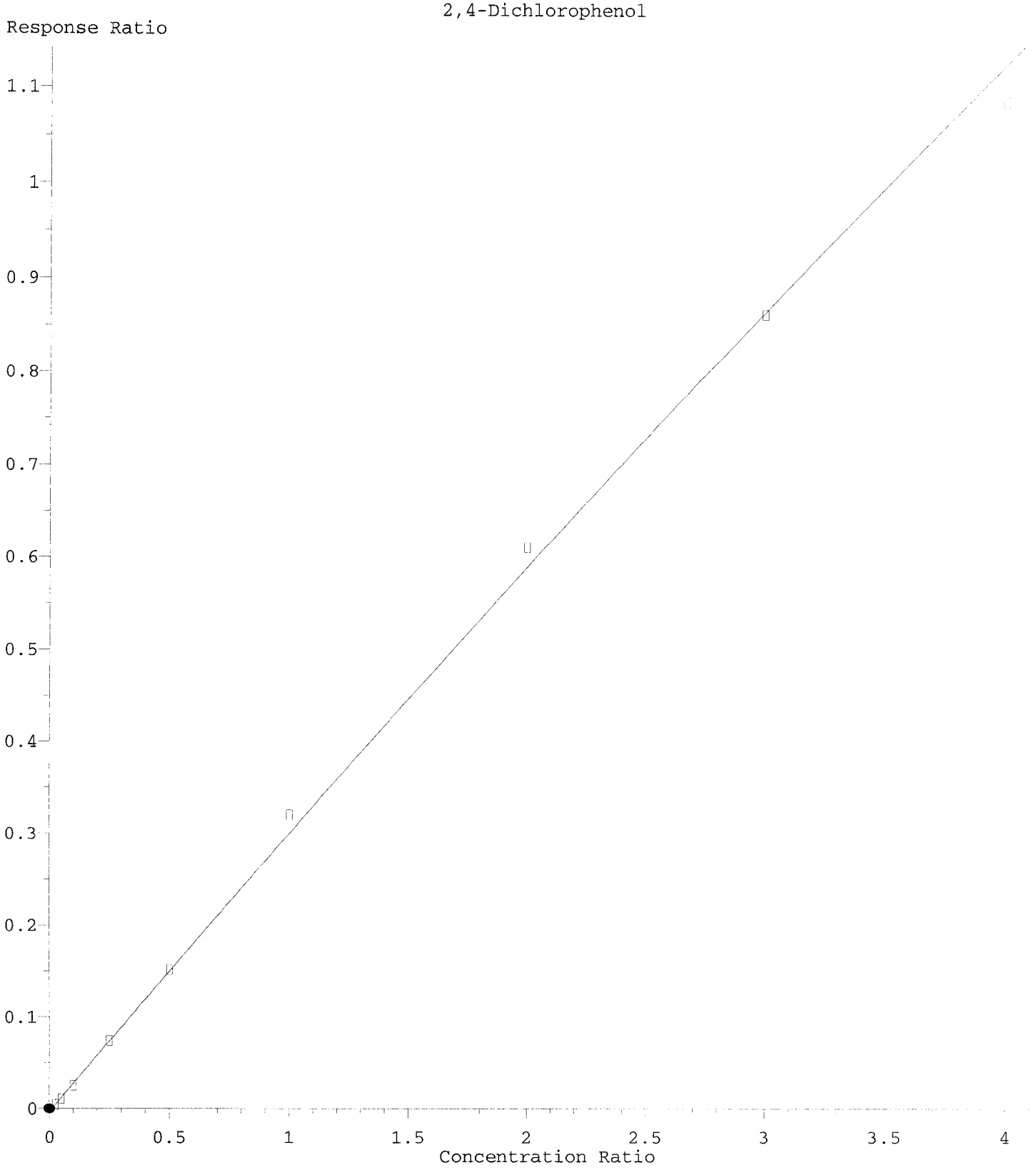
TIC: J09191918.D\data.ms

(26) Benzoic acid (T)

7.552min (-0.026) 807.68 ng/ml m

response 164

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	63.41
77.00	72.00	38.05#
0.00	0.00	0.00

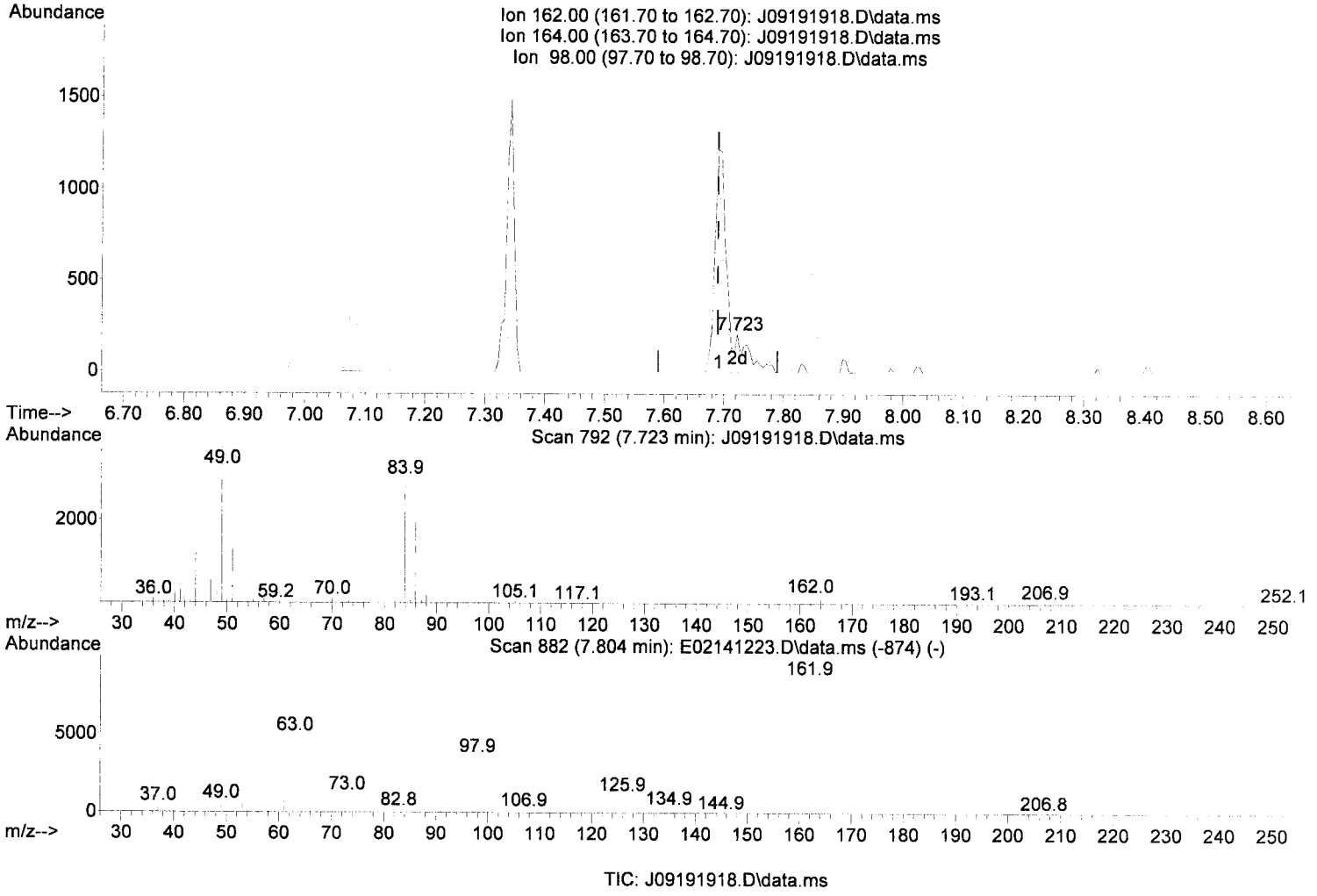


R = -7.18e-003 A*A + 3.11e-001 A - 3.87e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



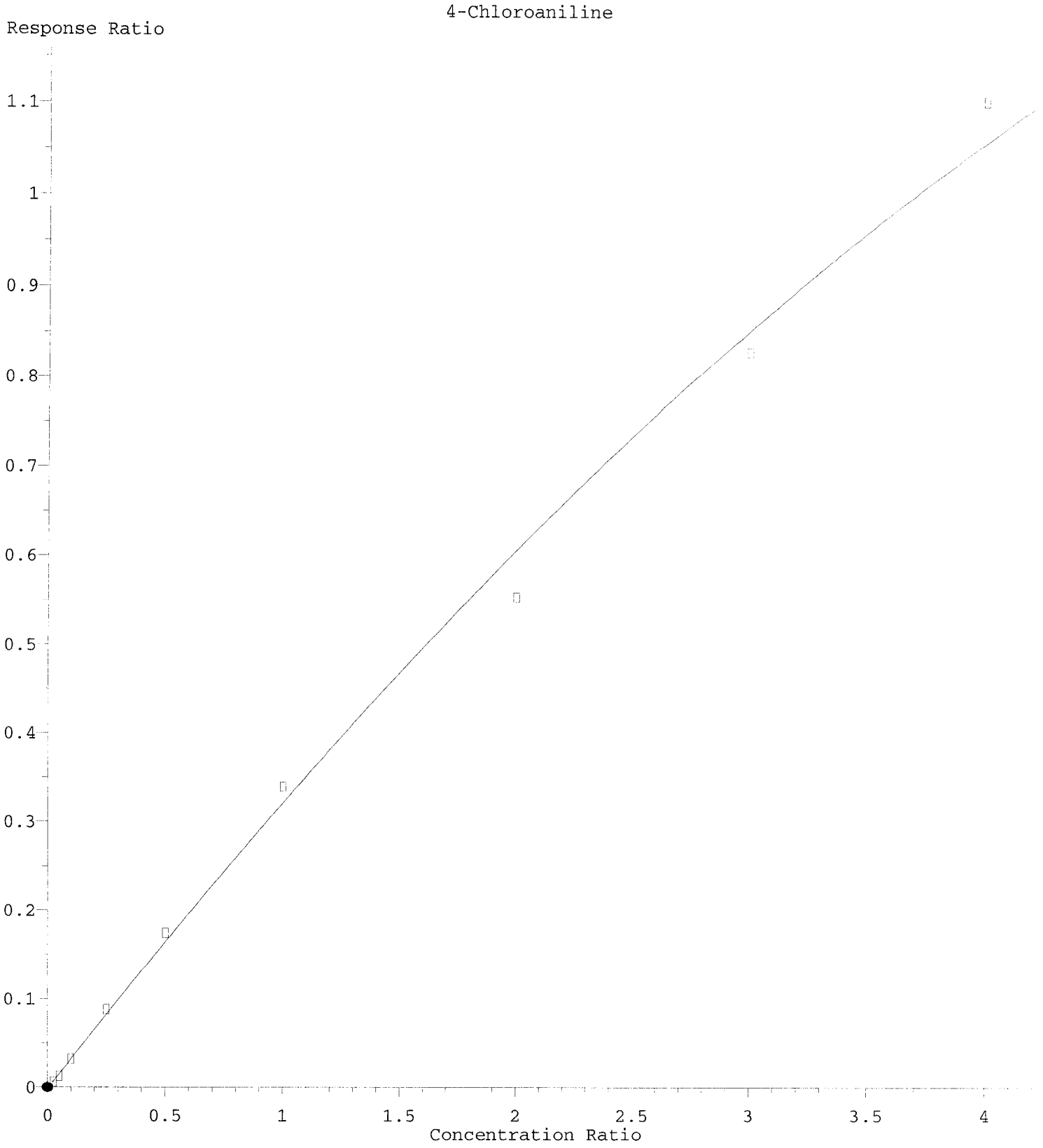
TIC: J09191918.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.723min (+ 0.033) 25.85 ng/ml m

response 177

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	64.50	62.20
98.00	33.60	0.00#
0.00	0.00	0.00

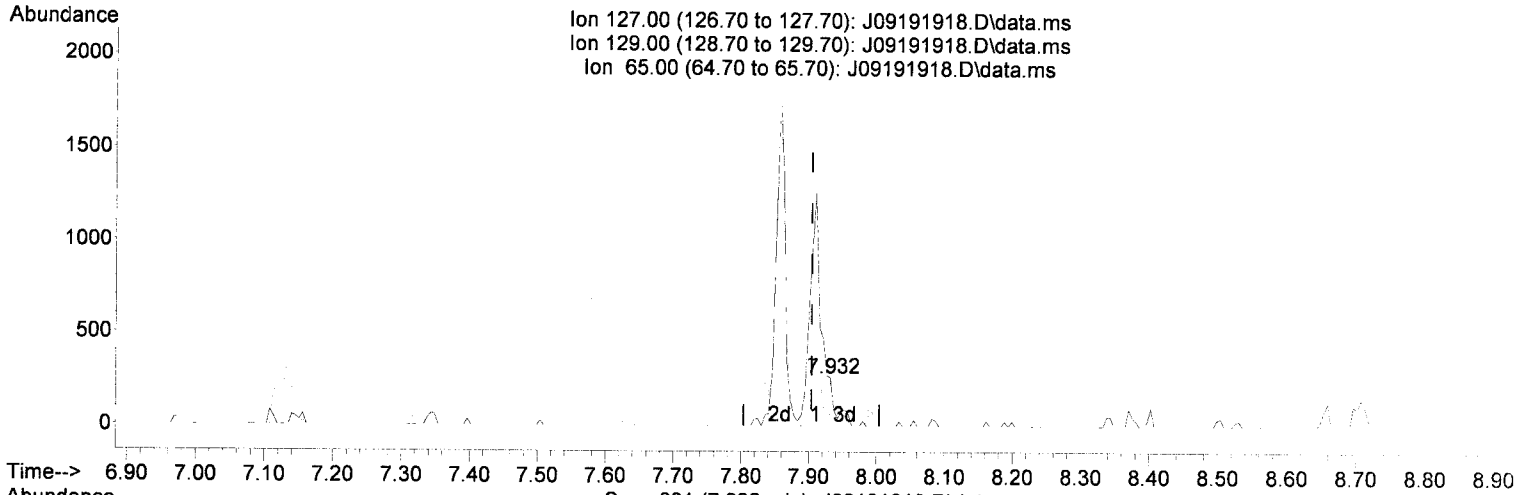


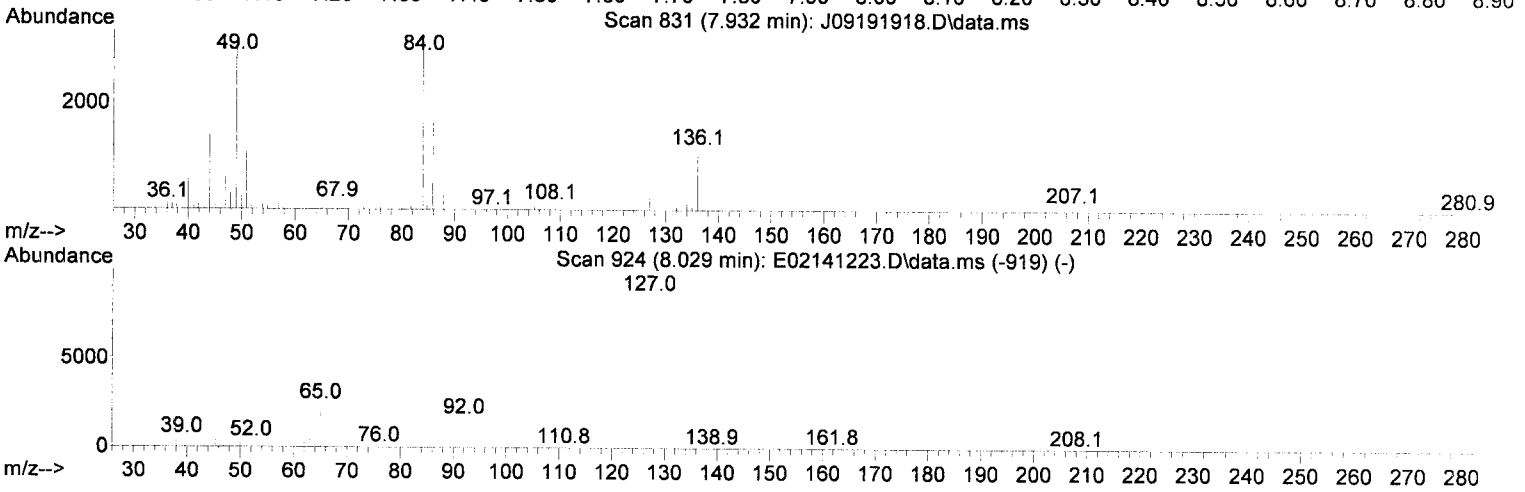
R = -1.94e-002 A*A + 3.43e-001 A - 2.27e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





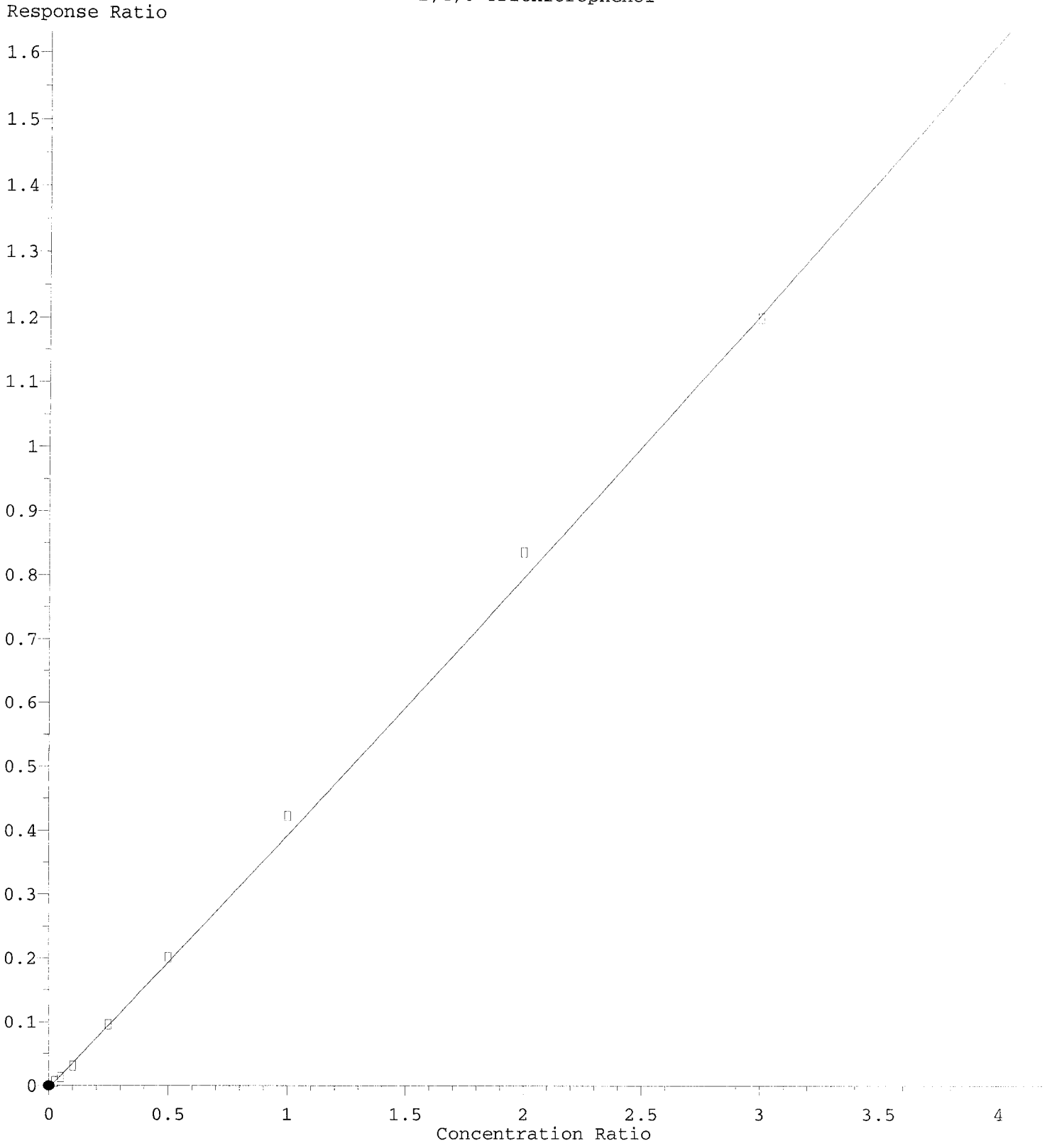
TIC: J09191918.D\data.ms

(30) 4-Chloroaniline (T)

7.932min (+ 0.028) 14.02 ng/ml m

response 160

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	33.00	0.00#
65.00	23.50	18.01
0.00	0.00	0.00

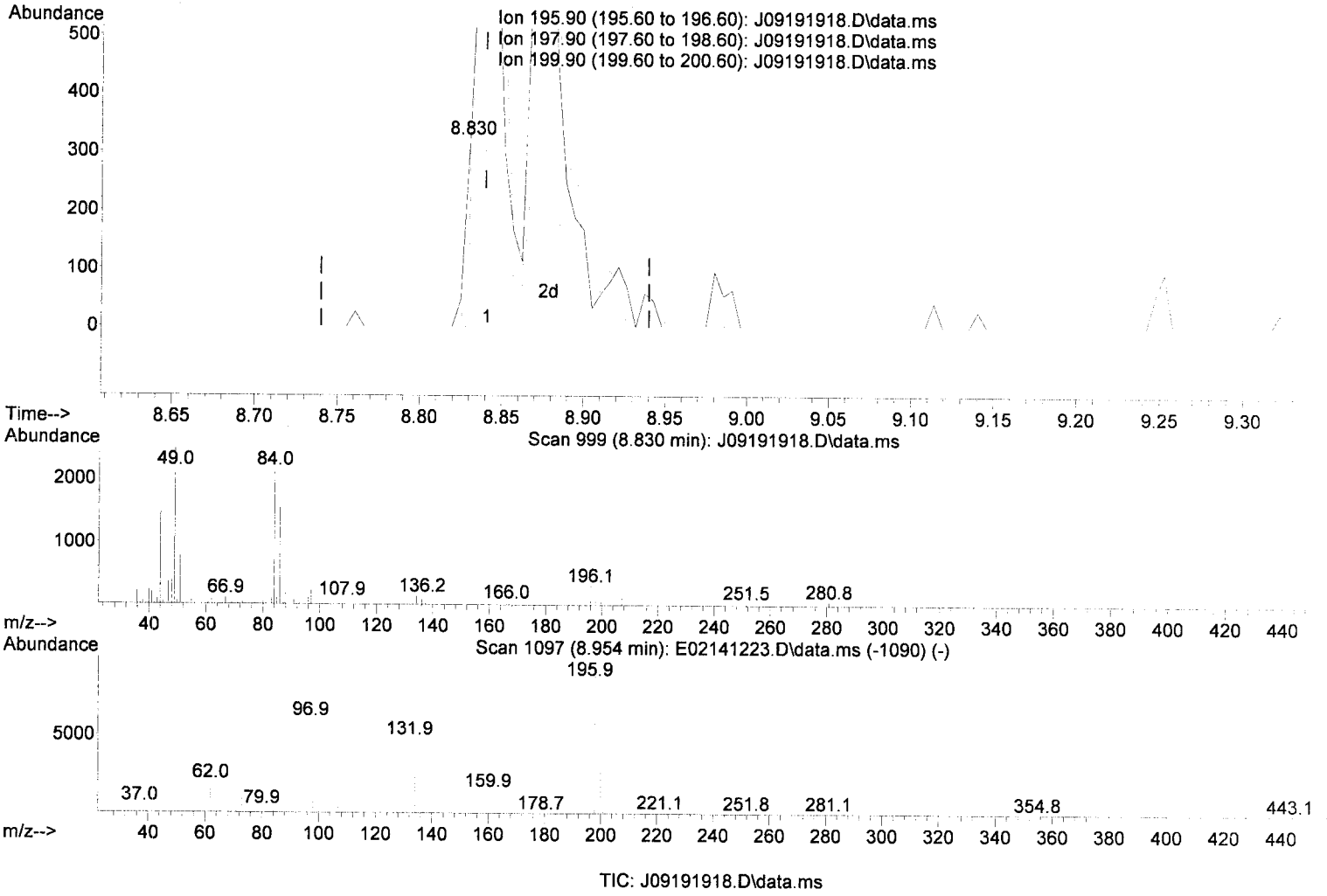


R = 3.29e-003 A*A + 3.94e-001 A - 4.68e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



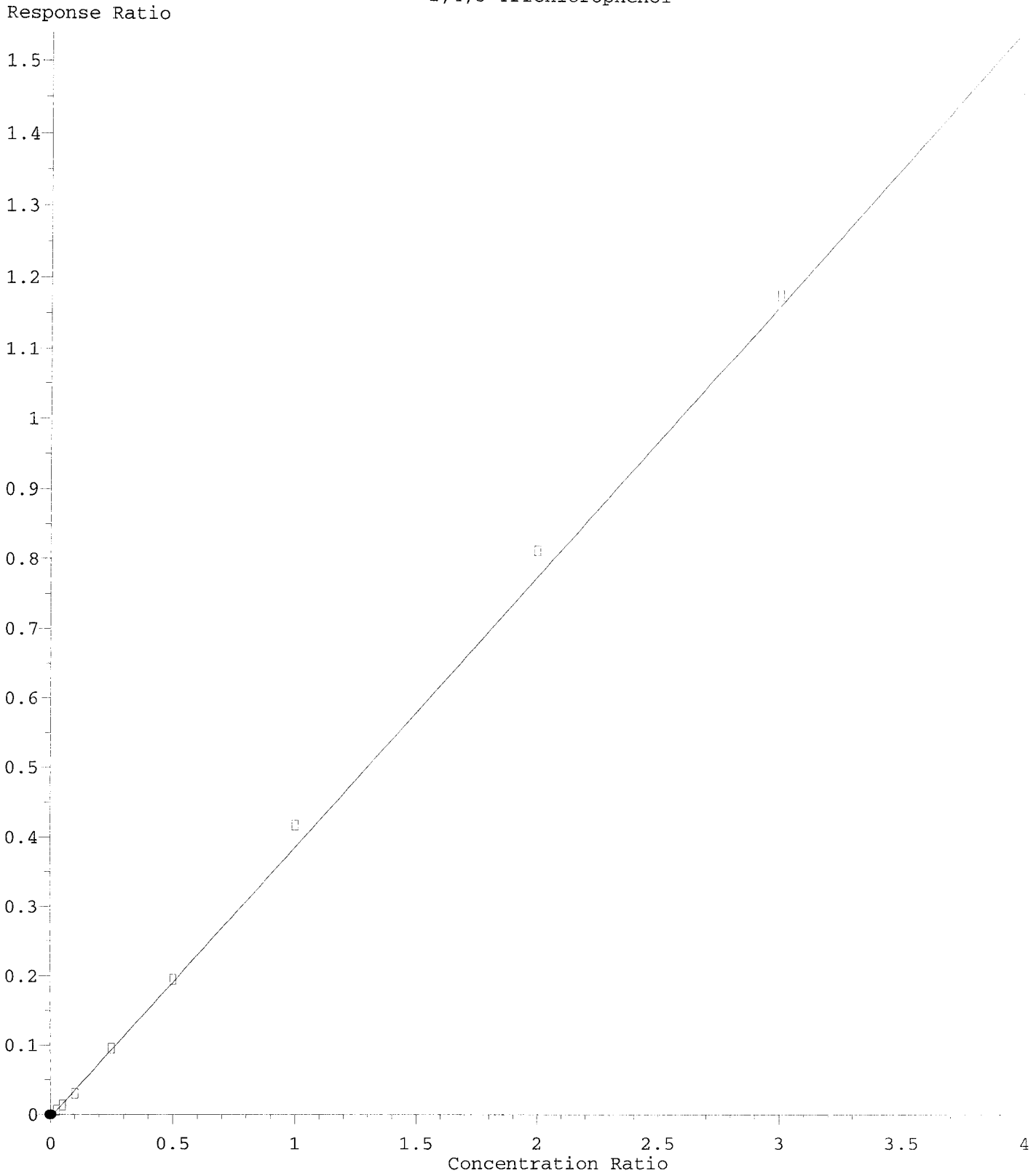
TIC: J09191918.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

8.830min (-0.010) 24.69 ng/ml m

response 119

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.40	61.61#
199.90	29.80	21.67
0.00	0.00	0.00

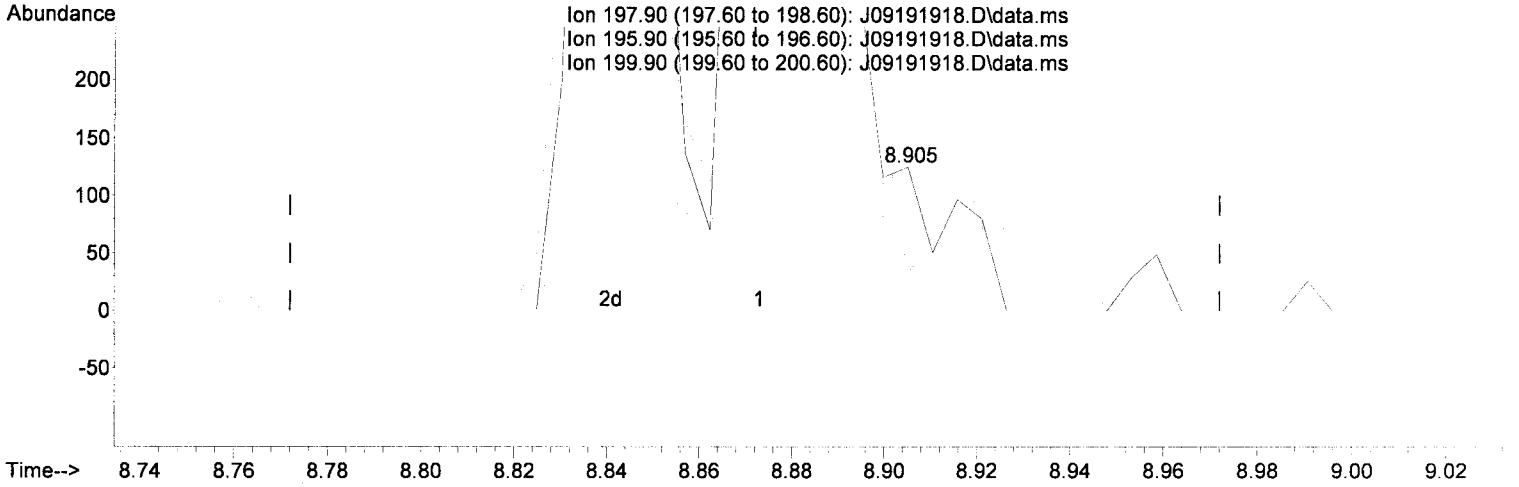


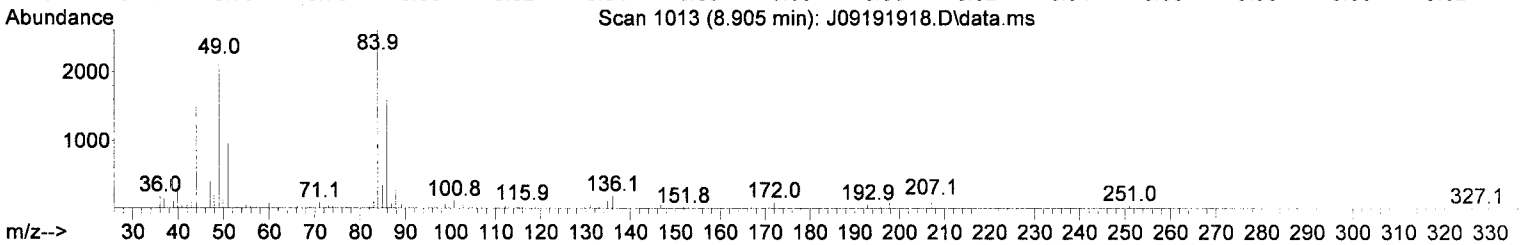
R = -3.95e-004 A*A + 3.91e-001 A - 4.45e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

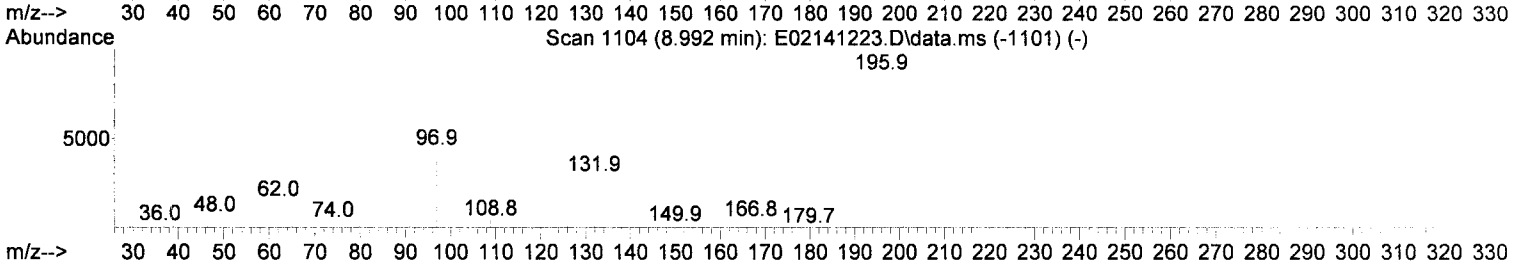
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







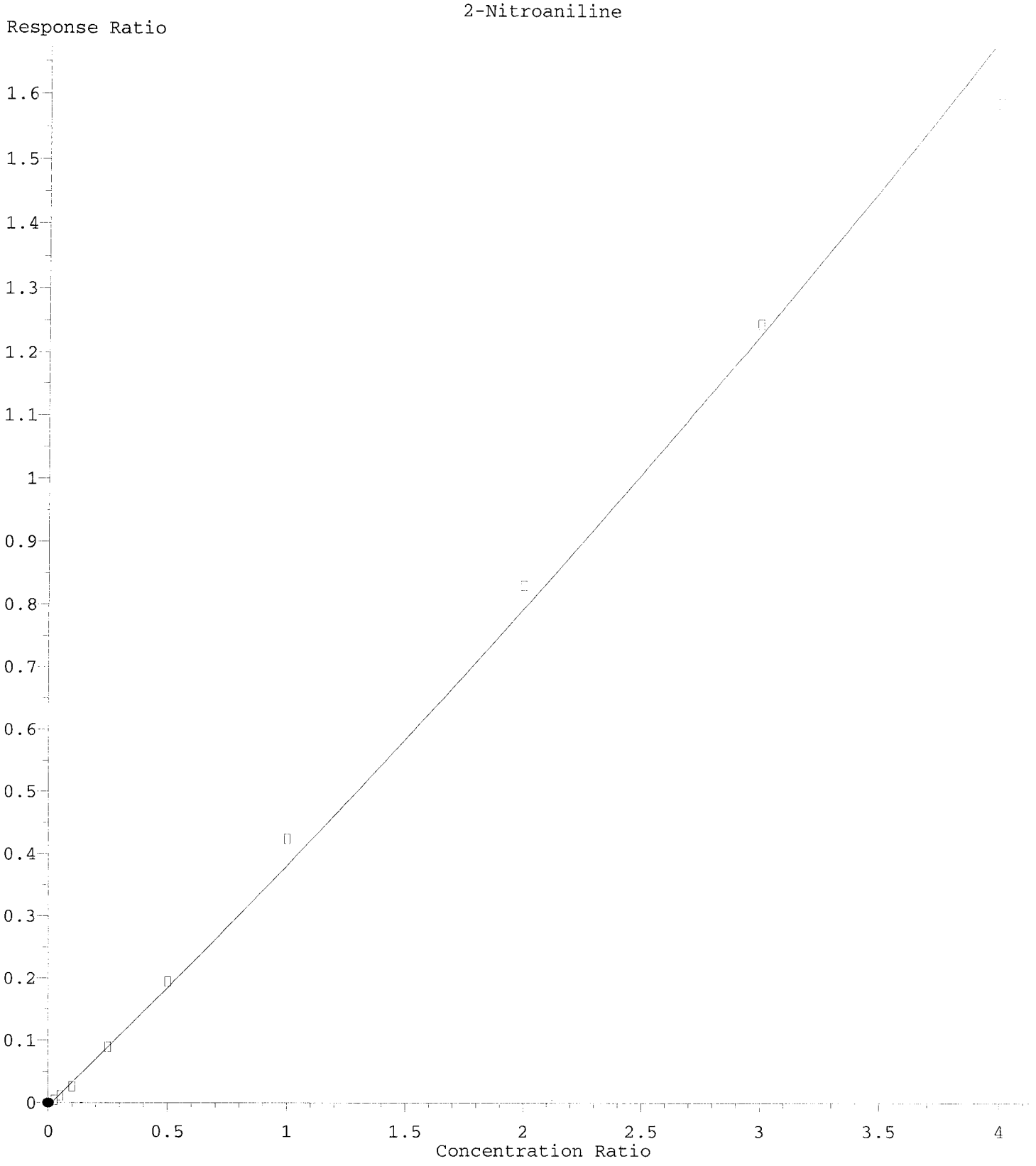
TIC: J09191918.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.905min (+ 0.033) 23.67 ng/ml m

response 113

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.40	26.40#
199.90	32.90	21.60
0.00	0.00	0.00

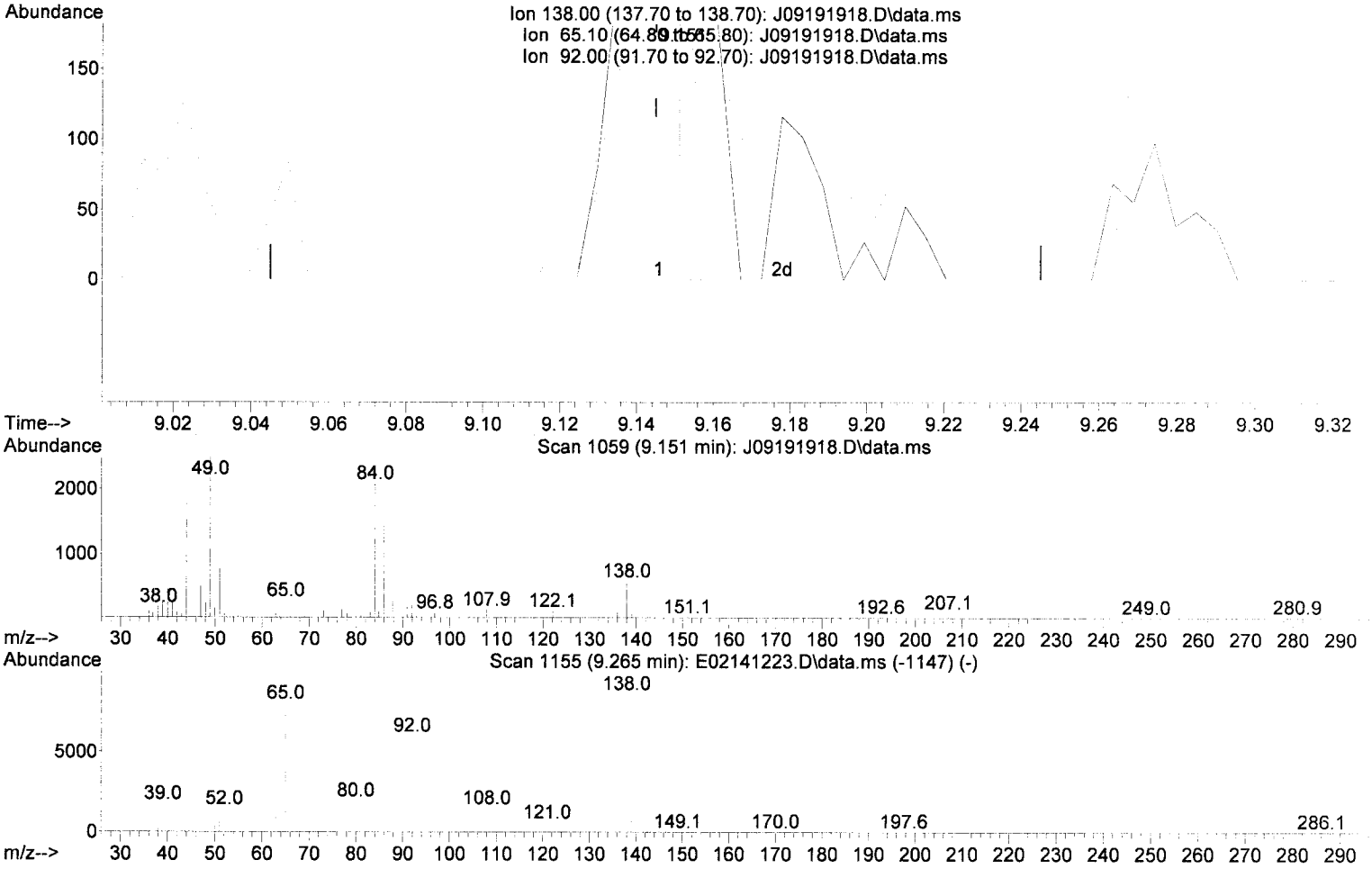


R = 1.23e-002 A*A + 3.75e-001 A - 5.72e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/x^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



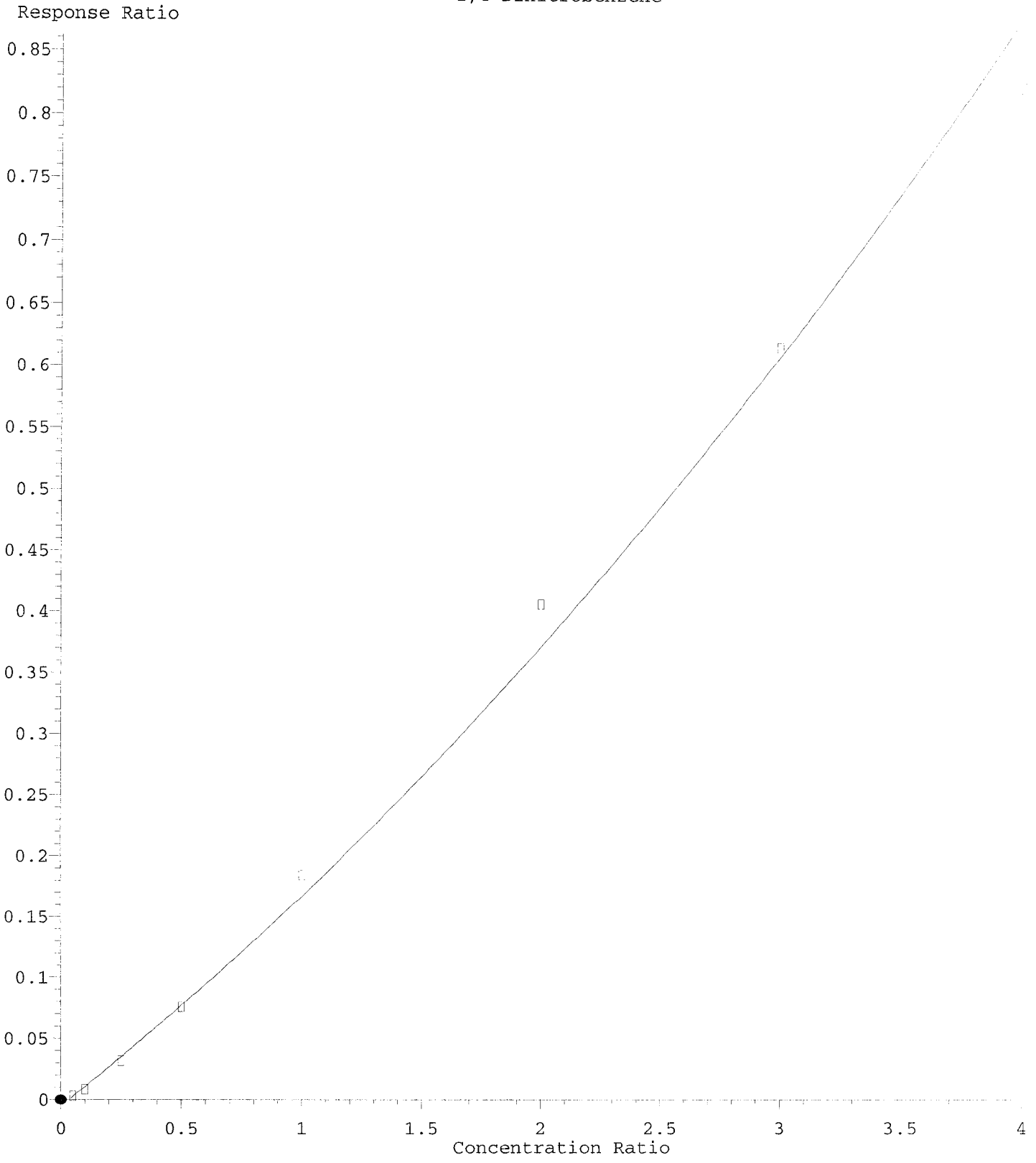
TIC: J09191918.D\data.ms

(42) 2-Nitroaniline (T)

9.151min (+ 0.006) 31.75 ng/ml m

response 155

Ion	Exp%	Act%
138.00	100.00	100.00
65.10	69.90	48.28
92.00	55.20	48.97
0.00	0.00	0.00

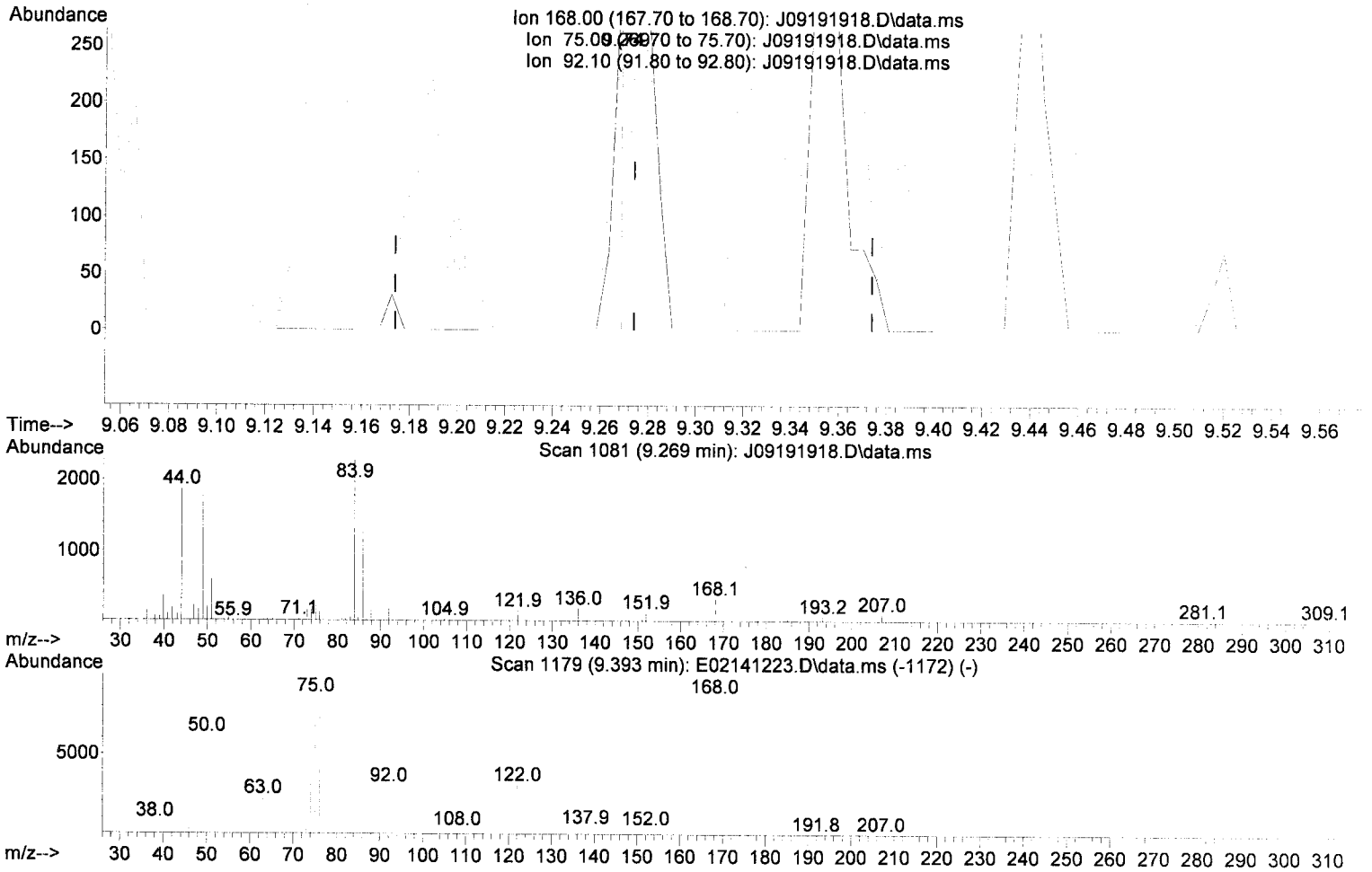


R = 1.61e-002 A*A + 1.56e-001 A - 5.19e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



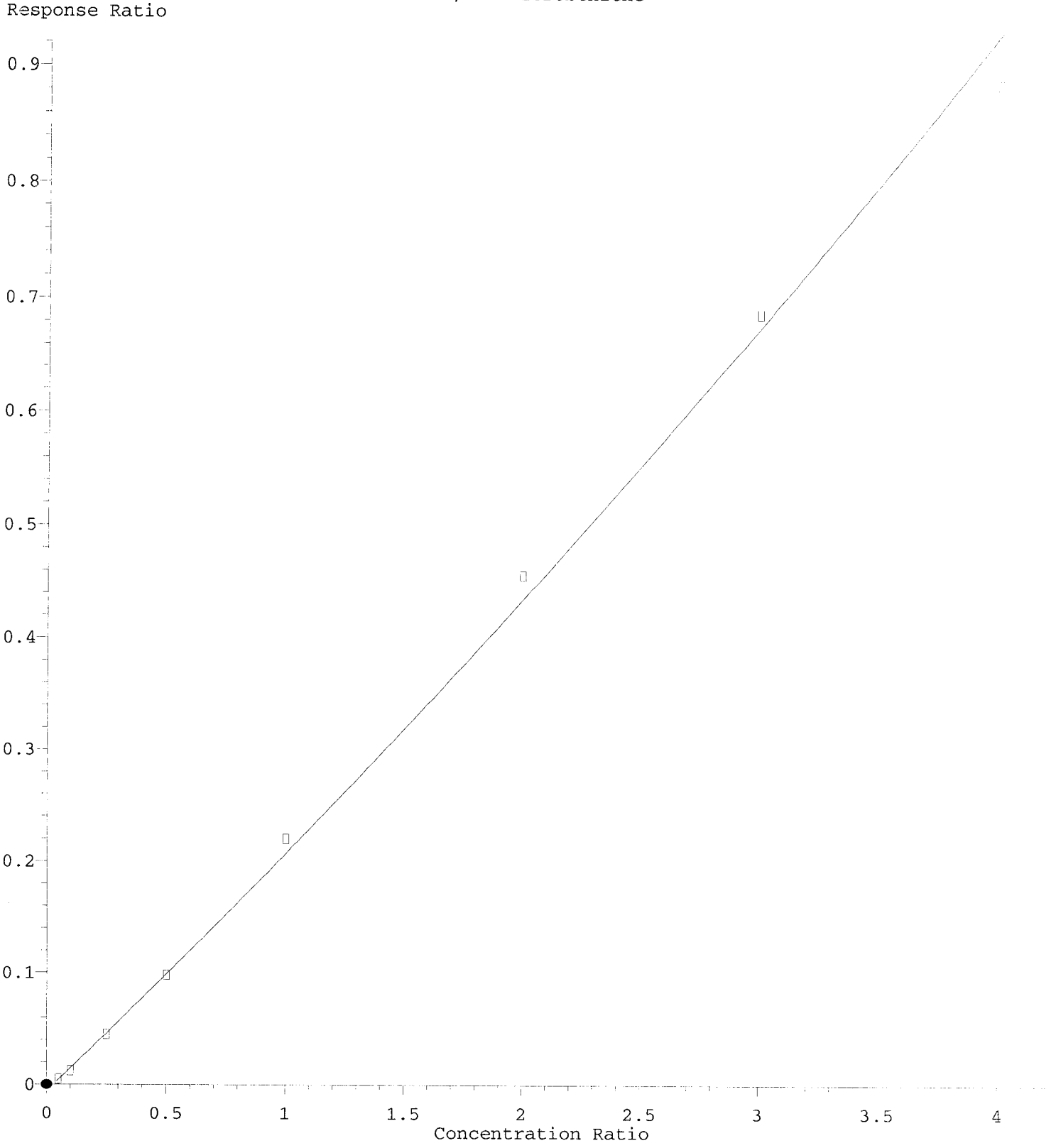
TIC: J09191918.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.269min (-0.005) 68.86 ng/ml m

response 130

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	102.70	80.36
92.10	34.10	55.06
0.00	0.00	0.00

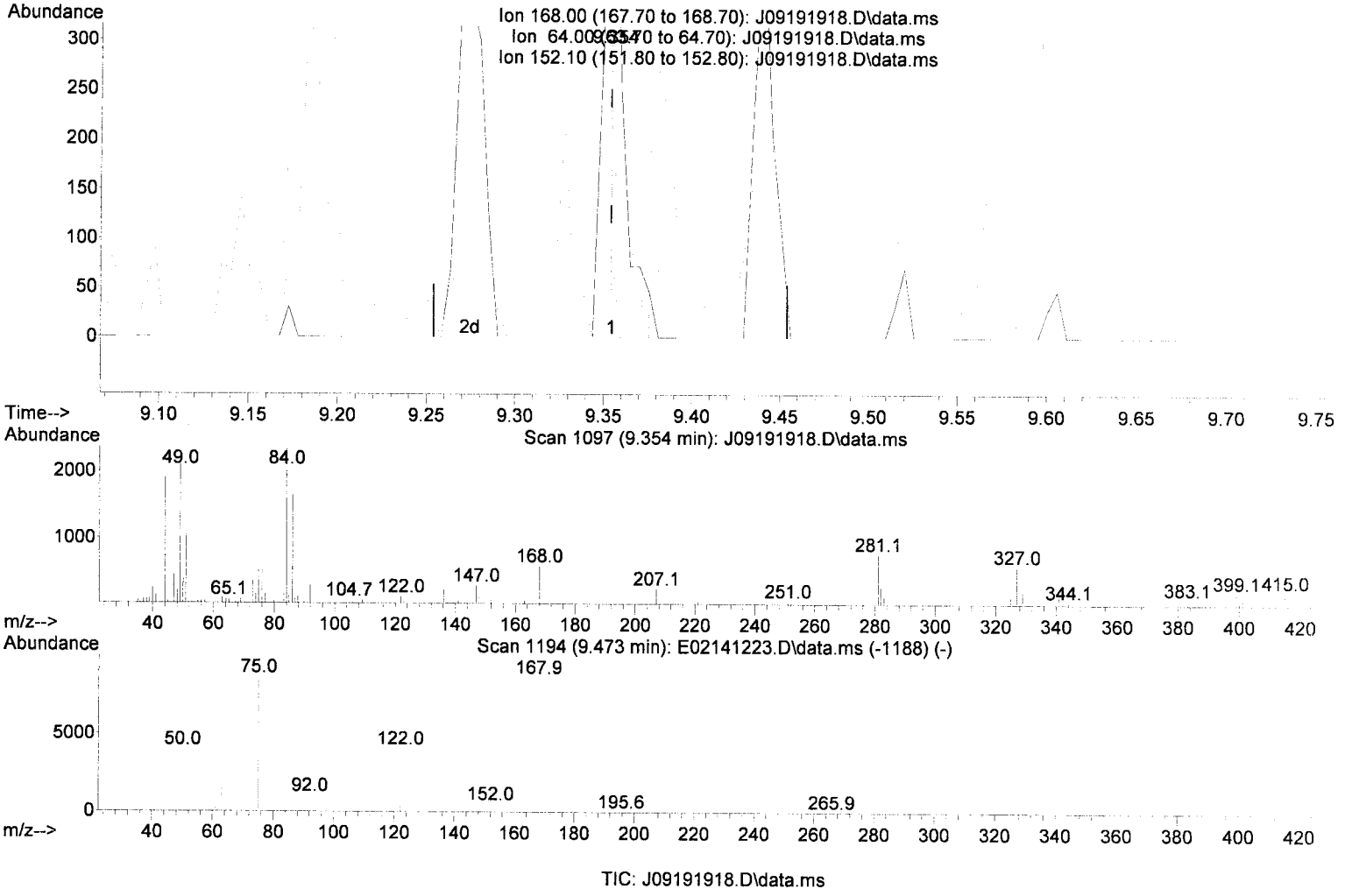


R = 6.81e-003 A*A + 2.06e-001 A - 5.98e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



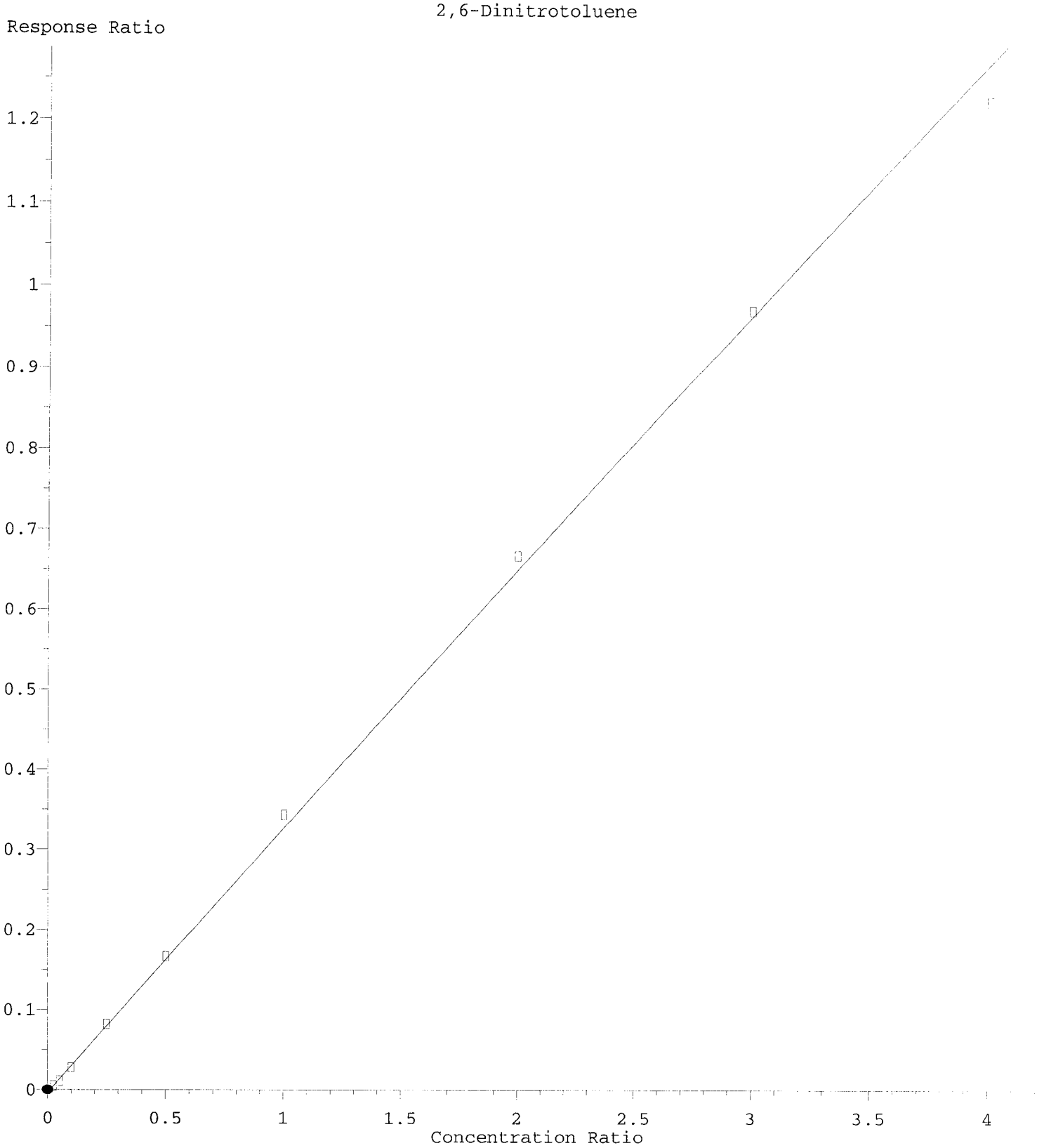
TIC: J09191918.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.354min (+ 0.000) 60.01 ng/ml m

response 141

Ion	Exp%	Act%
168.00	100.00	100.00
64.00	23.30	14.38
152.10	9.60	34.76
0.00	0.00	0.00

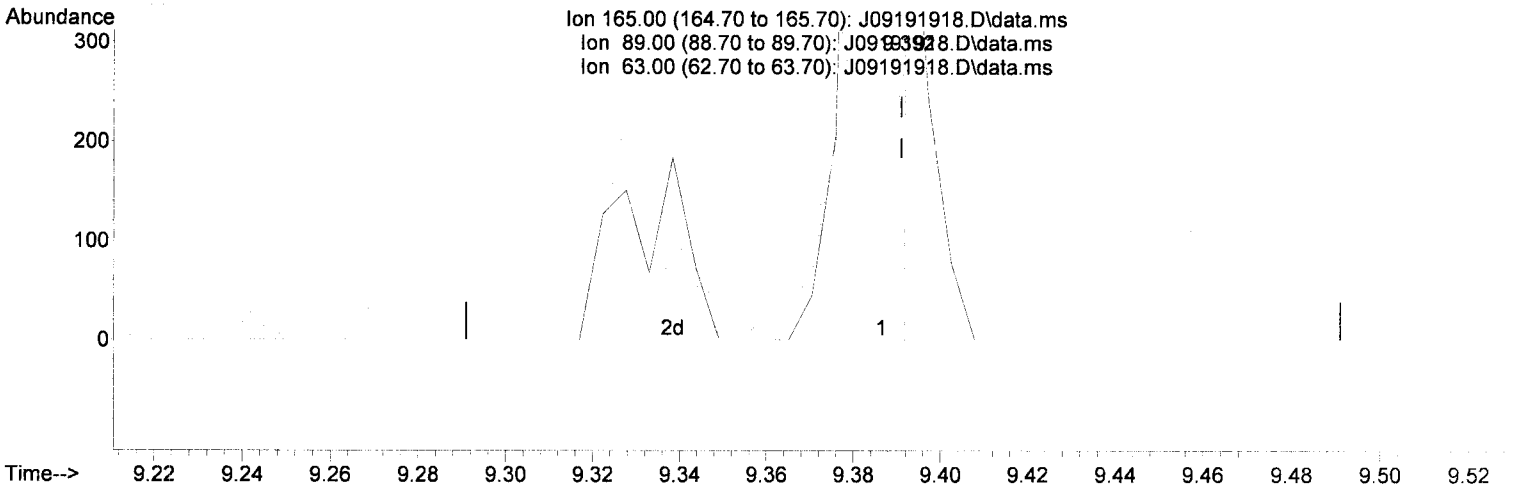


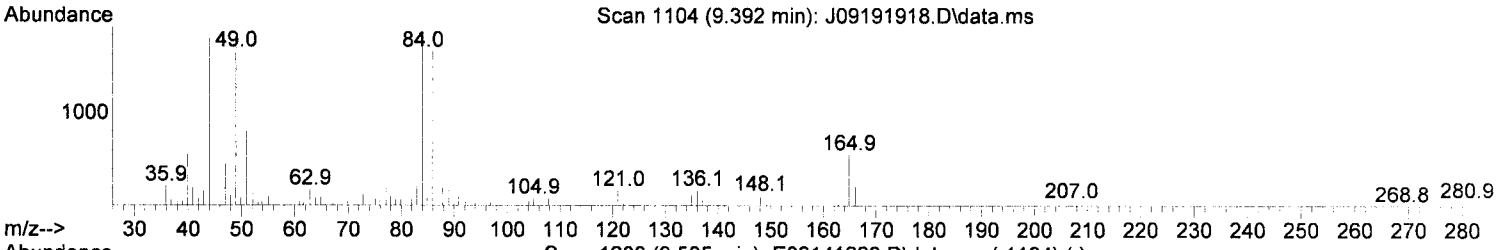
R = -4.24e-003 A*A + 3.35e-001 A - 4.20e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

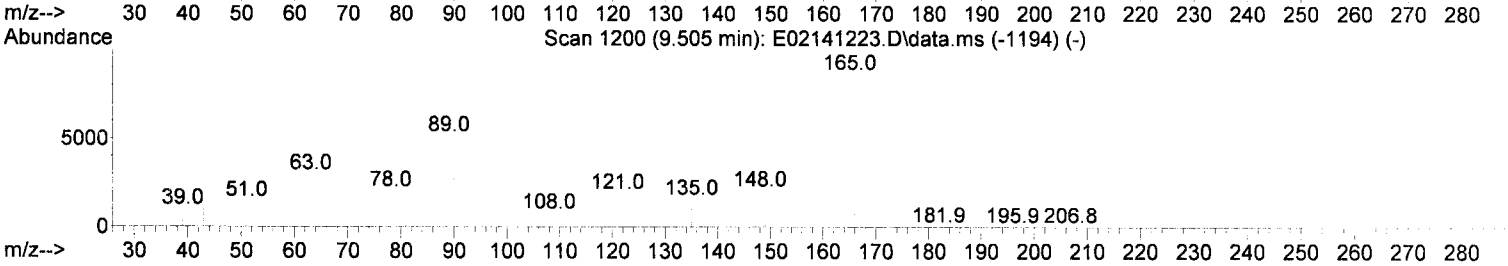
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







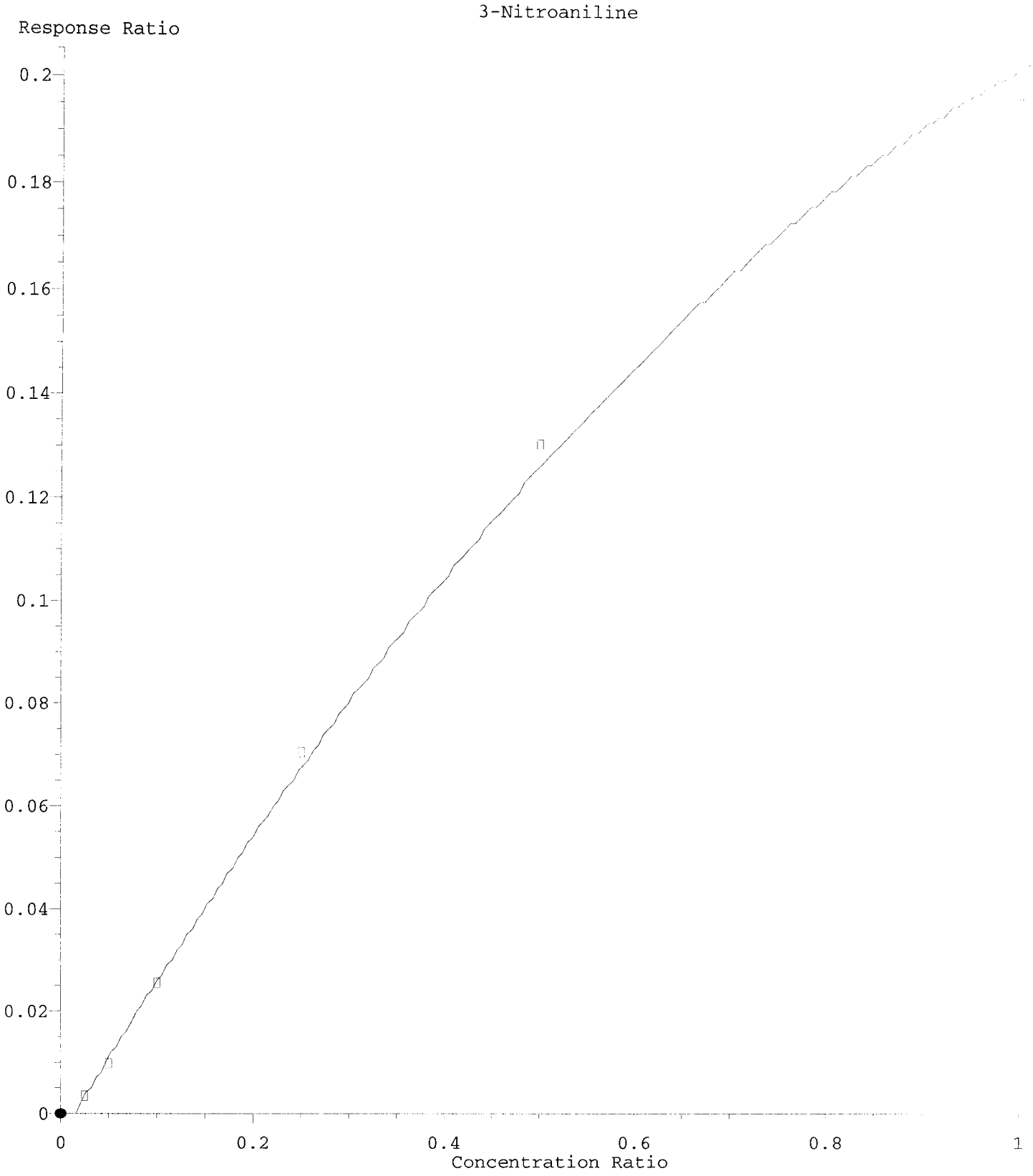
TIC: J09191918.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.392min (+ 0.001) 26.03 ng/ml m

response 103

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	46.30	43.52
63.00	36.80	34.46
0.00	0.00	0.00

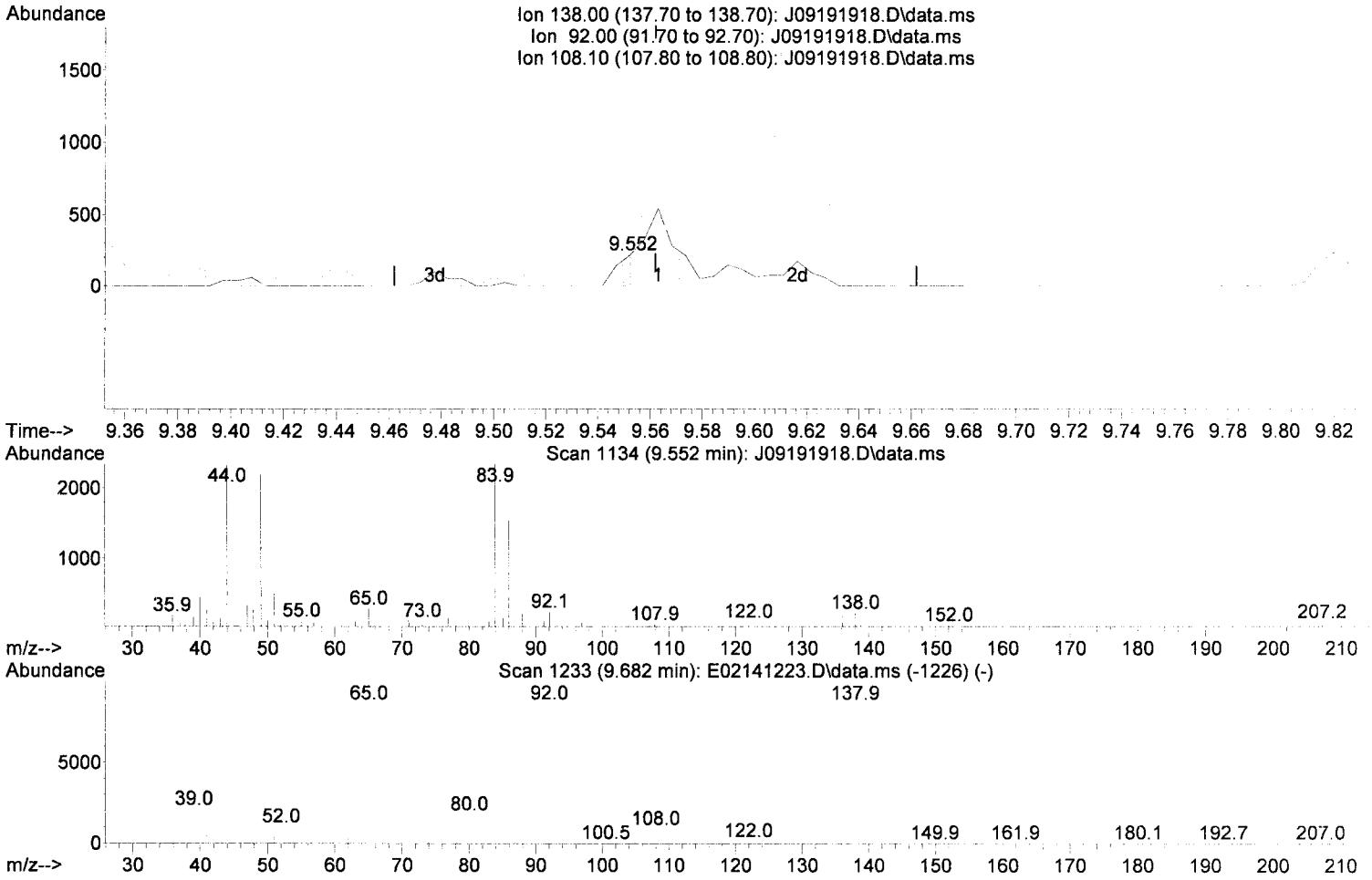


R = -1.10e-001 A*A + 3.17e-001 A - 4.68e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_0919I9.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

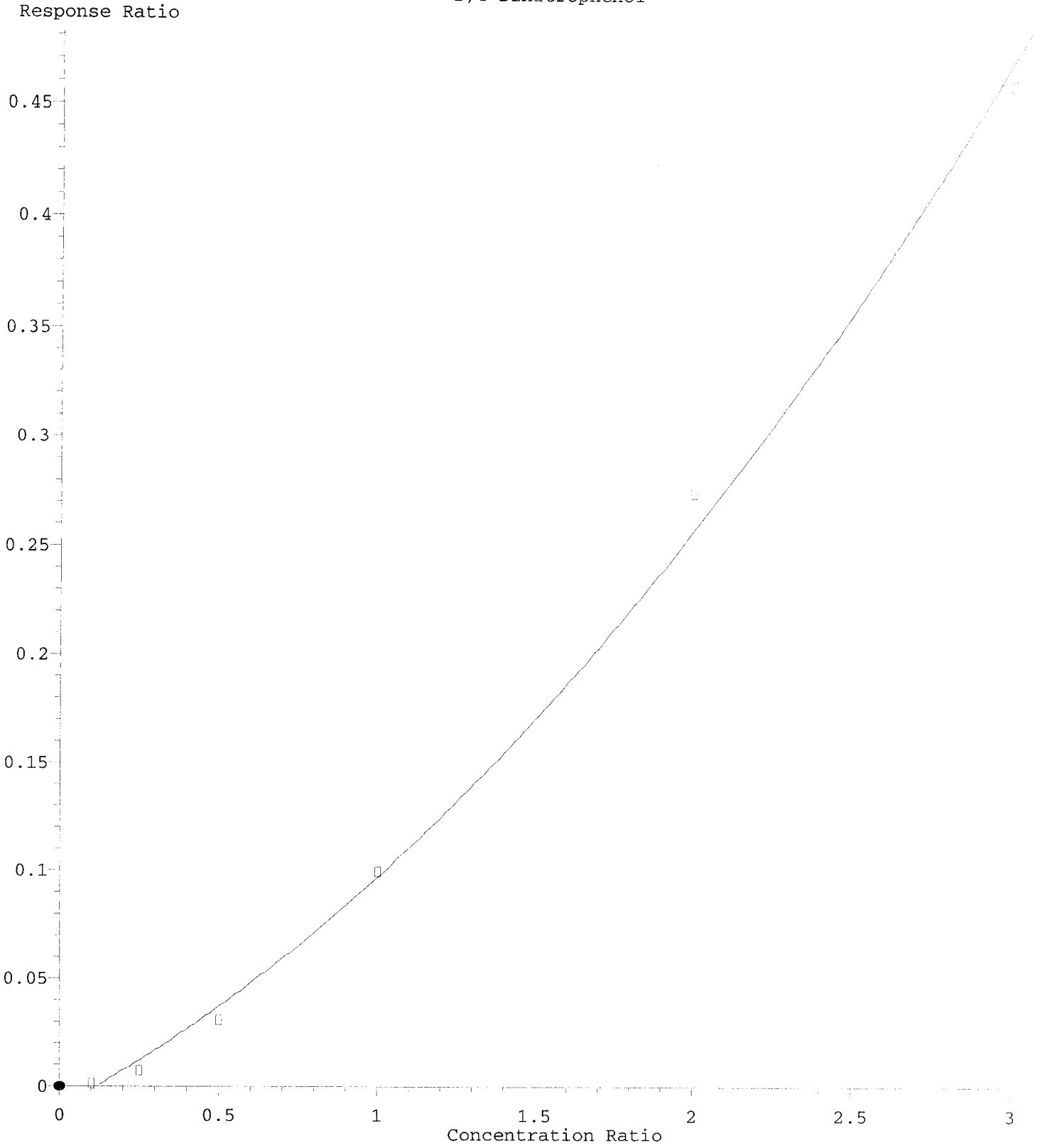
(50) 3-Nitroaniline (T)

9.552min (-0.010) 30.87 ng/ml m

response 116

J

Ion	Exp%	Act%
138.00	100.00	100.00
92.00	100.10	107.34
108.10	10.00	24.31
0.00	0.00	0.00

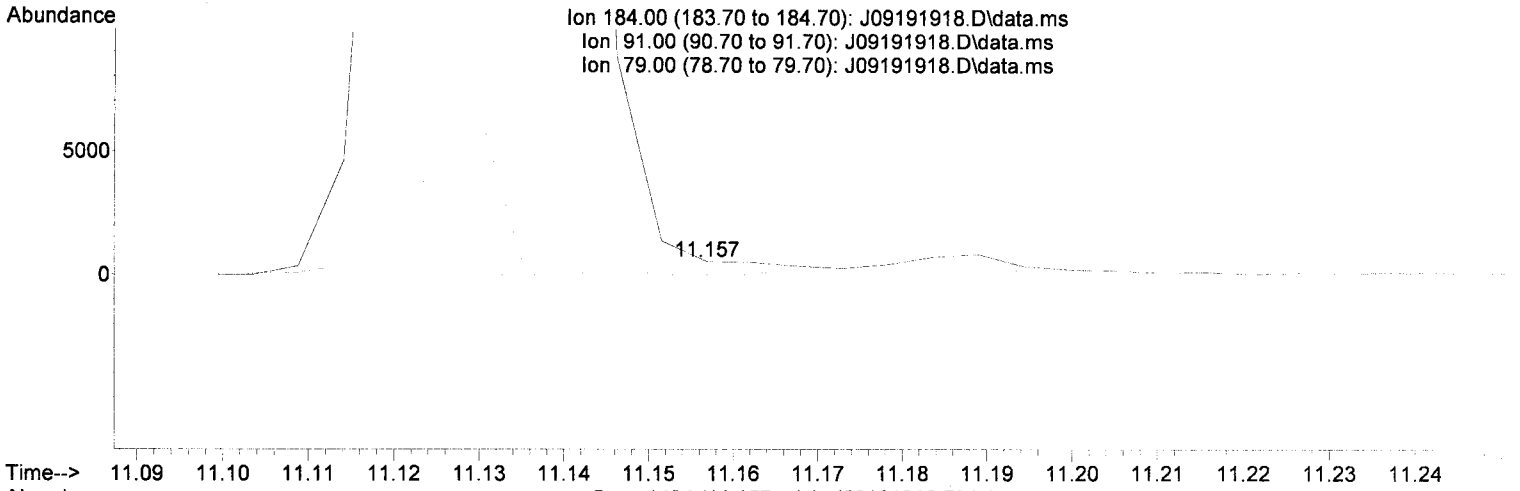


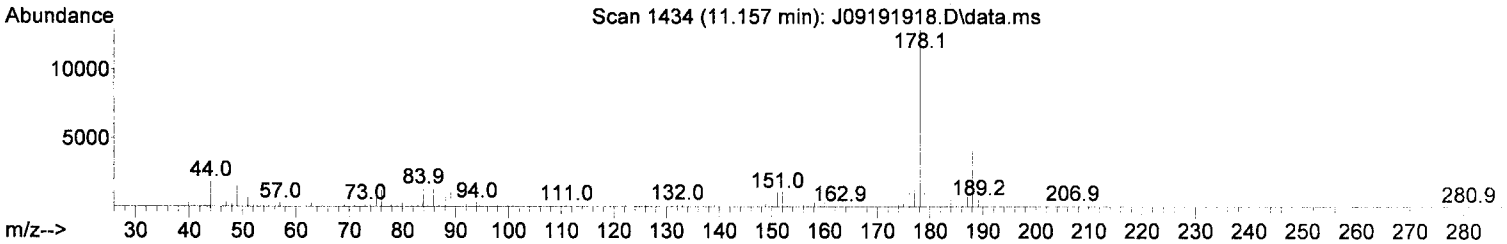
R = 2.65e-002 A*A + 8.01e-002 A - 9.46e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

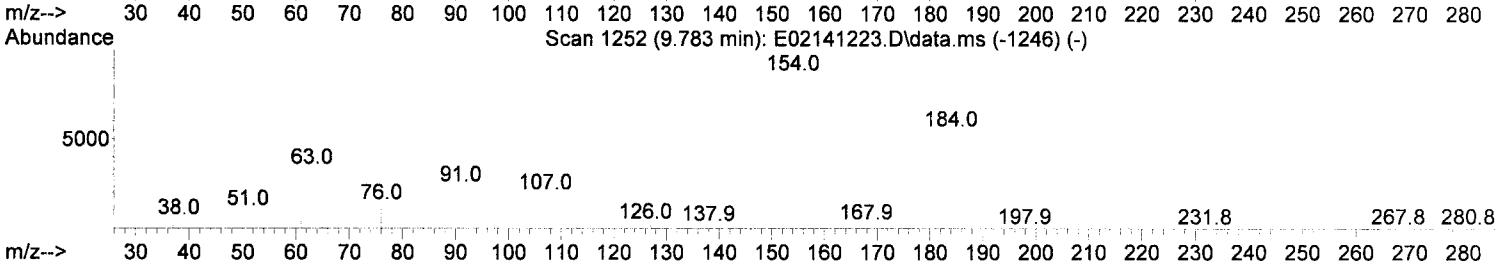
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







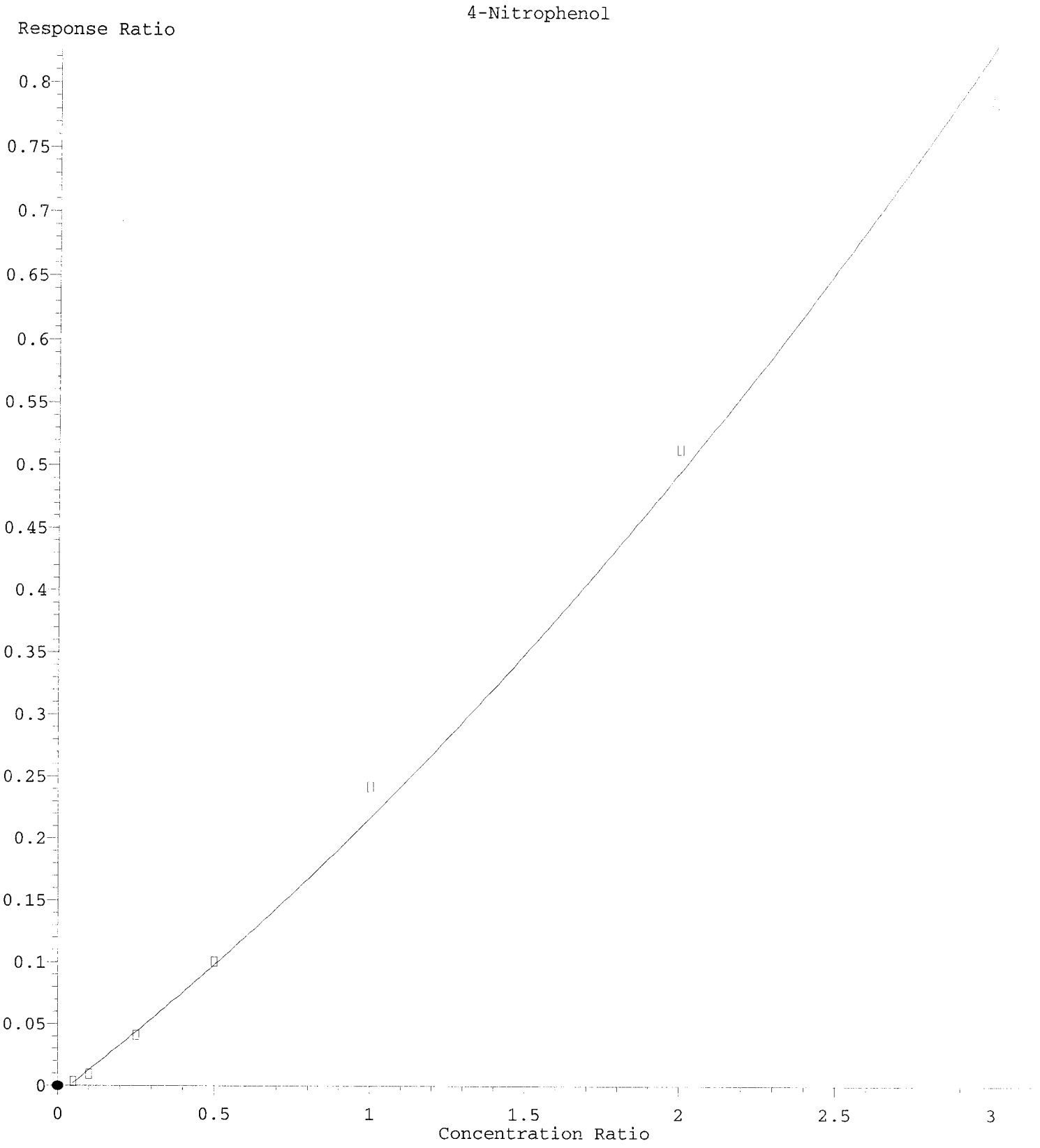
TIC: J09191918.D\data.ms

(52) 2,4-Dinitrophenol (T)

11.157min (+ 1.493) 233.65 ng/ml m

response 166

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	42.80	6.68#
79.00	26.10	17.15
0.00	0.00	0.00

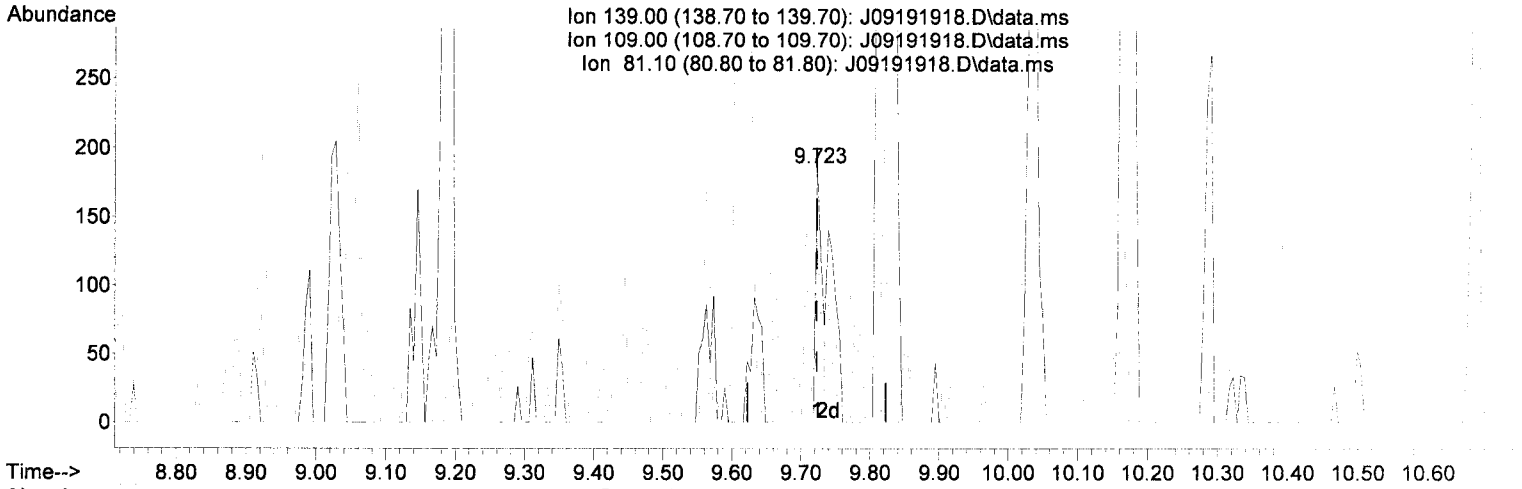


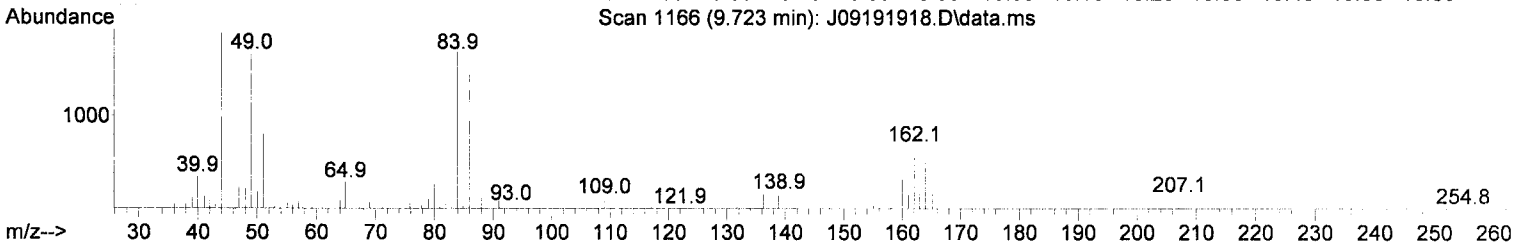
R = 2.73e-002 A*A + 1.97e-001 A - 7.29e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

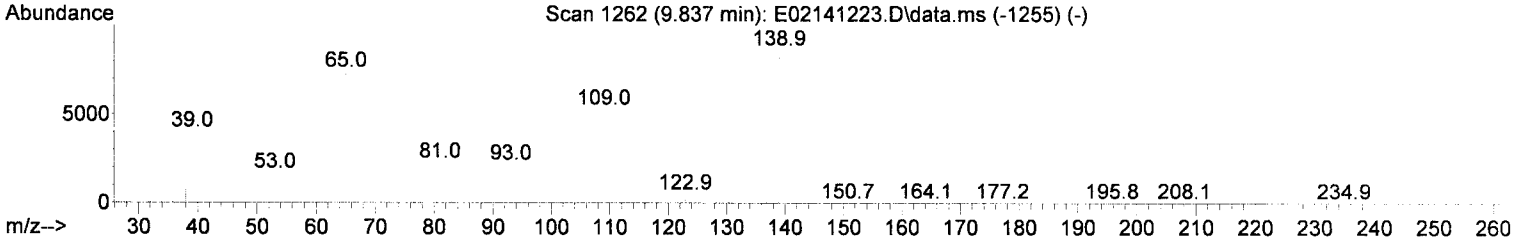
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







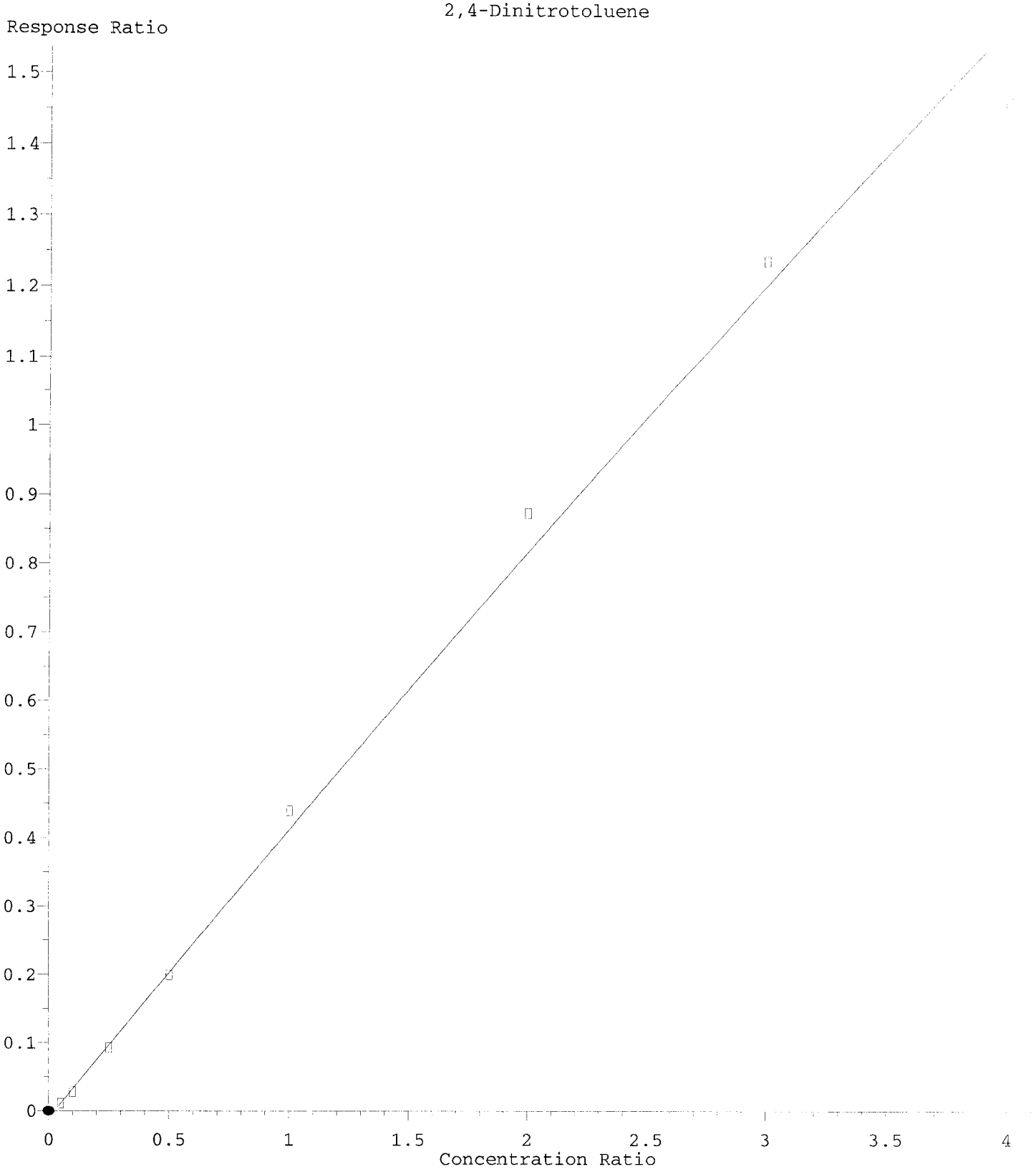
TIC: J09191918.D\data.ms

(53) 4-Nitrophenol (T)

9.723min (+ 0.000) 75.63 ng/ml

response 120

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	58.50	72.04
81.10	23.90	27.42
0.00	0.00	0.00

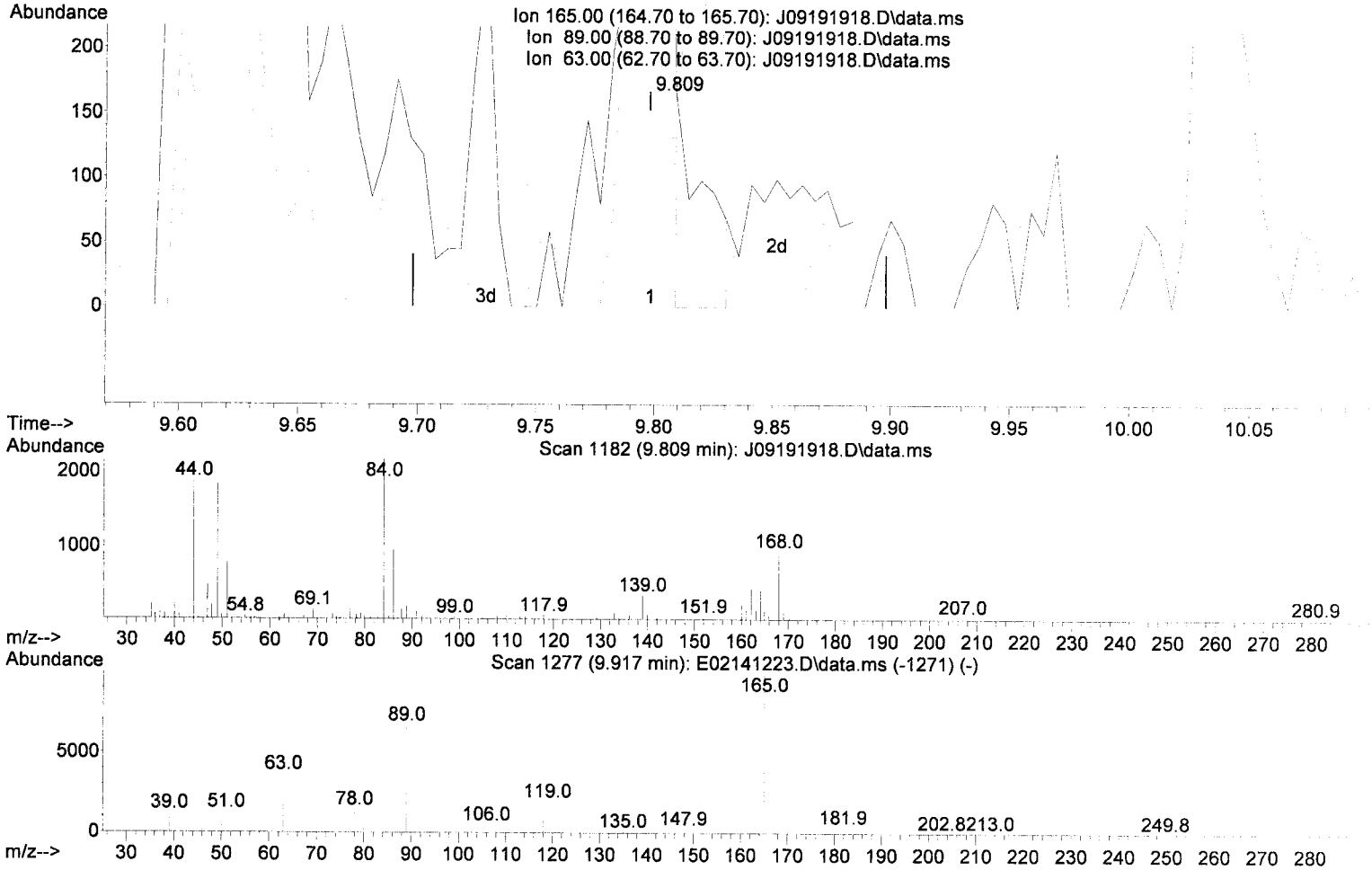


R = -9.39e-003 A*A + 4.33e-001 A - 1.16e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_0919I9.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



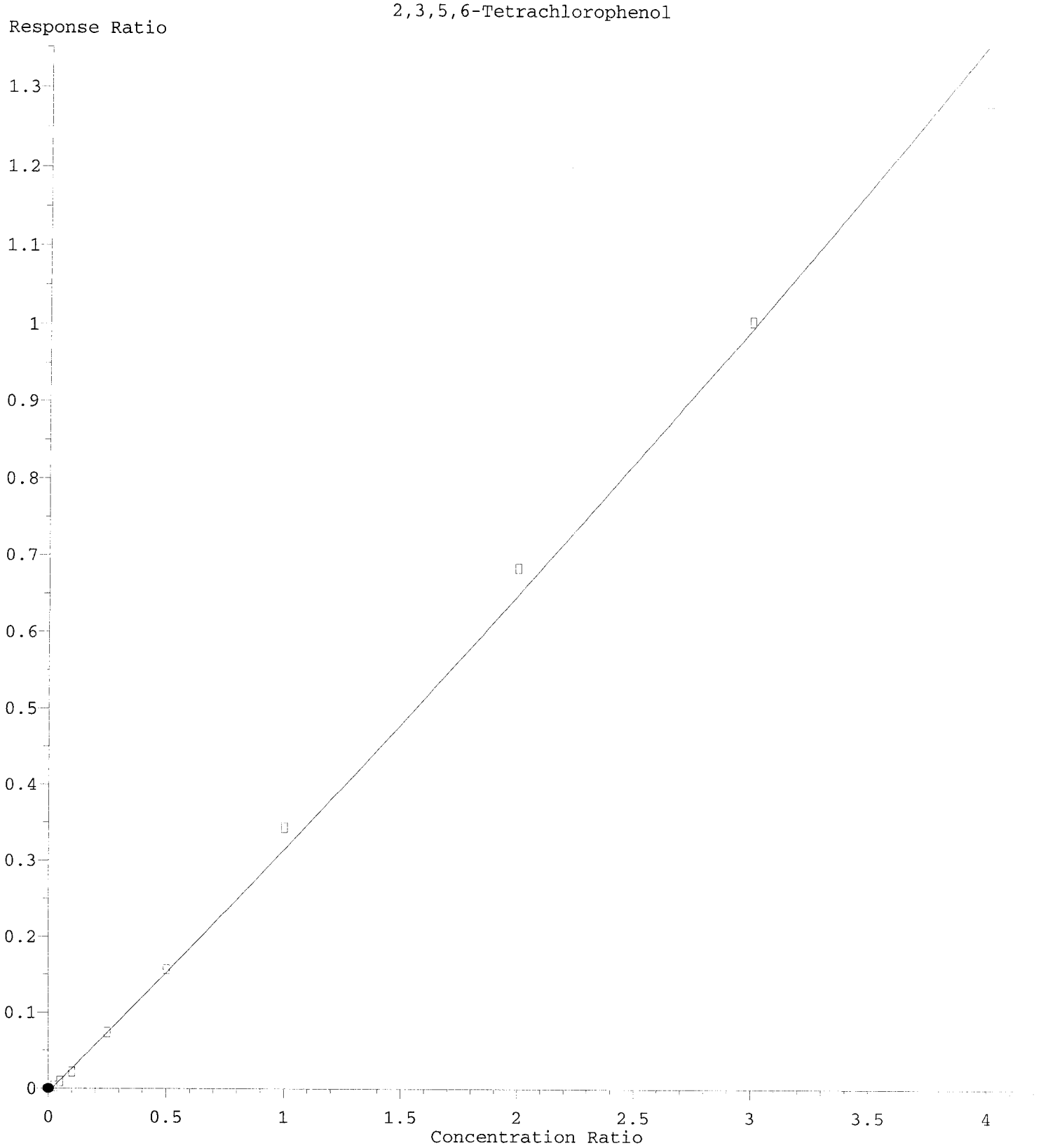
TIC: J09191918.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.809min (+ 0.011) 54.53 ng/ml m

response 109

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	61.80	135.76#
63.00	32.90	55.76
0.00	0.00	0.00

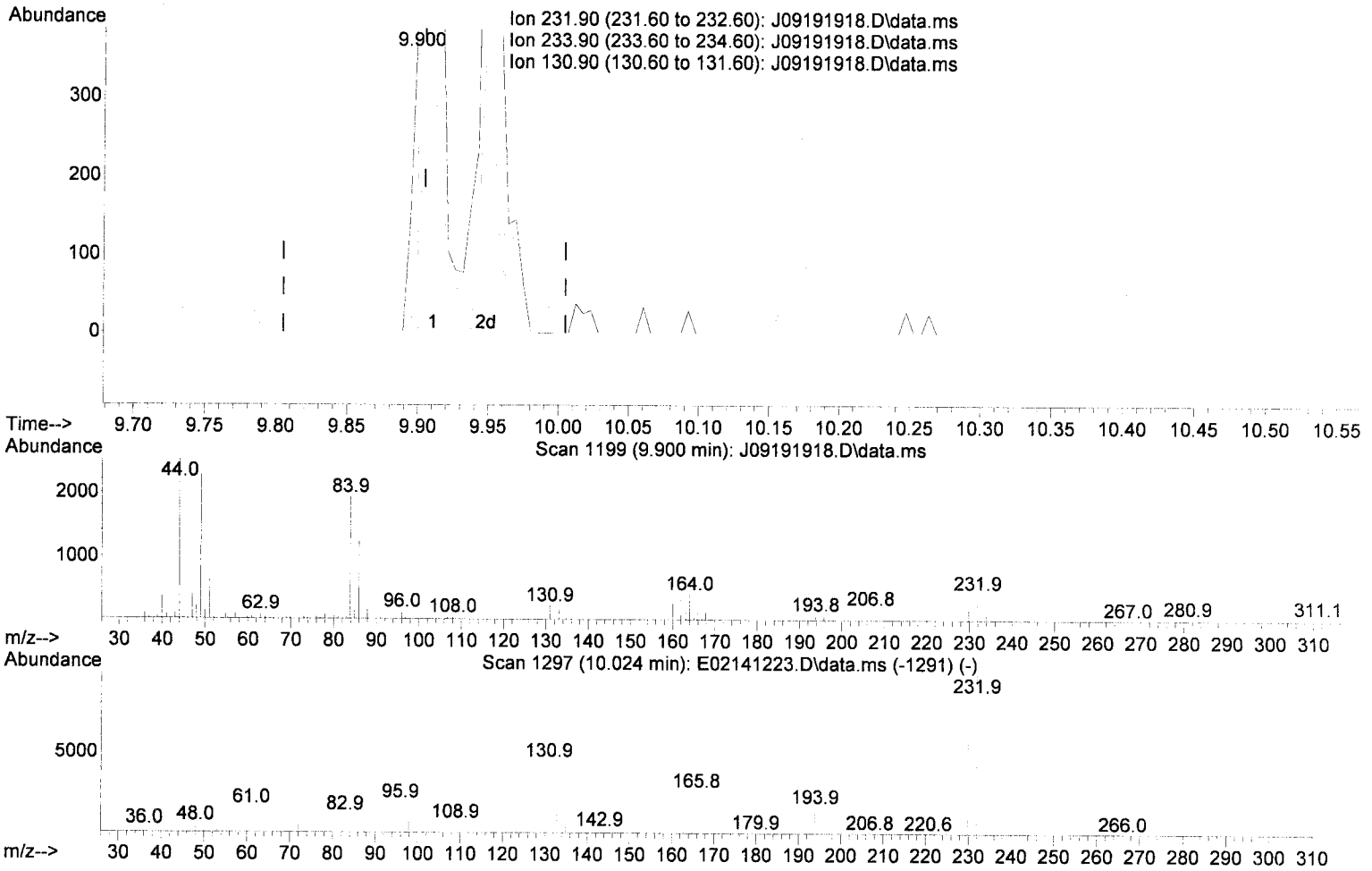


R = 6.93e-003 A*A + 3.13e-001 A - 5.57e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



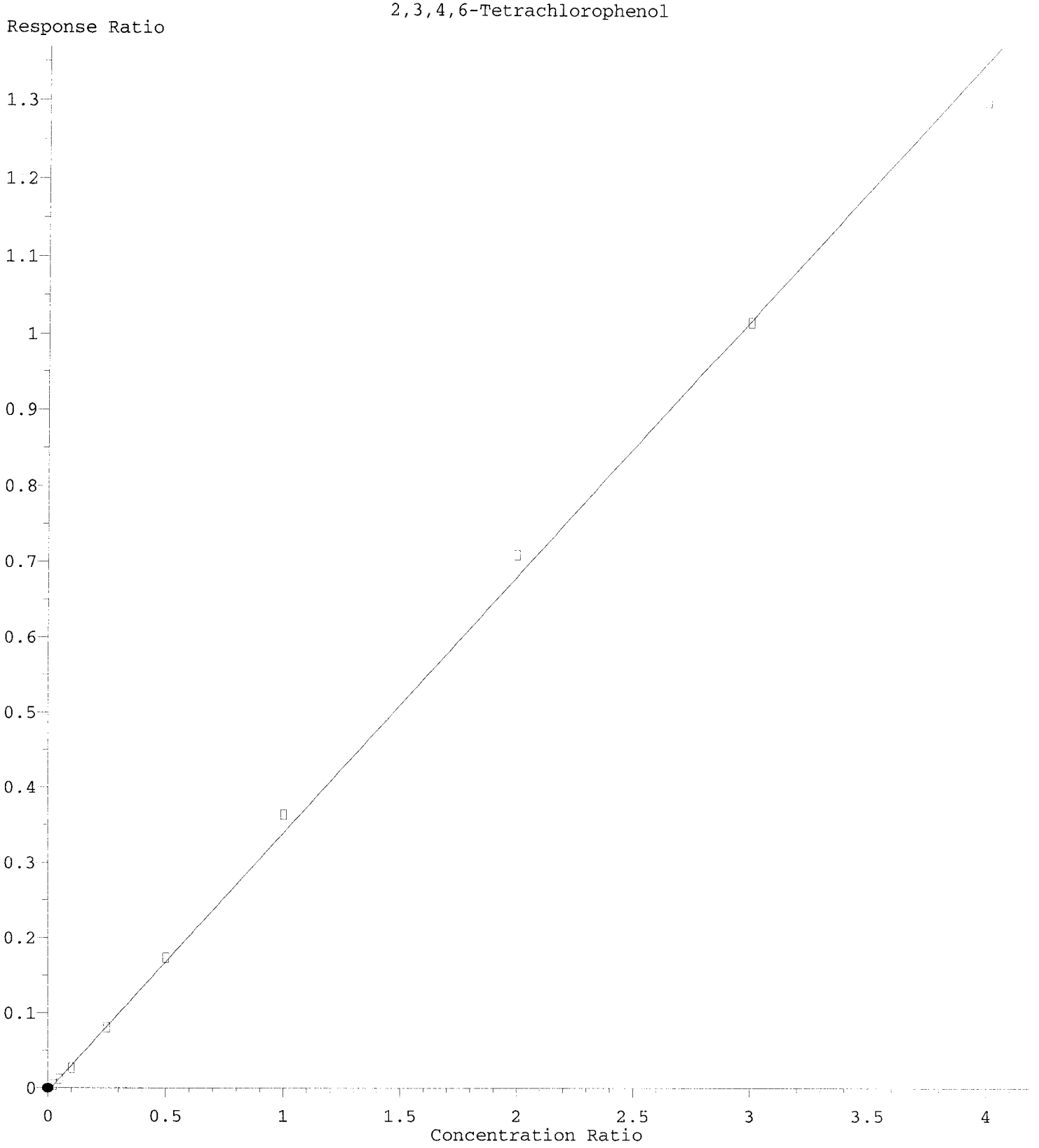
TIC: J09191918.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

9.900min (-0.005) 37.40 ng/ml m

response 188

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	48.30	24.72
130.90	40.60	55.10
0.00	0.00	0.00

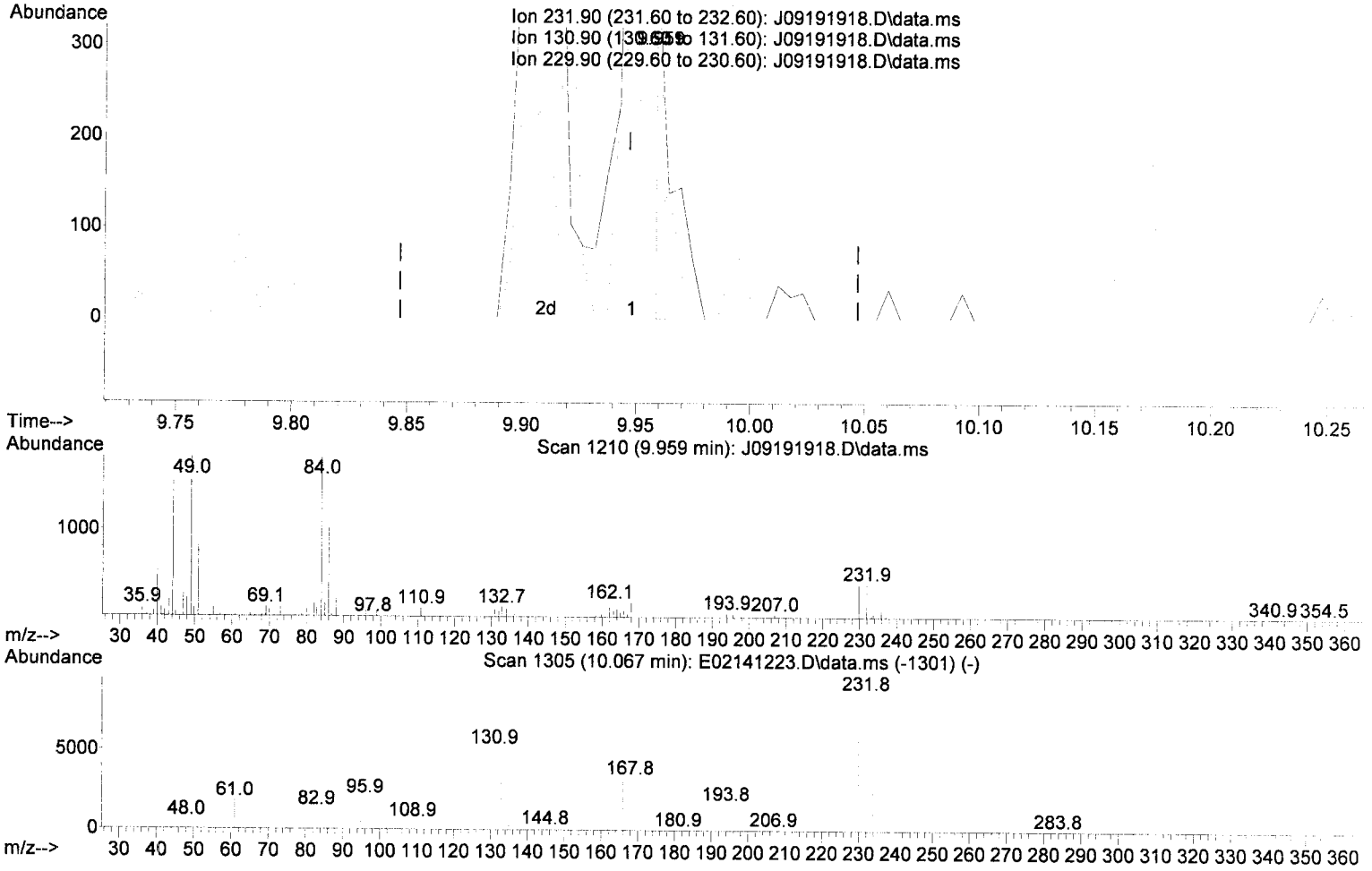


R = -1.57e-003 A*A + 3.46e-001 A - 4.91e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



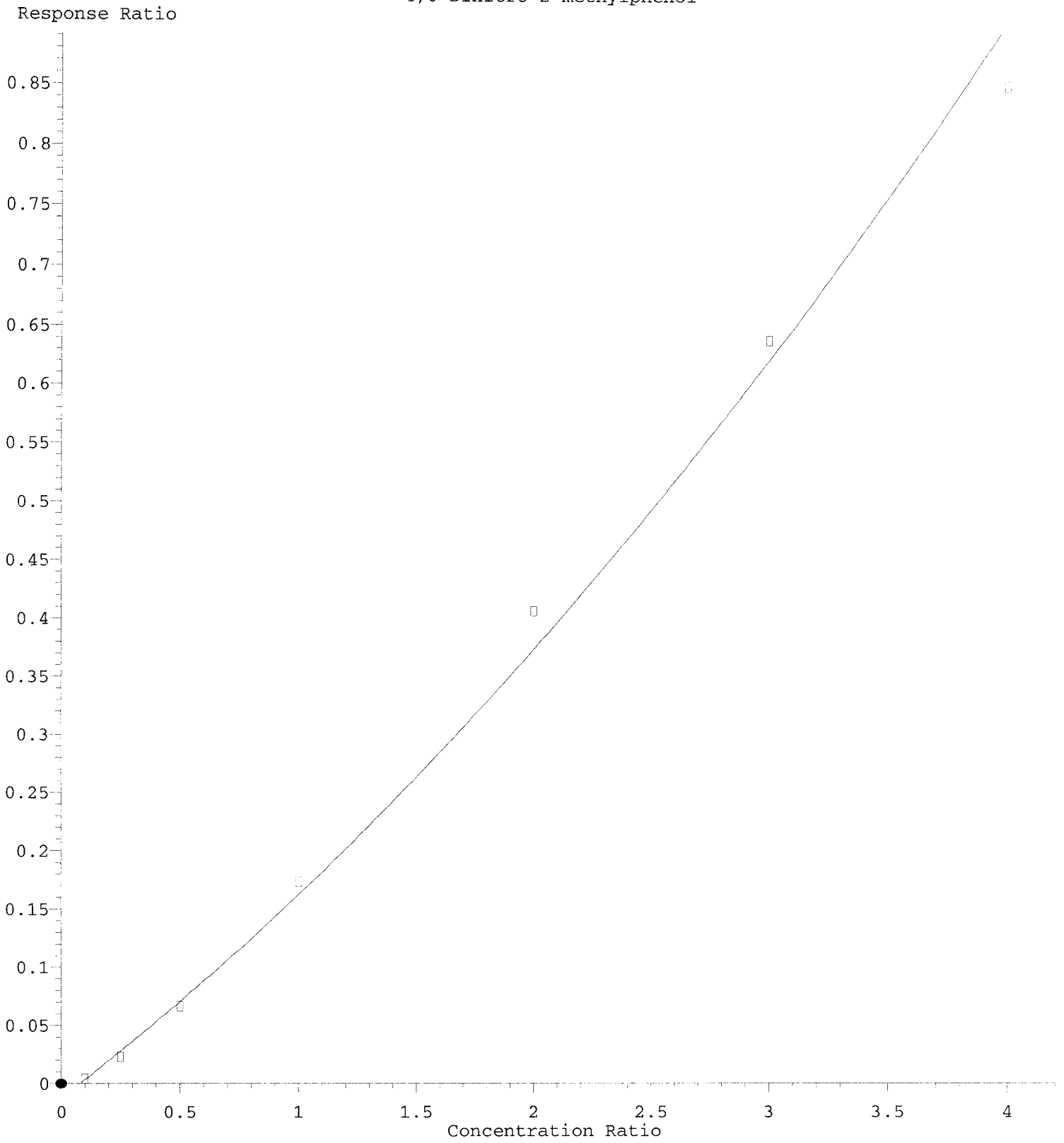
TIC: J09191918.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

9.959min (+ 0.012) 29.40 ng/ml m

response 112

Ion	Exp%	Act%
231.90	100.00	100.00
130.90	45.50	28.97
229.90	77.80	98.74
0.00	0.00	0.00

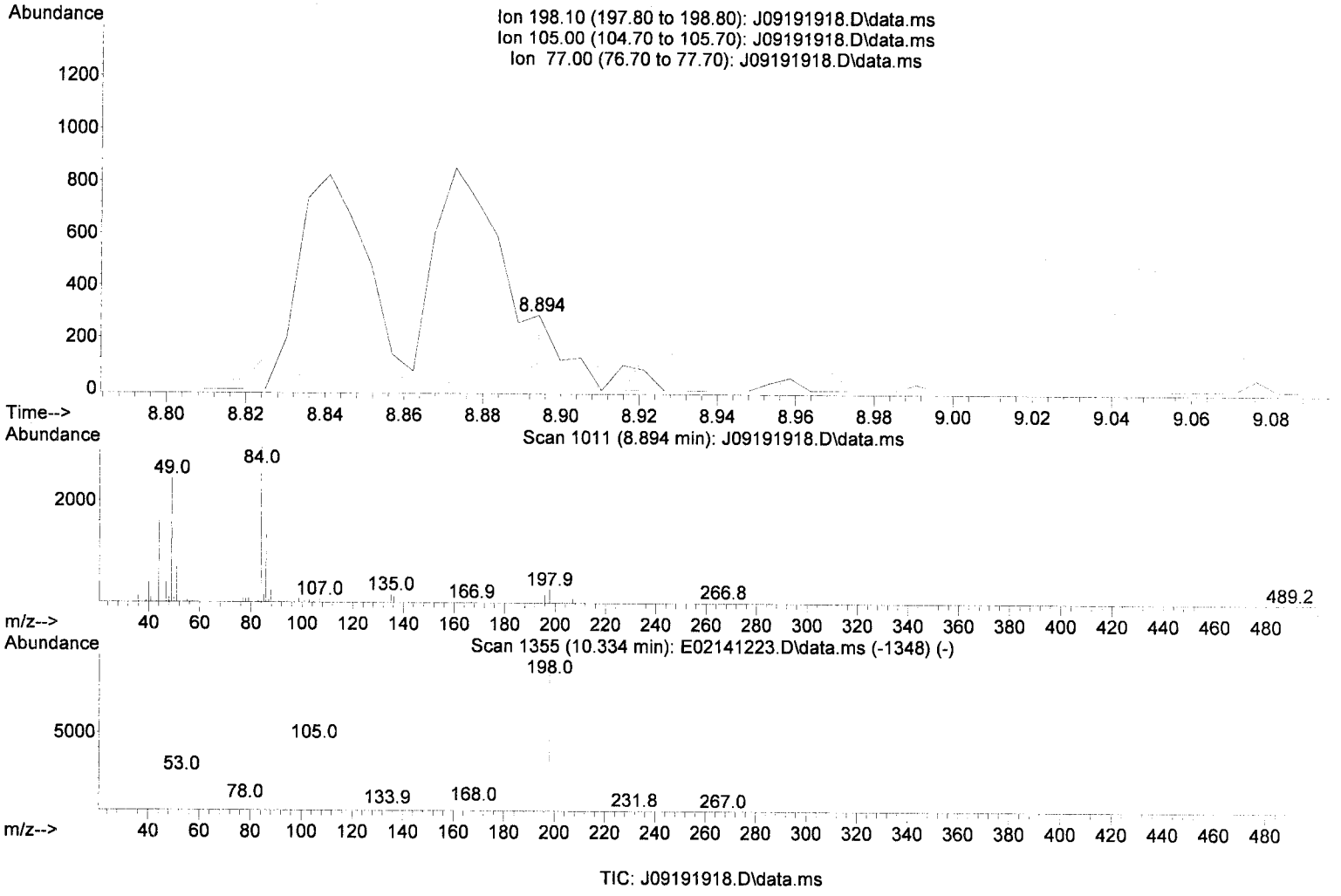


R = 1.79e-002 A*A + 1.57e-001 A - 1.26e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



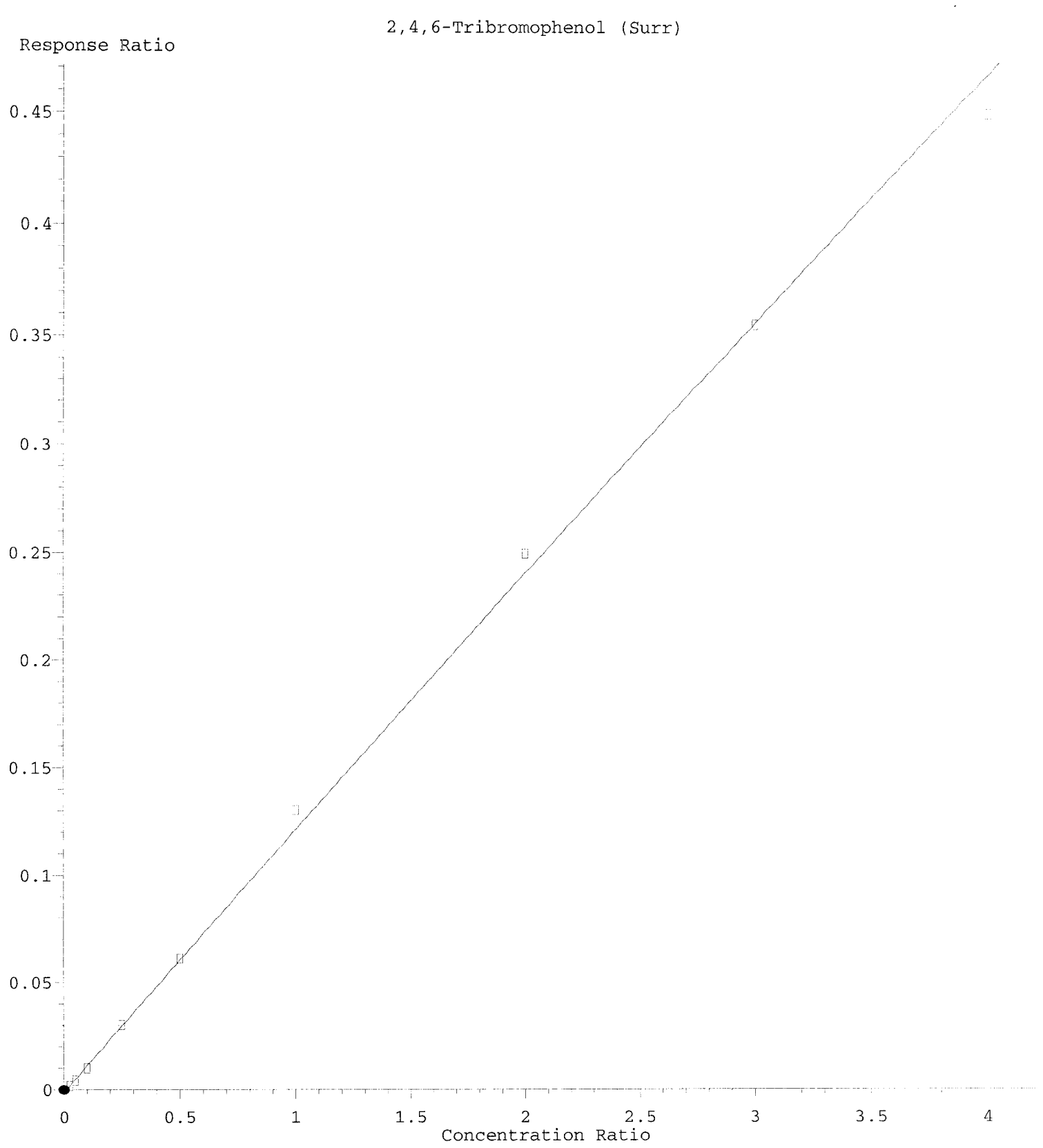
TIC: J09191918.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

8.894min (-1.321) 161.35 ng/ml m

response 134

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	40.70	9.00#
77.00	20.00	37.37
0.00	0.00	0.00

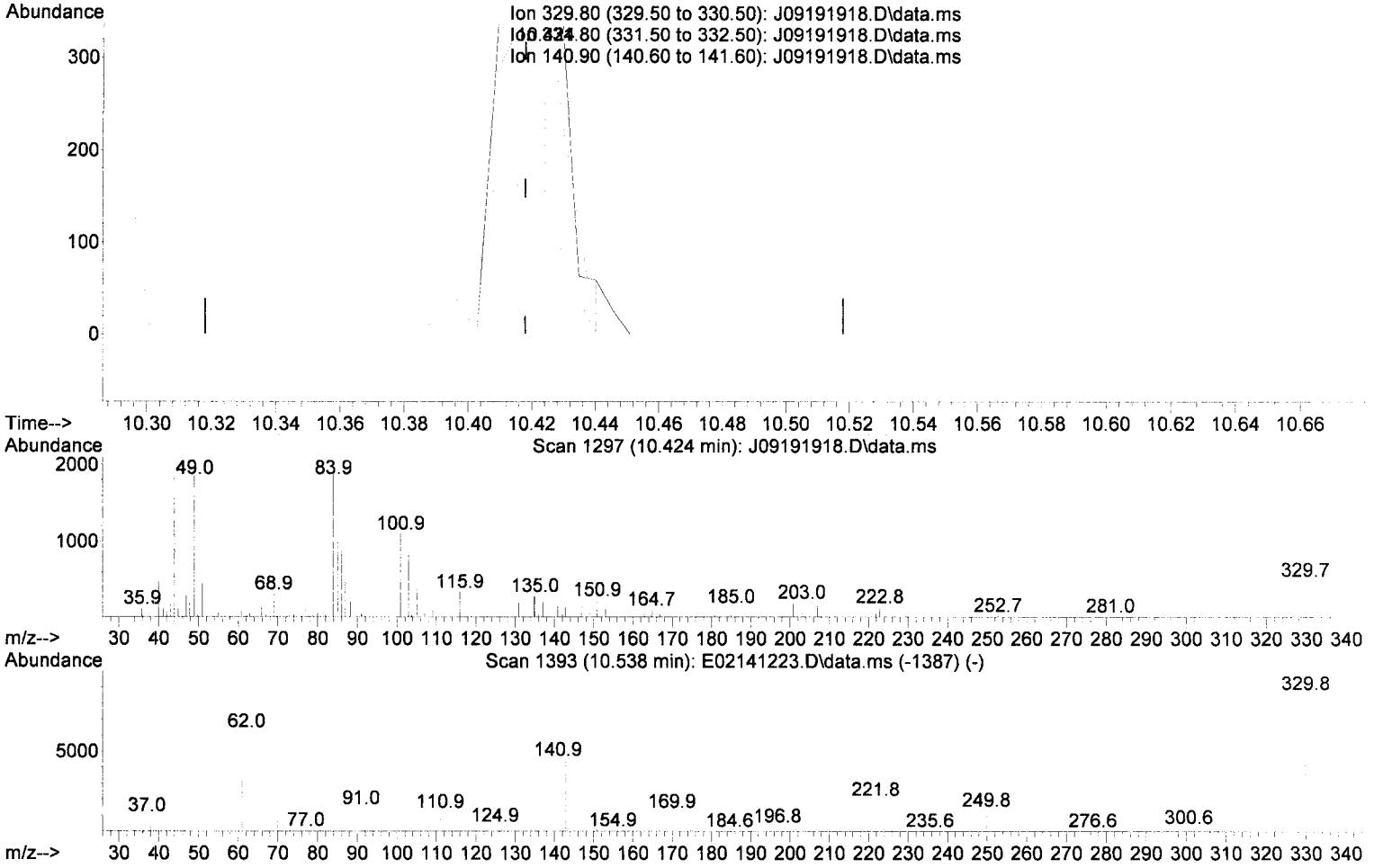


R = -1.82e-003 A*A + 1.24e-001 A - 1.50e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



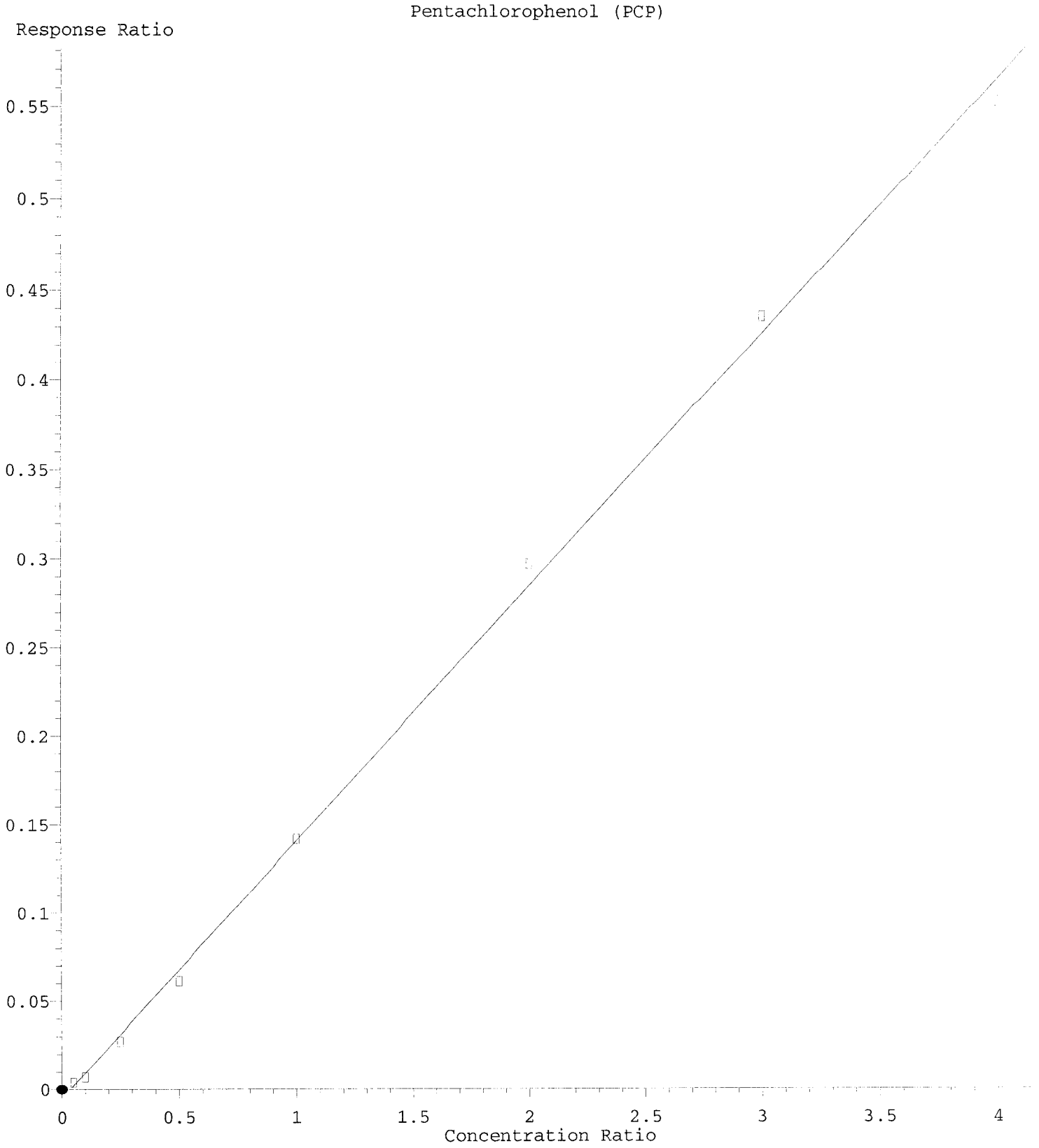
TIC: J09191918.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.424min (+ 0.006) 26.15 ng/ml m

response 151

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	97.00	81.25
140.90	32.90	37.90
0.00	0.00	0.00

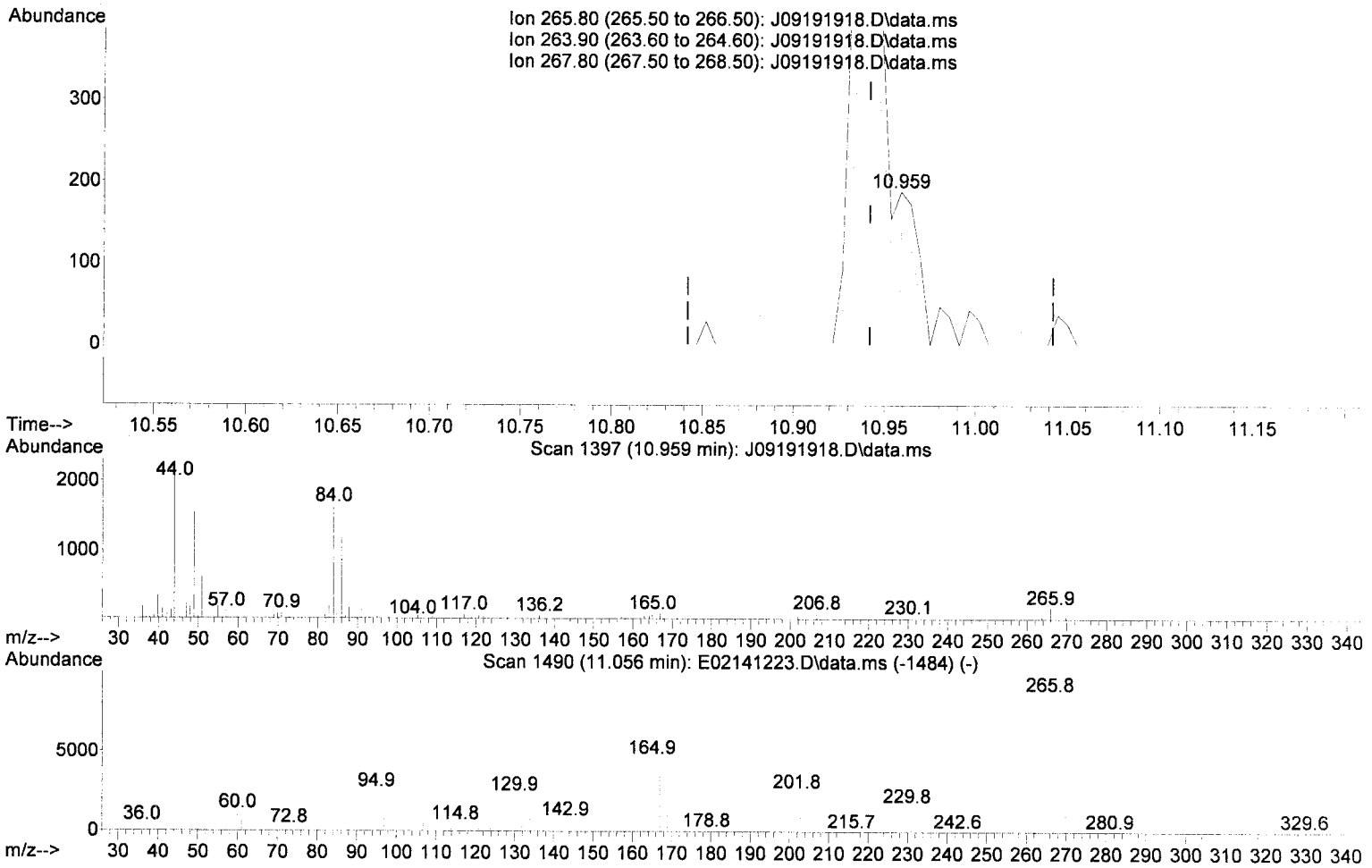


R = -1.05e-003 A*A + 1.47e-001 A - 5.64e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/(1/a)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



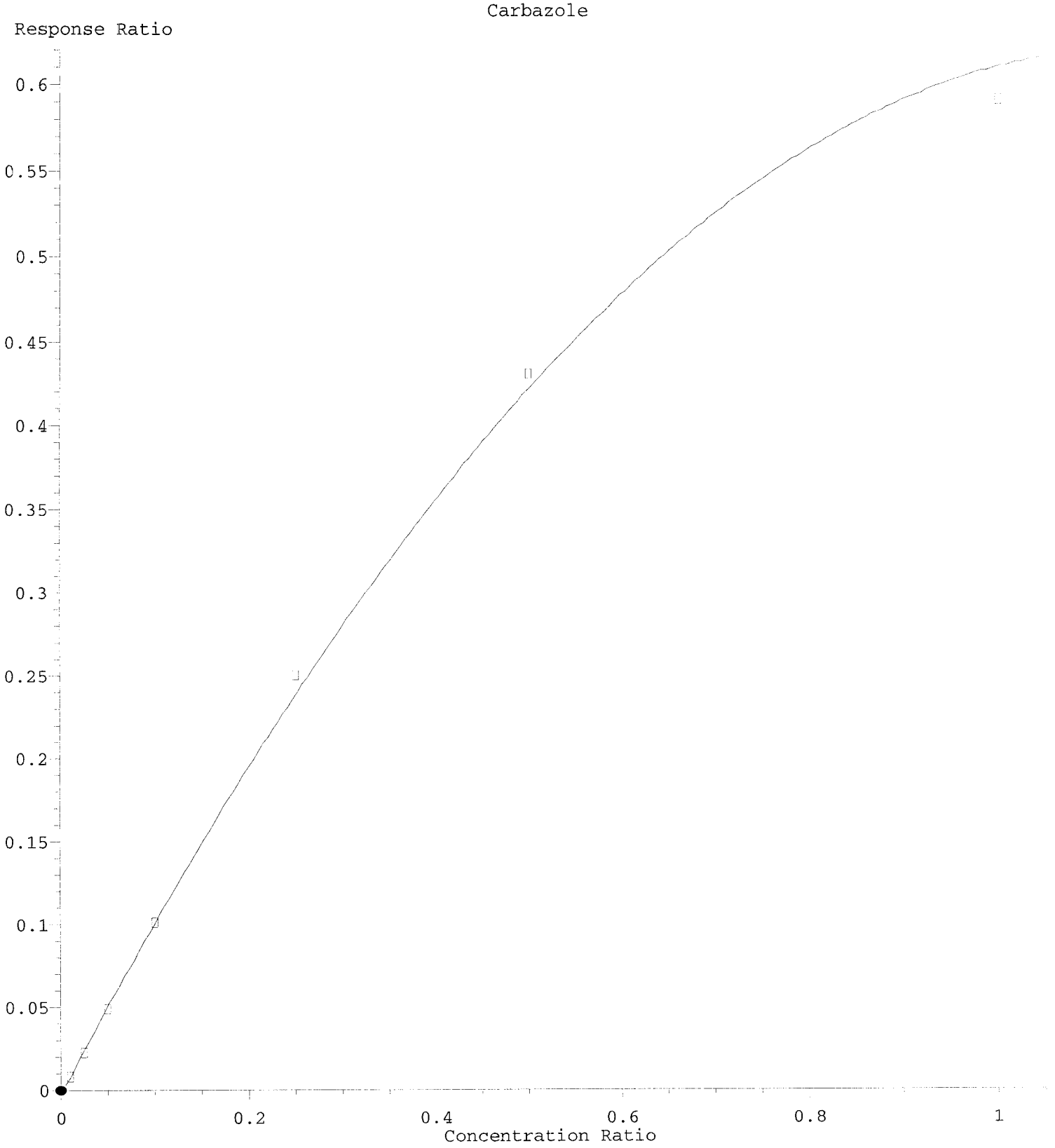
TIC: J09191918.D\data.ms

(70) Pentachlorophenol (PCP) (T)

10.959min (+ 0.017) 77.97 ng/ml m

response 116

Ion	Exp%	Act%
265.80	100.00	100.00
263.90	63.30	32.28#
267.80	64.70	0.00#
0.00	0.00	0.00

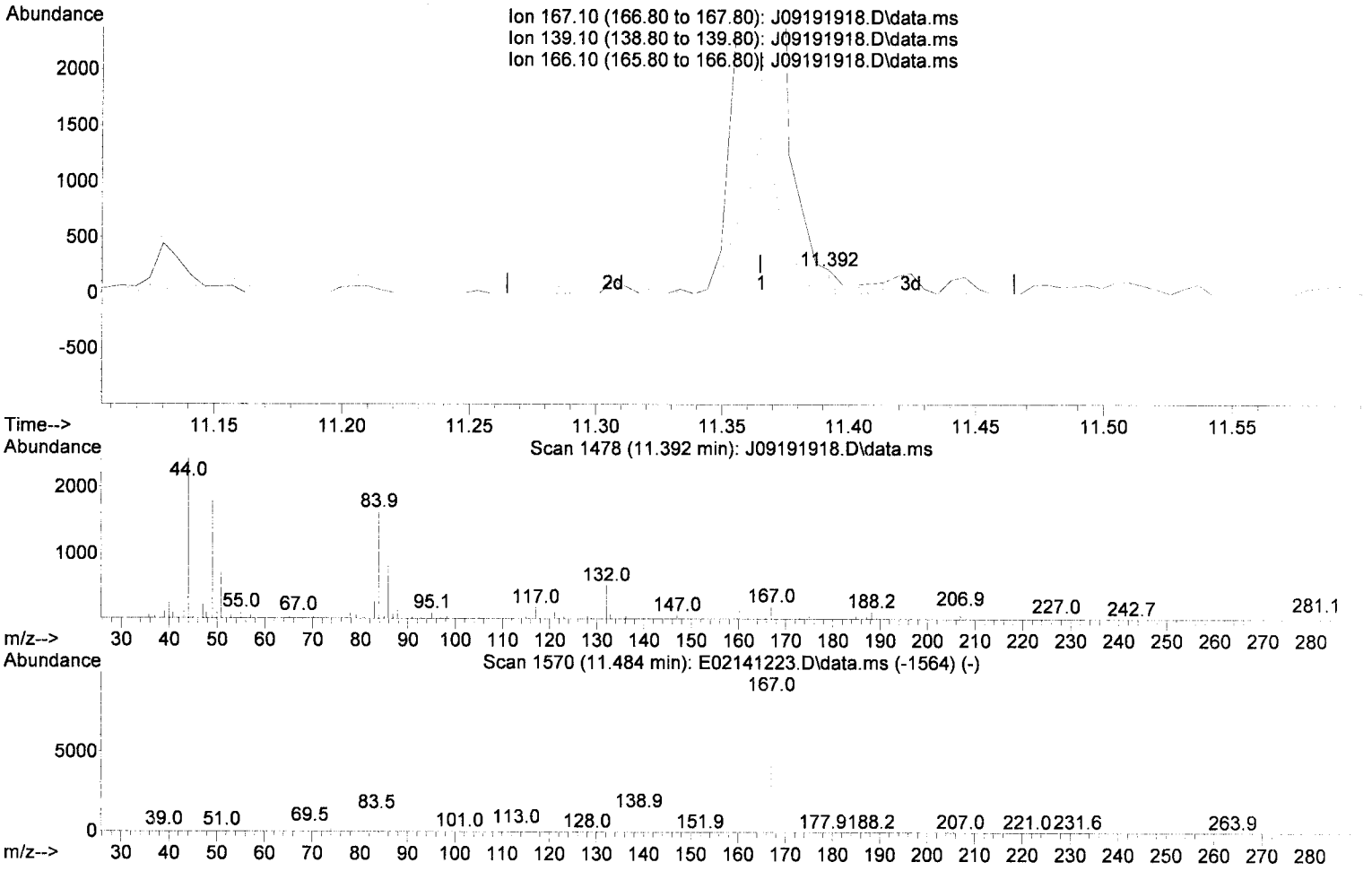


R = -4.70e-001 A*A + 1.08e+000 A - 3.03e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/1/(a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



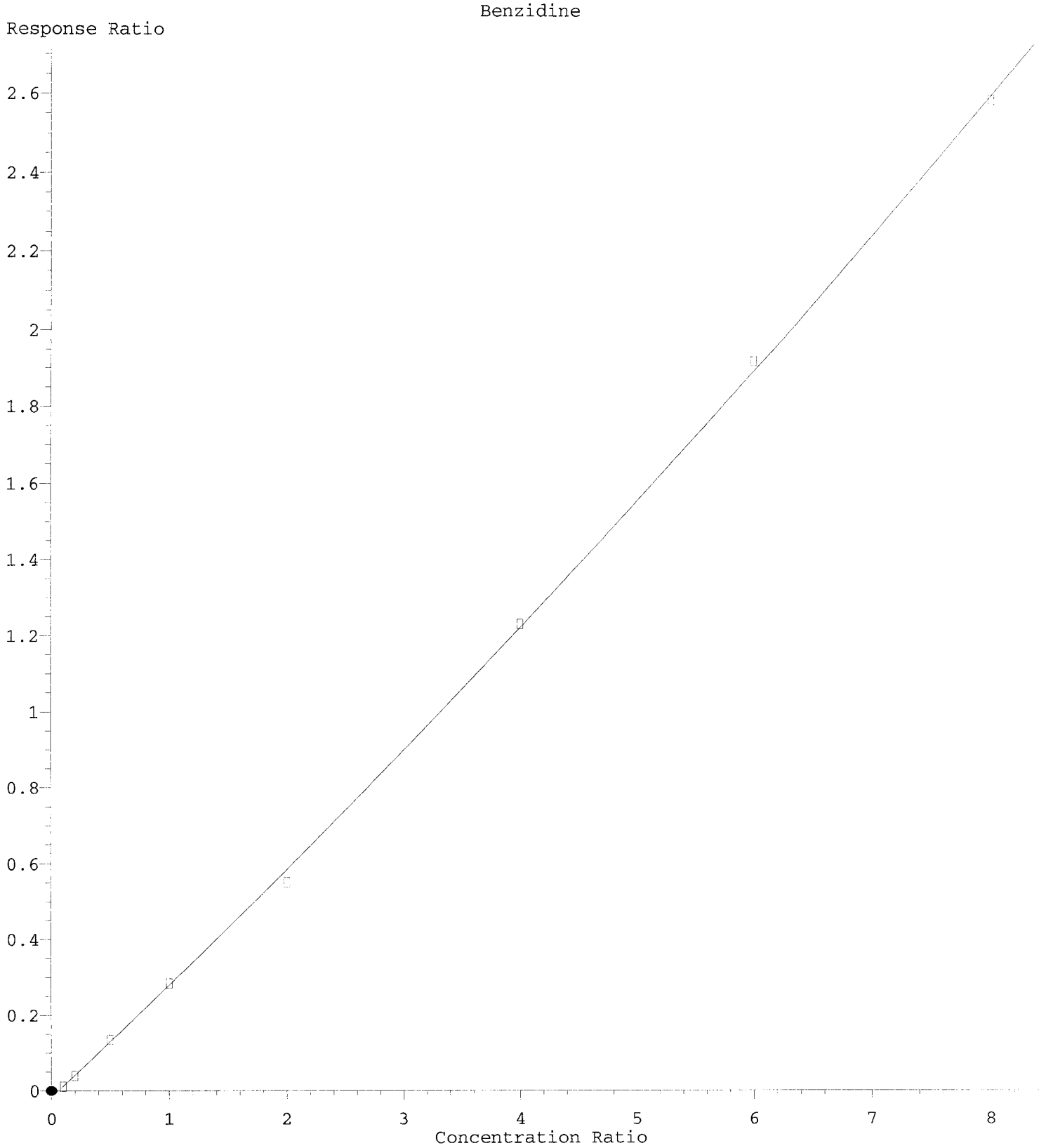
TIC: J09191918.D\data.ms

(73) Carbazole (T)

11.392min (+ 0.027) 5.78 ng/ml m

response 115

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	12.90	18.22
166.10	20.90	15.42
0.00	0.00	0.00

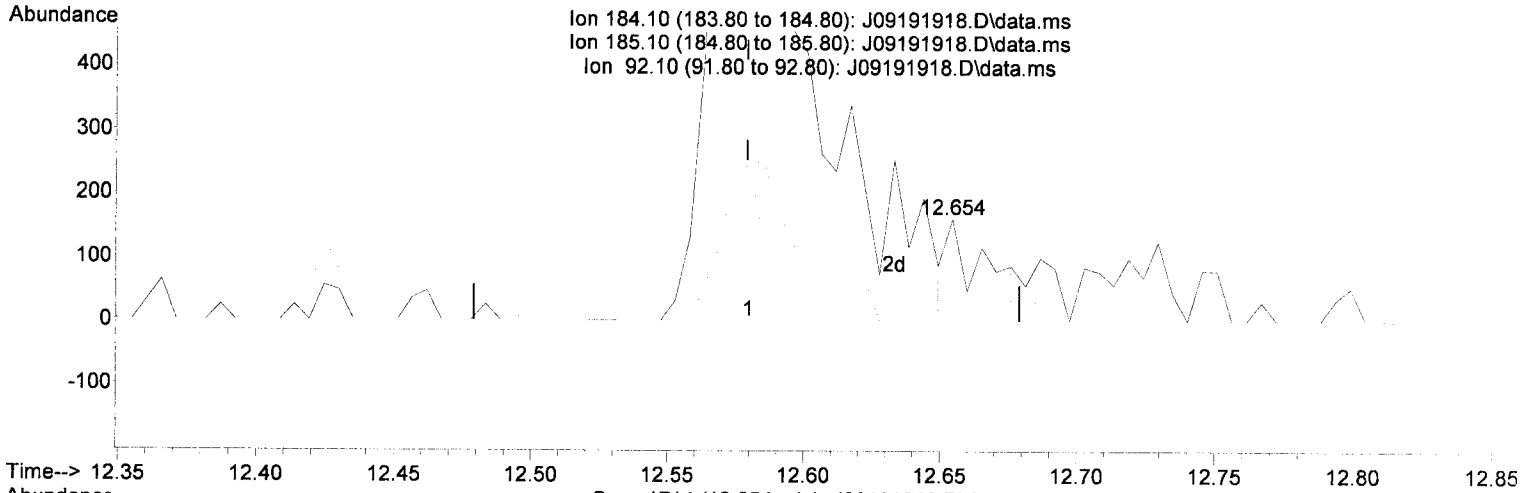


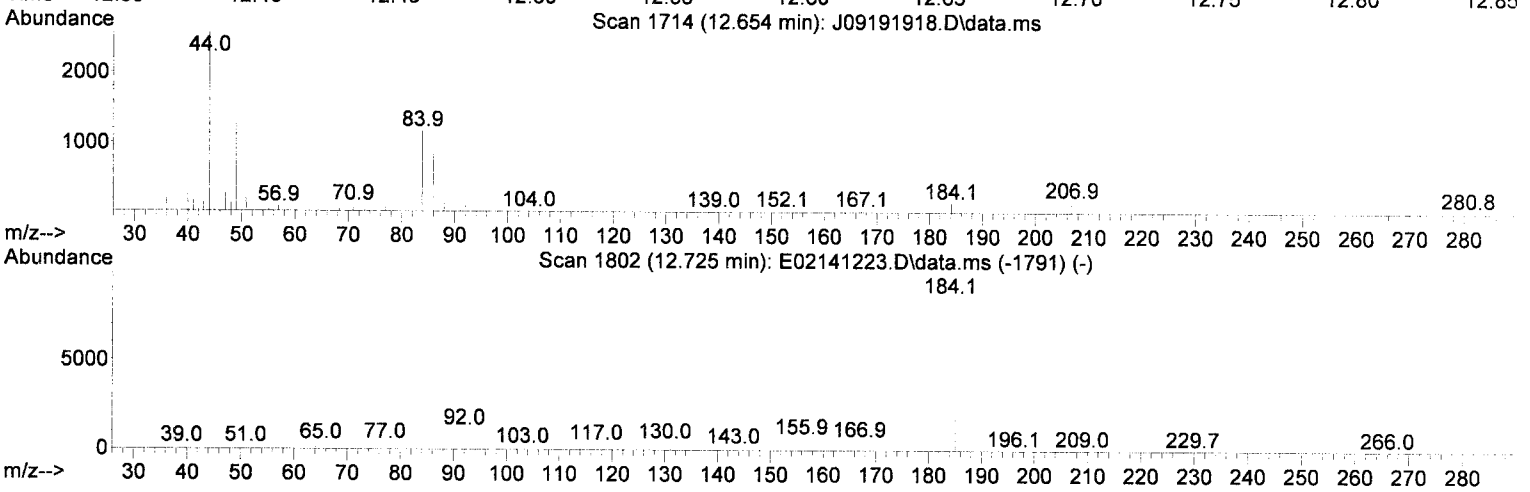
R = 4.30e-003 A*A + 2.93e-001 A - 1.80e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





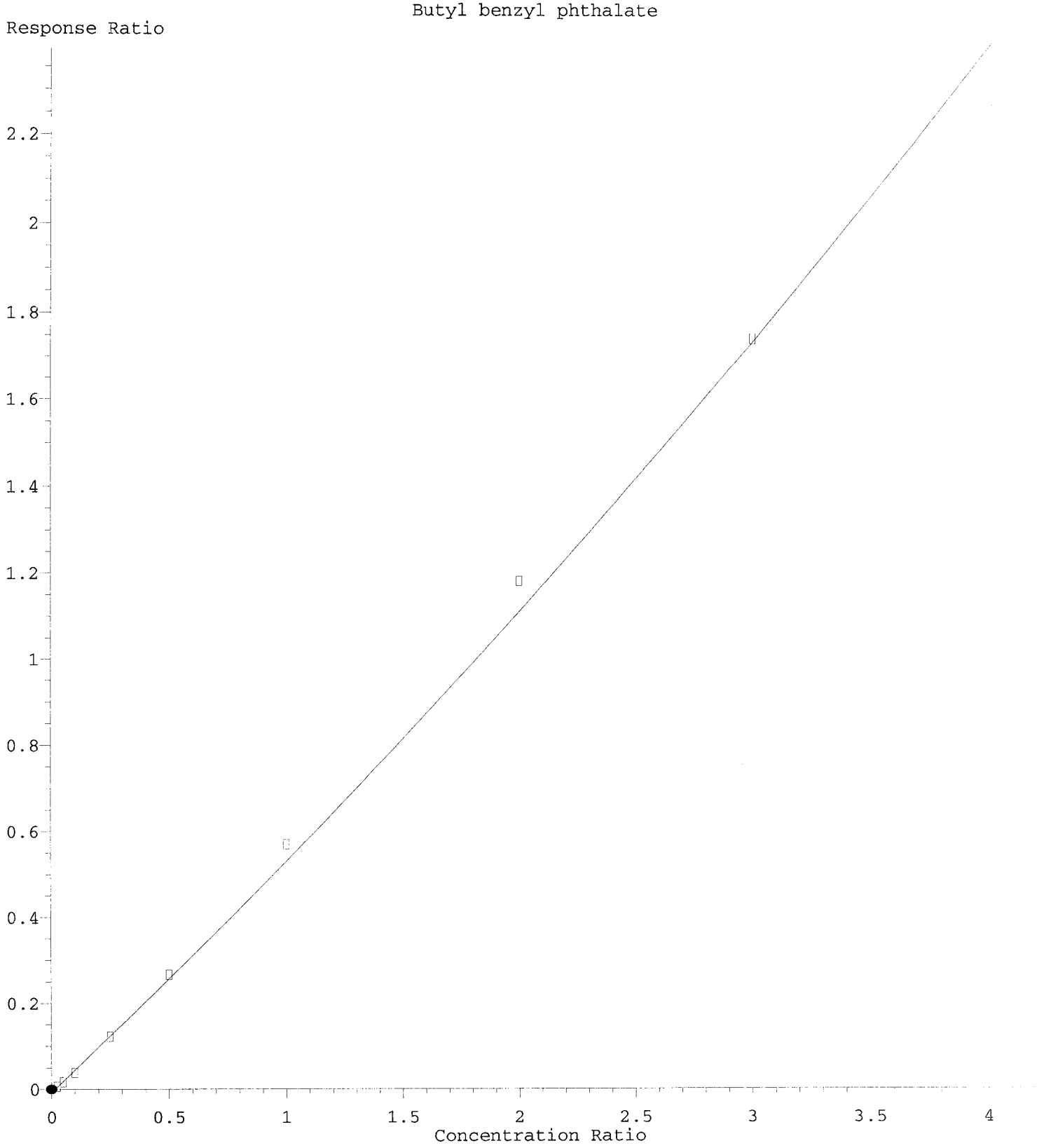
TIC: J09191918.D\data.ms

(76) Benzidine (T)

12.654min (+ 0.075) 123.93 ng/ml m

response 158

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	15.50	0.00
92.10	9.10	70.99#
0.00	0.00	0.00

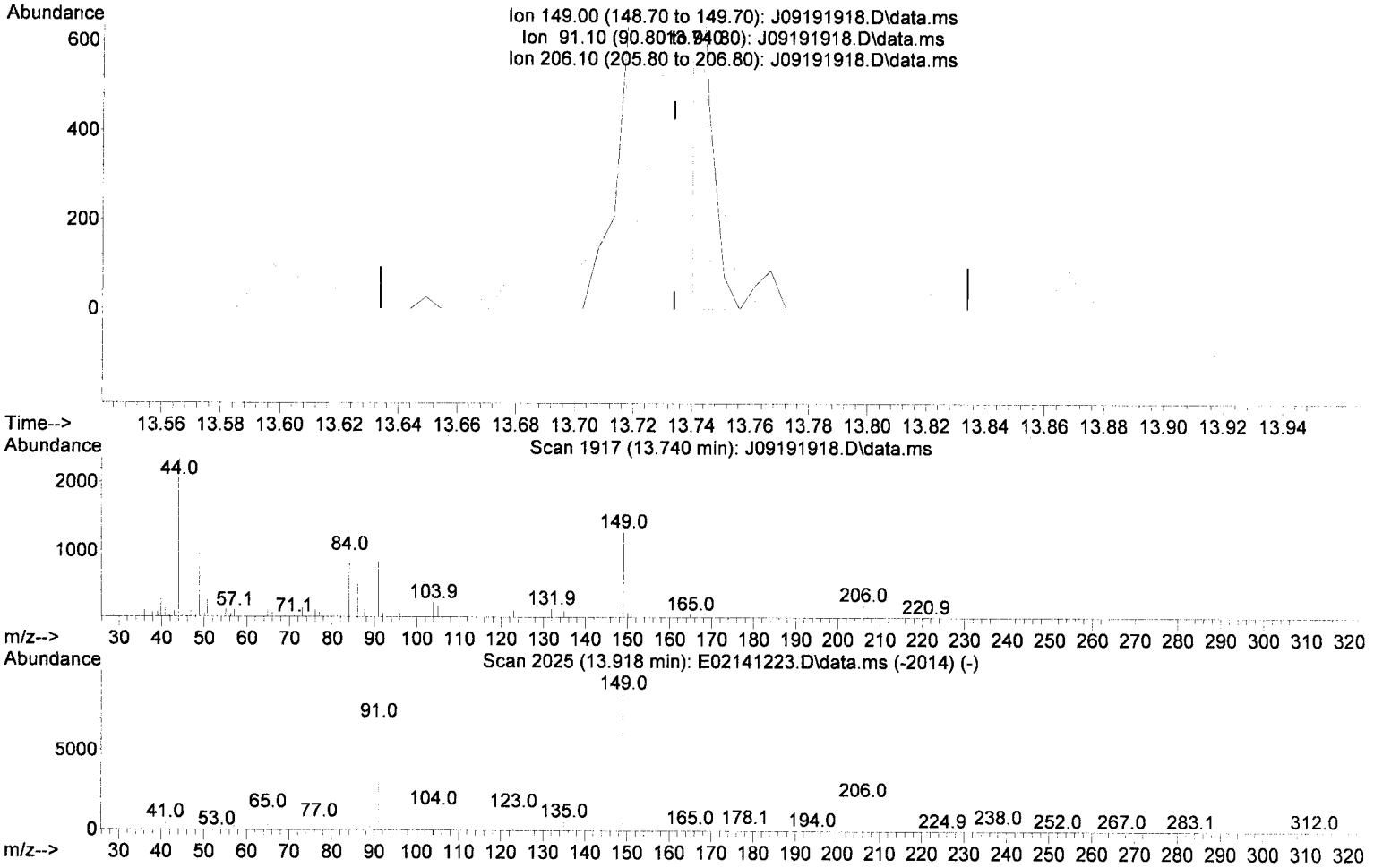


R = 2.13e-002 A*A + 5.16e-001 A - 7.58e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



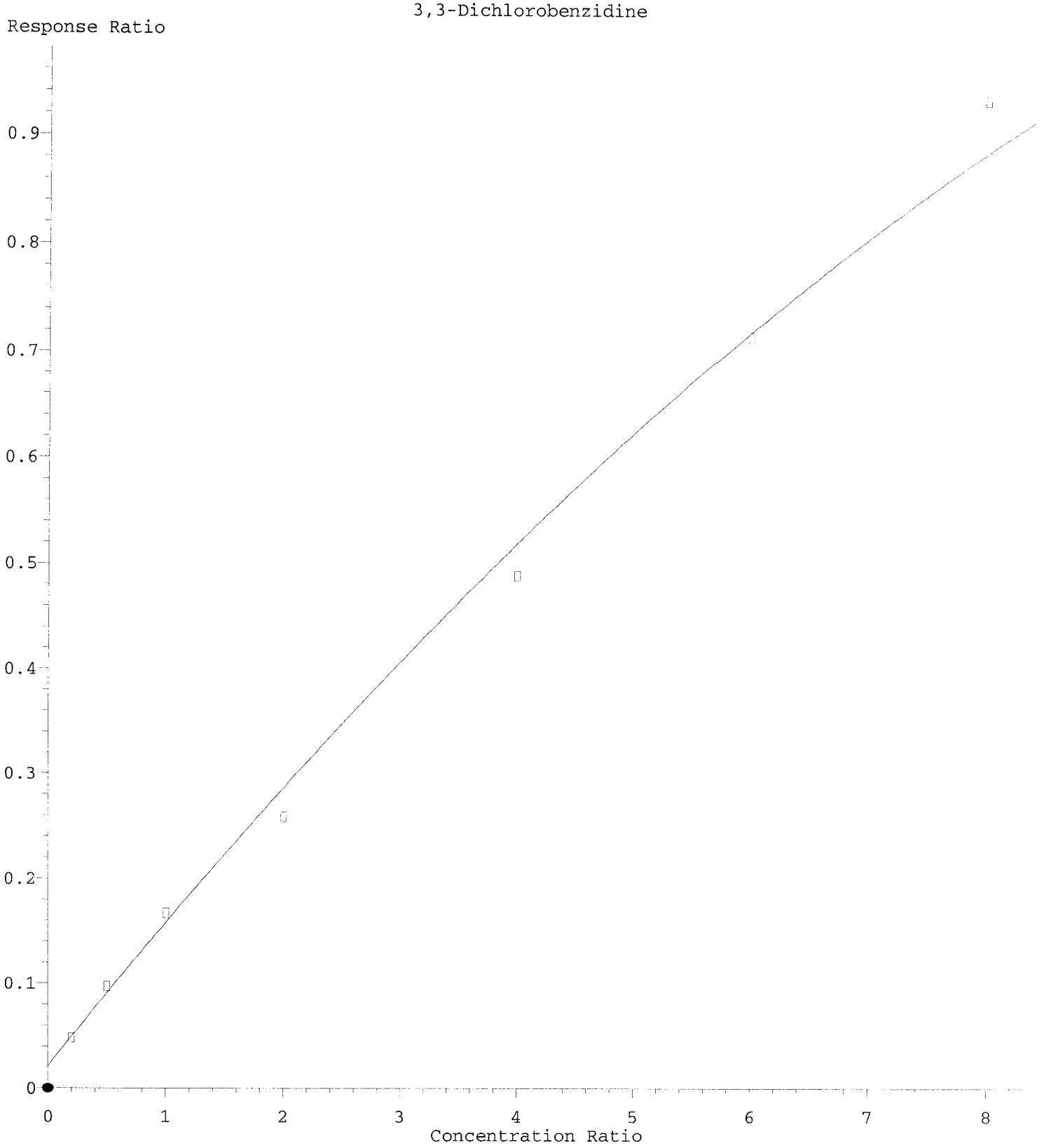
TIC: J09191918.D\data.ms

(80) Butyl benzyl phthalate (T)

13.740min (+ 0.006) 29.98 ng/ml m

response 188

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	64.60	66.02
206.10	20.40	16.13
0.00	0.00	0.00

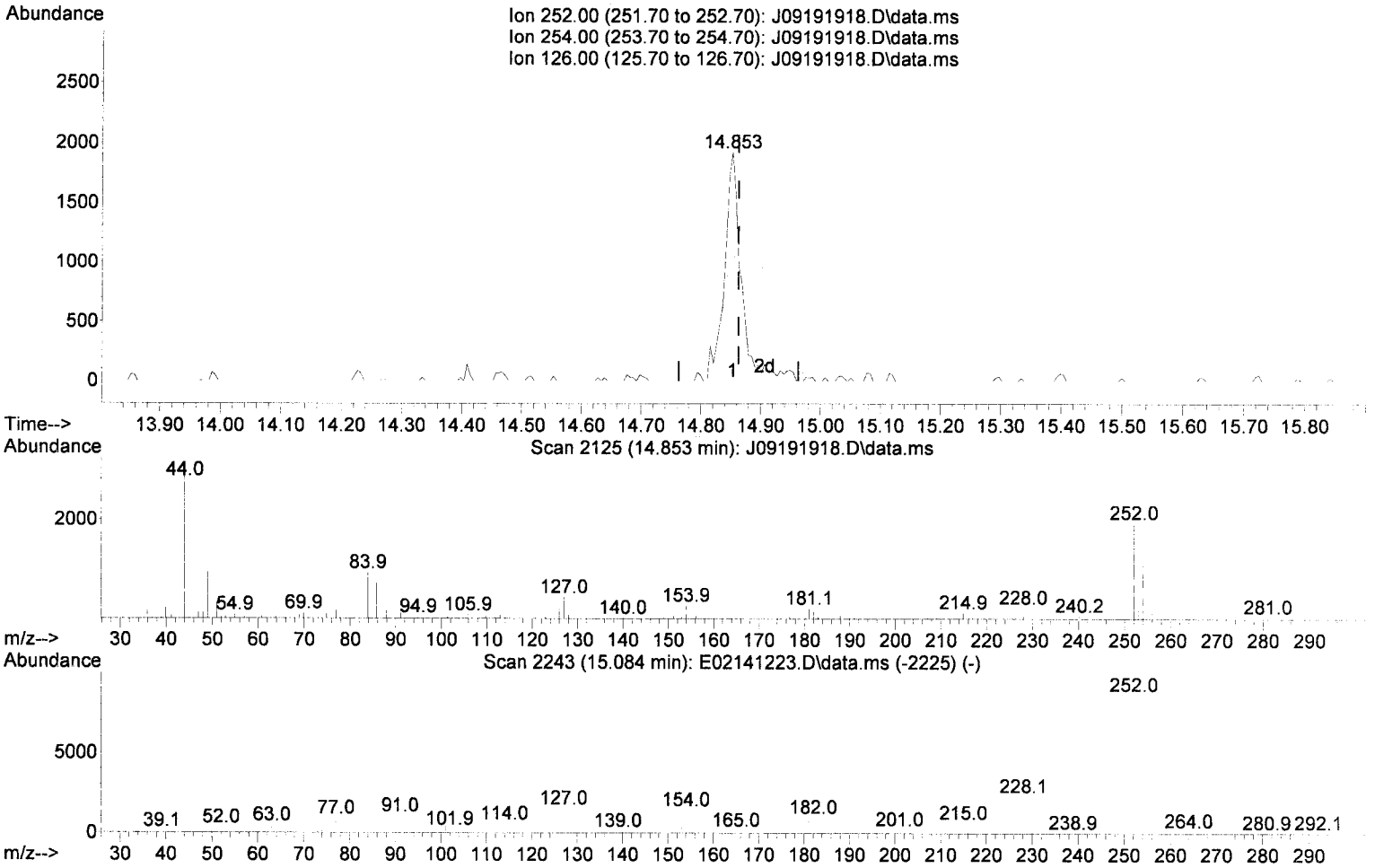


R = -4.11e-003 A*A + 1.41e-001 A + 2.12e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_0919I9.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



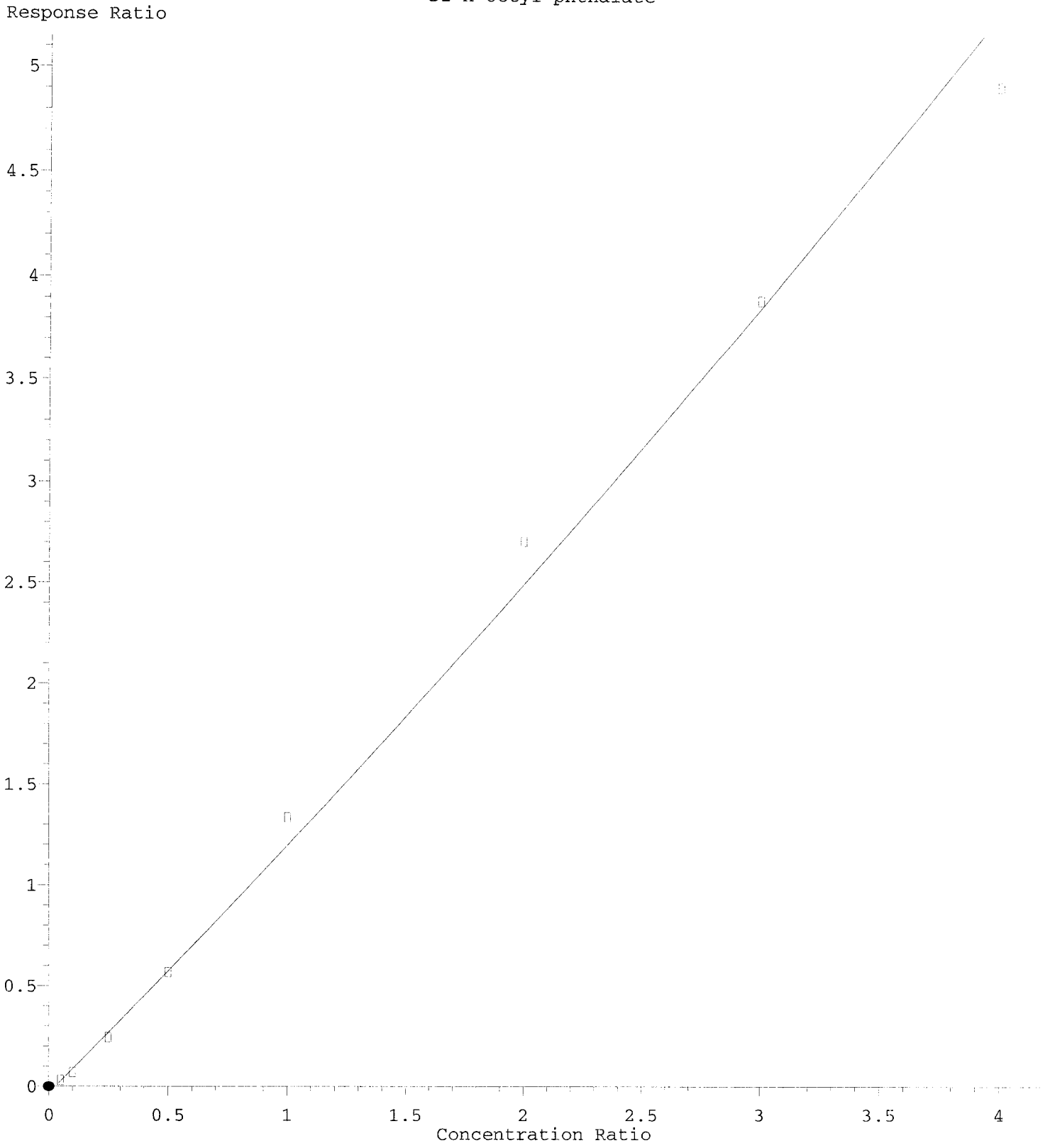
TIC: J09191918.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.853min (-0.010) -1.00 ng/ml m

response 3954

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	62.09
126.00	12.00	11.91
0.00	0.00	0.00

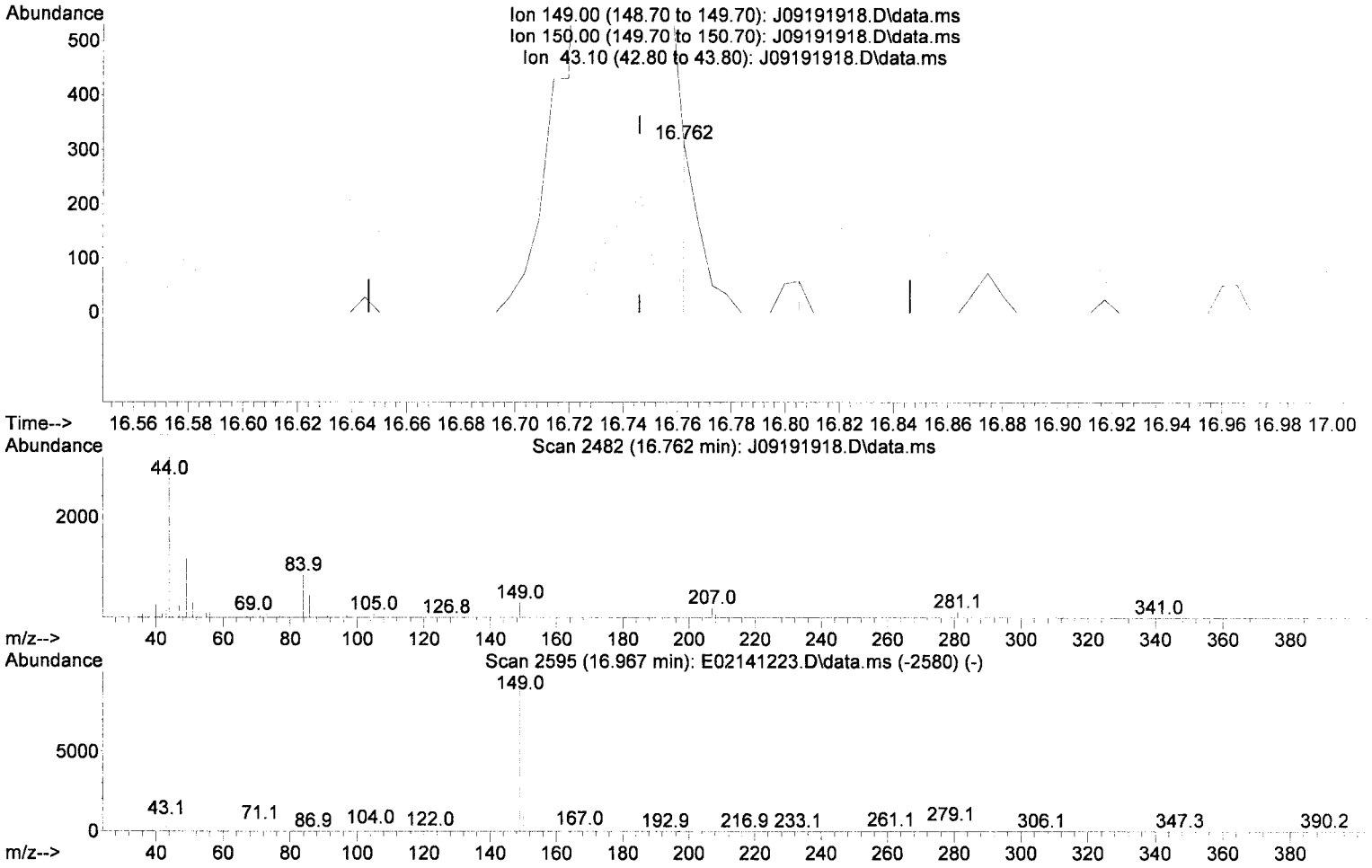


R = 3.12e-002 A*A + 1.20e+000 A - 3.48e-002
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



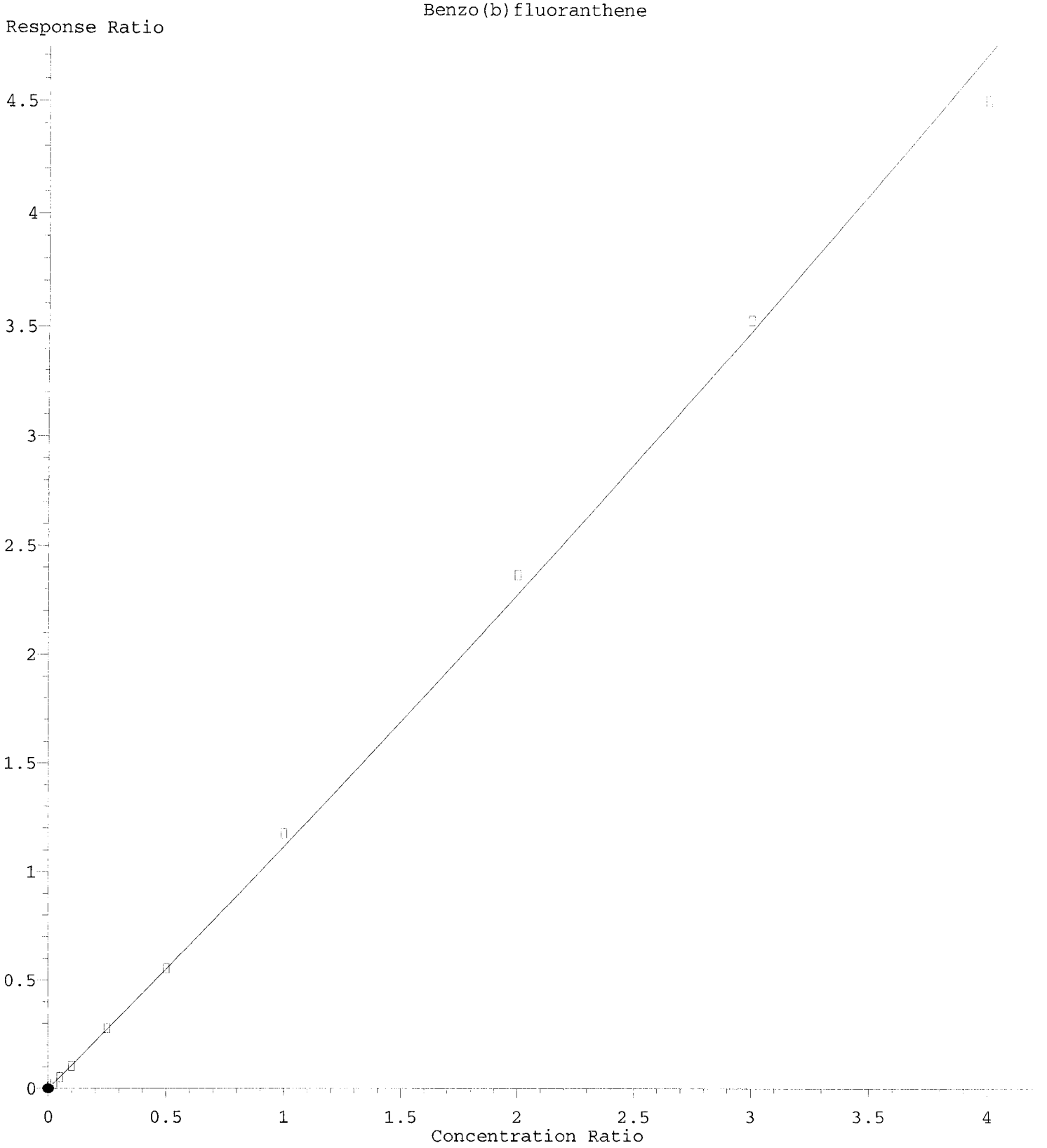
TIC: J09191918.D\data.ms

(87) Di-n-octyl phthalate (T)

16.762min (+ 0.016) 58.11 ng/ml m ✓

response 117

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.90	19.81
43.10	5.60	52.08#
0.00	0.00	0.00

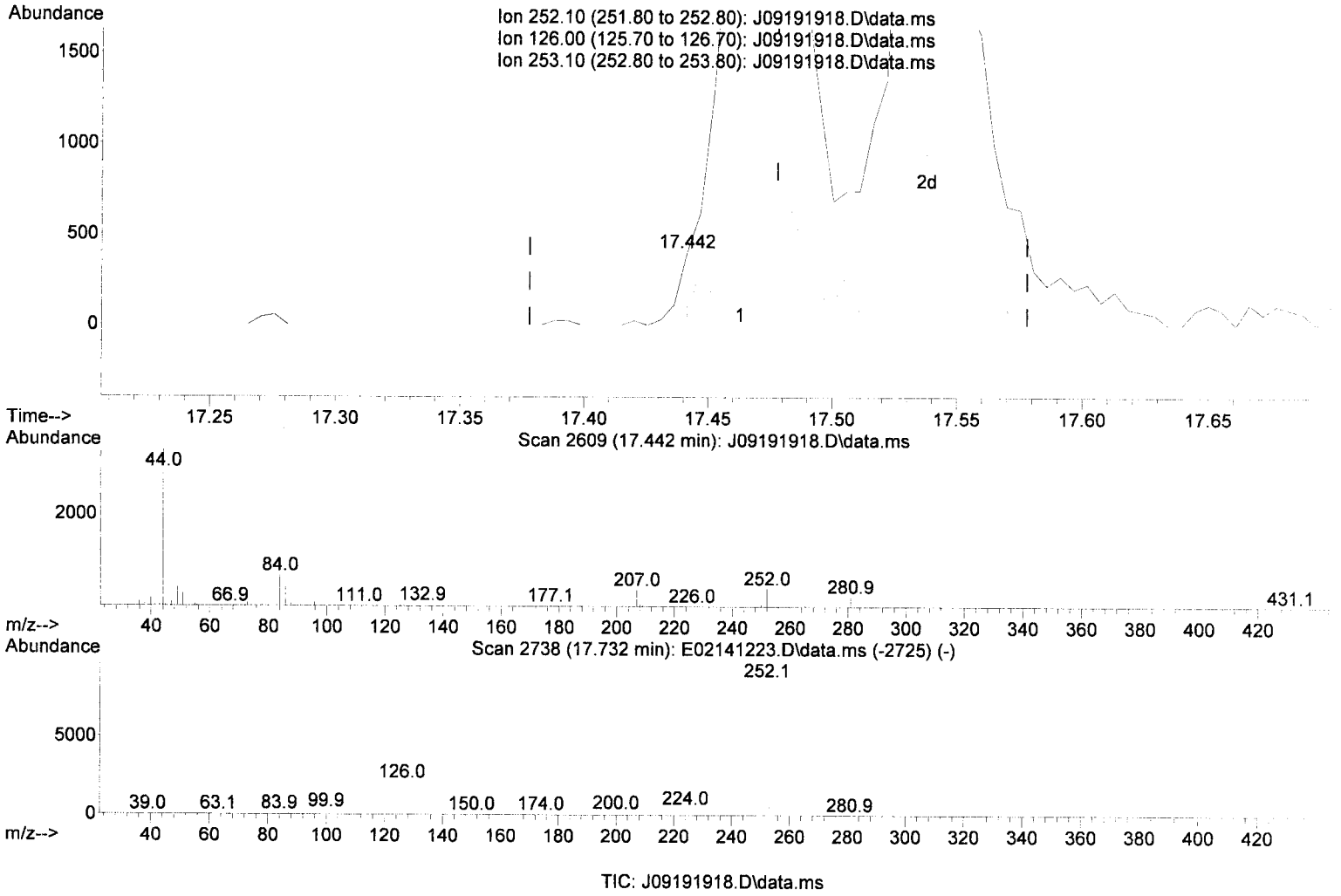


R = 1.98e-002 A*A + 1.10e+000 A - 4.38e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_0919I9.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.442min (-0.036) 8.23 ng/ml m

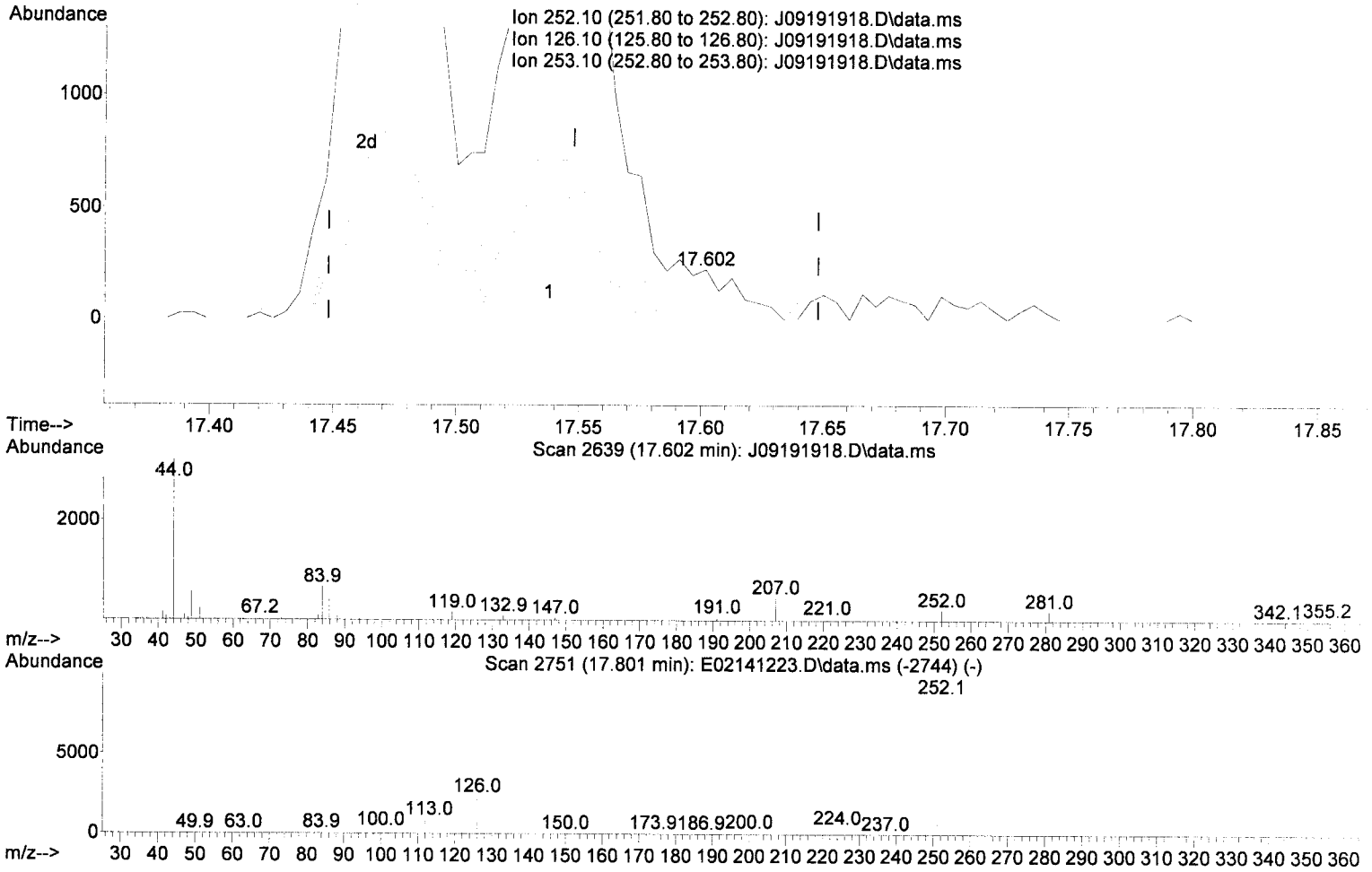
response 176

Ion	Exp%	Act%
252.10	100.00	100.00
126.00	16.50	12.07
253.10	21.90	8.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



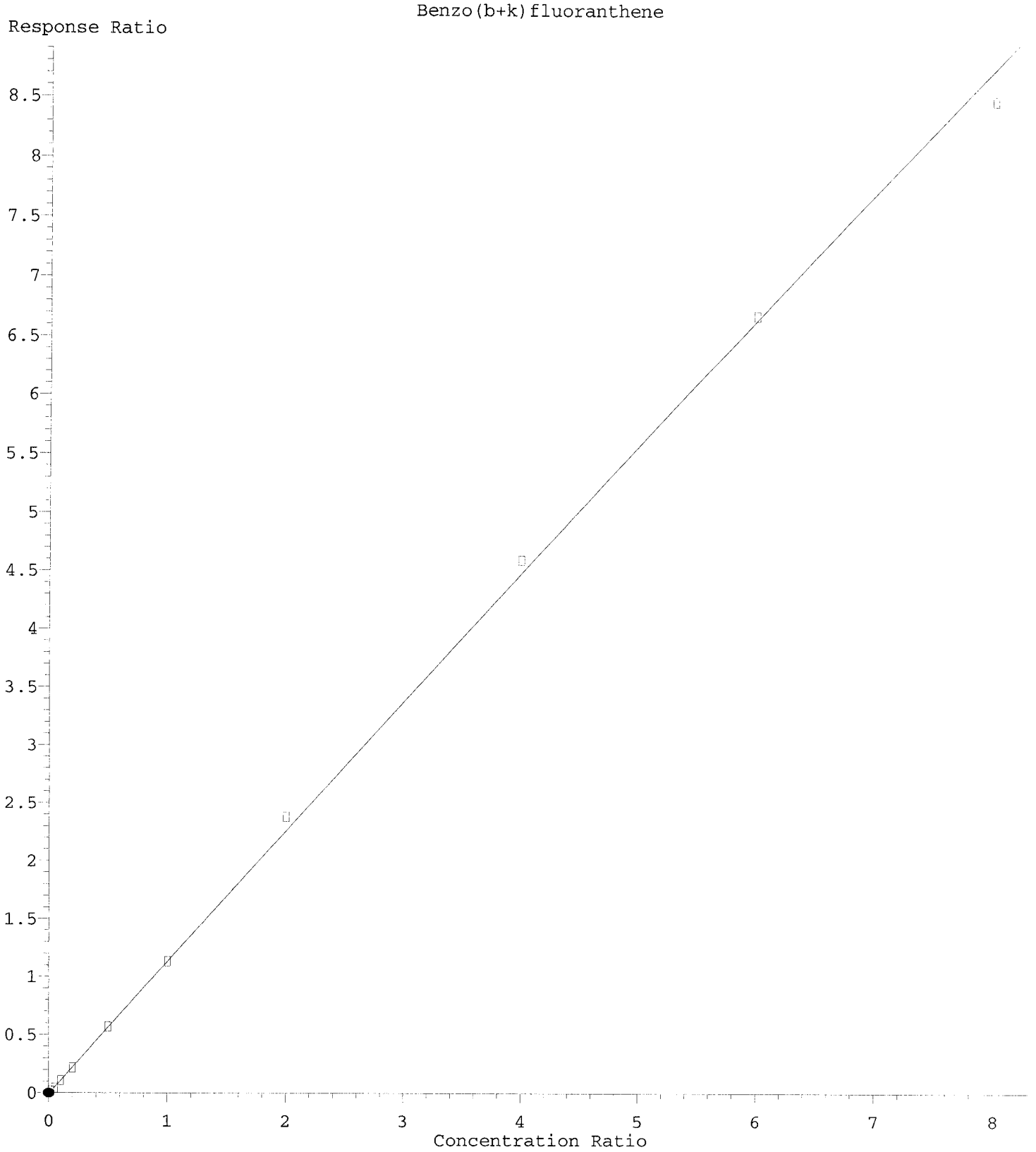
TIC: J09191918.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.602min (+ 0.054) 8.71 ng/ml m J

response 154

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	0.00
253.10	22.00	0.00
0.00	0.00	0.00

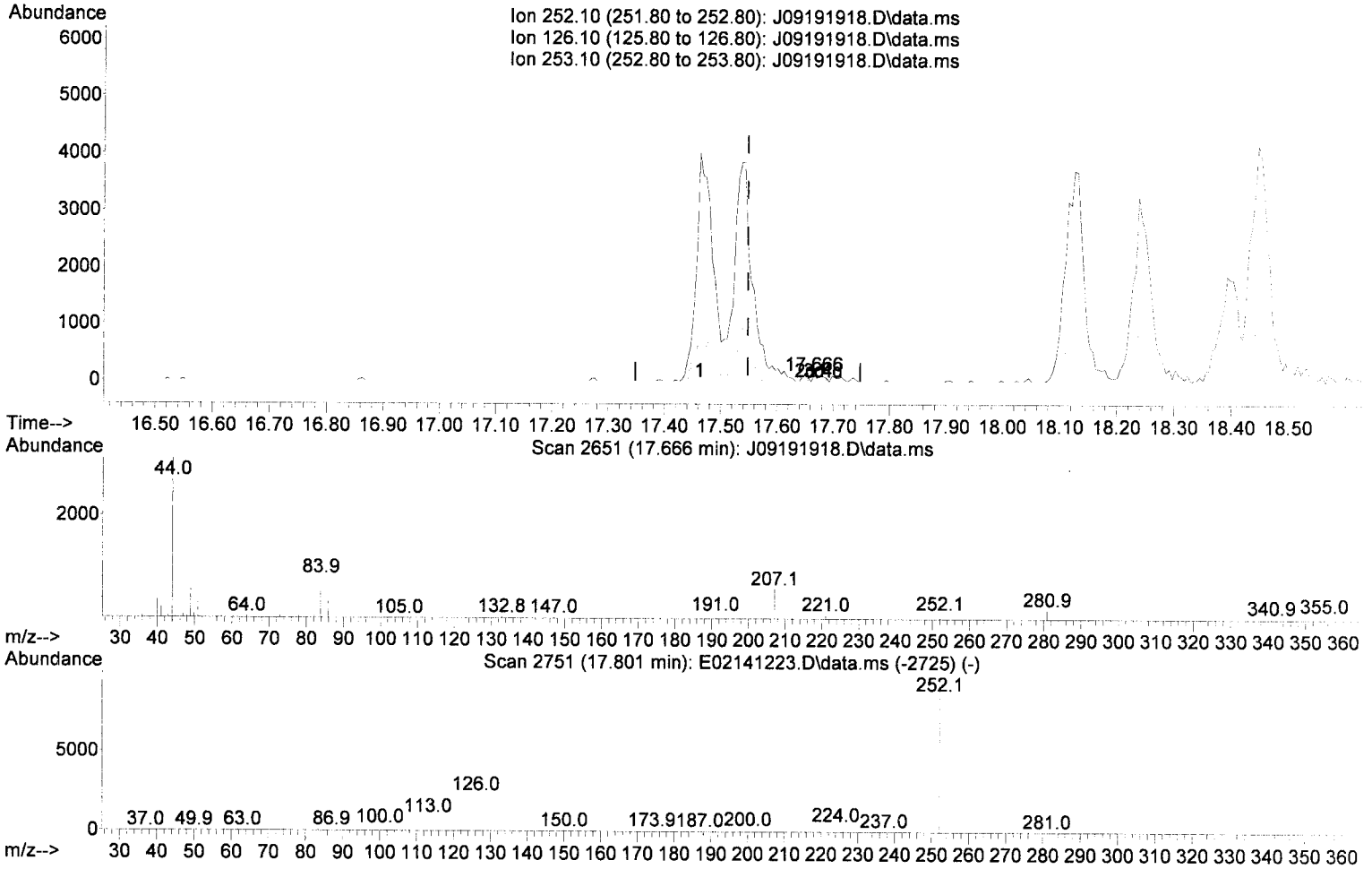


R = -6.69e-003 A*A + 1.15e+000 A - 9.04e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



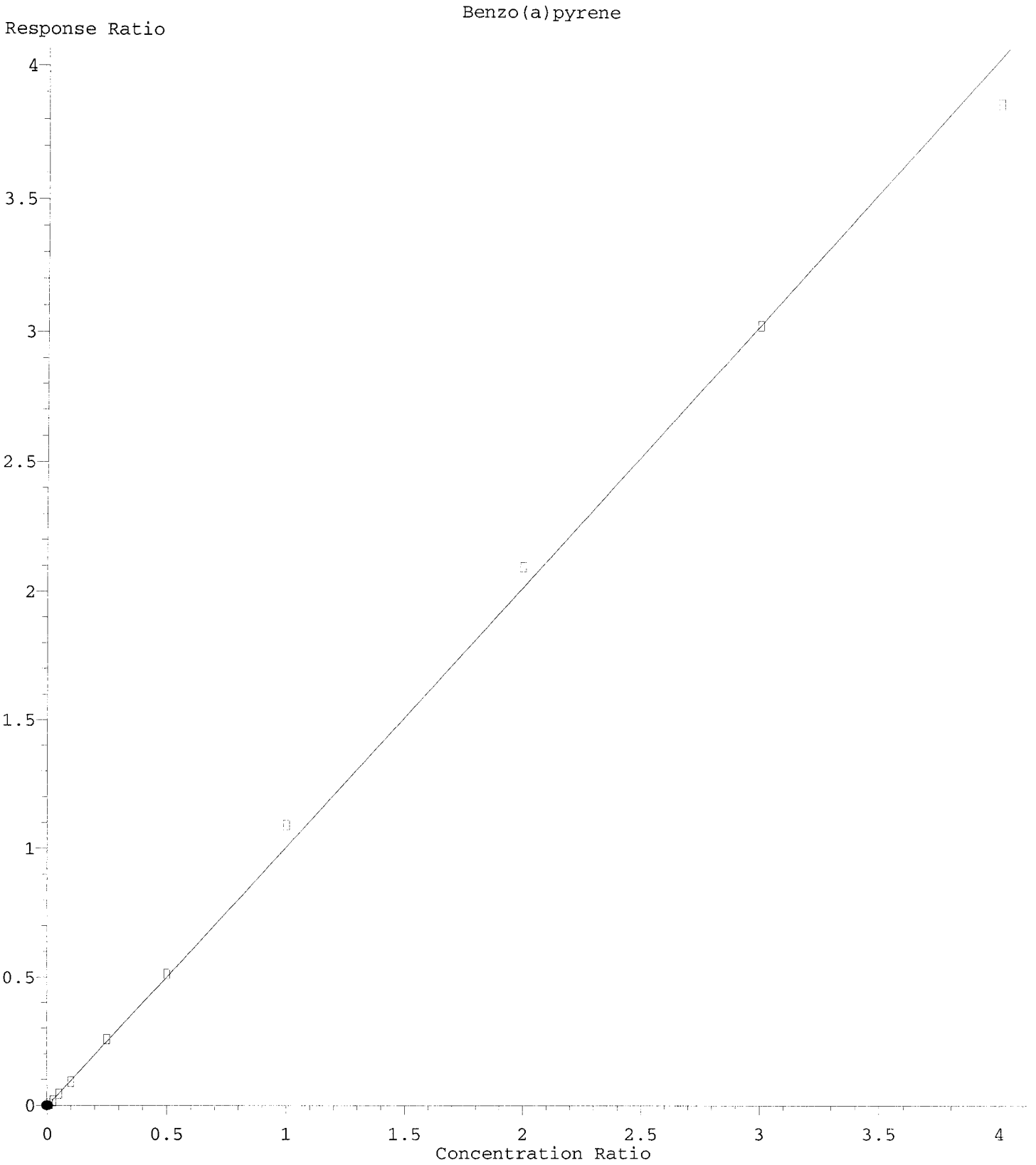
TIC: J09191918.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

17.666min (+ 0.118) 15.95 ng/ml m

response 140

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	0.00
253.10	22.00	0.00
0.00	0.00	0.00

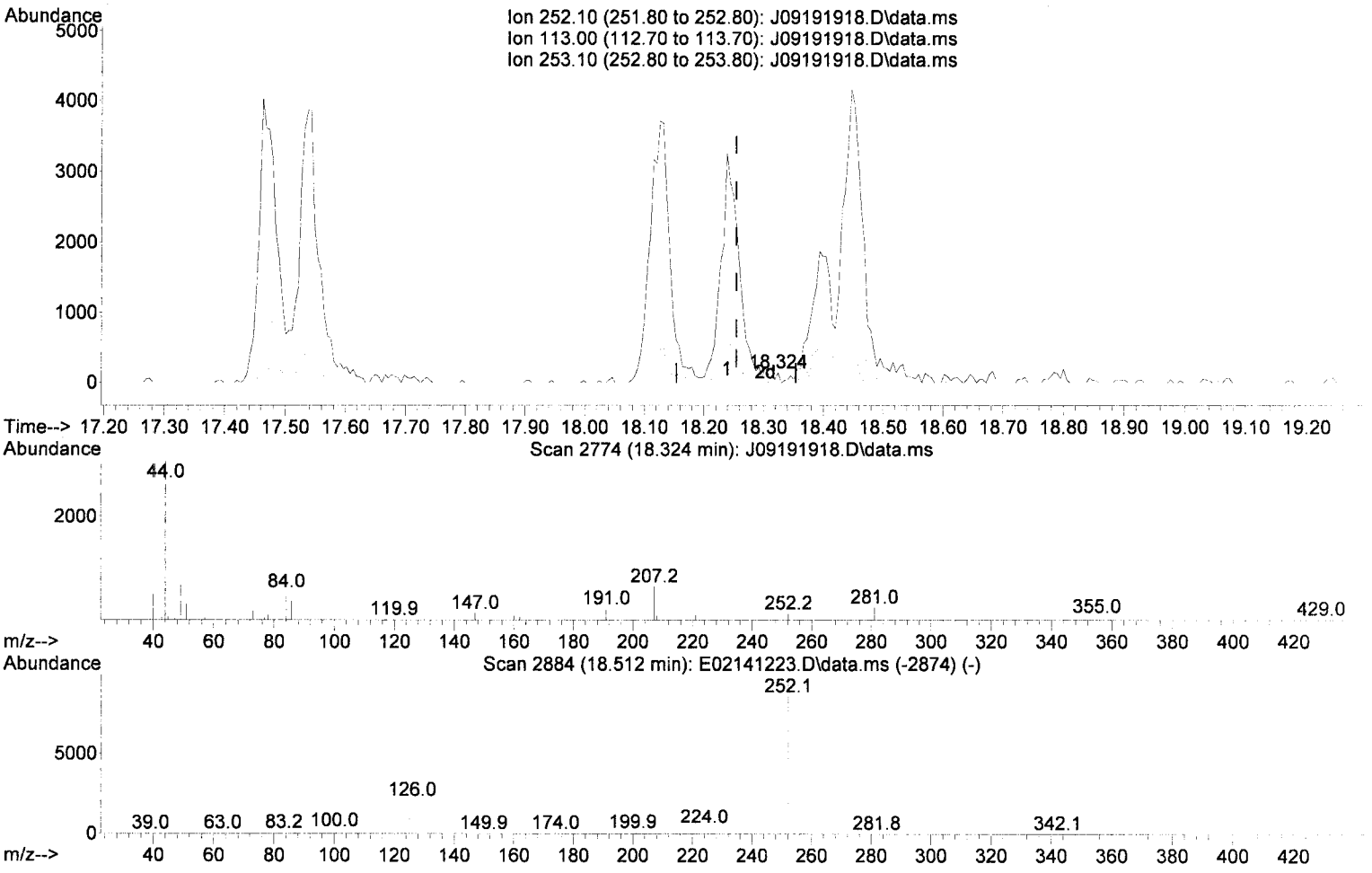


R = 4.44e-004 A*A + 1.01e+000 A - 4.97e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(92) Benzo(a)pyrene (T)

18.324min (+ 0.070) 10.04 ng/ml m ✓

response 116

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	9.90	0.00
253.10	22.50	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9I19035

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9I19035-TUN1	MS Tune	Soil	A19I165	A19I086	9/20/2019 12:22:00AM
9I19035-ICB1	Initial Cal Blank	Soil		A19I086	9/20/2019 12:49:00AM
9I19035-CAL1	Cal Standard	Soil	A19G238	"	9/20/2019 1:24:00AM
9I19035-CAL2	Cal Standard	Soil	A19G239	"	9/20/2019 1:59:00AM
9I19035-CAL3	Cal Standard	Soil	A19G240	"	9/20/2019 2:34:00AM
9I19035-CAL4	Cal Standard	Soil	A19G241	"	9/20/2019 3:09:00AM
9I19035-CAL5	Cal Standard	Soil	A19G242	"	9/20/2019 3:44:00AM
9I19035-CAL6	Cal Standard	Soil	A19G243	"	9/20/2019 4:19:00AM
9I19035-CAL7	Cal Standard	Soil	A19G244	"	9/20/2019 4:54:00AM
9I19035-CAL8	Cal Standard	Soil	A19G245	"	9/20/2019 5:29:00AM
9I19035-CAL9	Cal Standard	Soil	A19G246	"	9/20/2019 6:04:00AM
9I19035-CALA	Cal Standard	Soil	A19G247	"	9/20/2019 6:39:00AM
9I19035-ICV1	Initial Cal Check	Soil	A19I254	"	9/20/2019 7:50:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Soil**

9I19035-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9I19035-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: 9I19035

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: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Soil**

9I19035-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: 9I19035

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9I19035-TUN1	MS Tune	Water	A19I165	A19I086	9/20/2019 12:22:00AM
9I19035-ICB1	Initial Cal Blank	Water		A19I086	9/20/2019 12:49:00AM
9I19035-CAL1	Cal Standard	Water	A19G238	"	9/20/2019 1:24:00AM
9I19035-CAL2	Cal Standard	Water	A19G239	"	9/20/2019 1:59:00AM
9I19035-CAL3	Cal Standard	Water	A19G240	"	9/20/2019 2:34:00AM
9I19035-CAL4	Cal Standard	Water	A19G241	"	9/20/2019 3:09:00AM
9I19035-CAL5	Cal Standard	Water	A19G242	"	9/20/2019 3:44:00AM
9I19035-CAL6	Cal Standard	Water	A19G243	"	9/20/2019 4:19:00AM
9I19035-CAL7	Cal Standard	Water	A19G244	"	9/20/2019 4:54:00AM
9I19035-CAL8	Cal Standard	Water	A19G245	"	9/20/2019 5:29:00AM
9I19035-CAL9	Cal Standard	Water	A19G246	"	9/20/2019 6:04:00AM
9I19035-CALA	Cal Standard	Water	A19G247	"	9/20/2019 6:39:00AM
9I19035-ICV1	Initial Cal Check	Water	A19I254	"	9/20/2019 7:50:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Water**

9I19035-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-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: 9I19035

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: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Water**

9I19035-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/23/19

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	106	0.00
2	TG	N-Nitrosodimethylamine	1000.000	1045.350	-4.5	114	0.09
3	TG	Pyridine	1000.000	896.190	10.4	96	0.10
4	S	2-Fluorophenol (Surr)	1000.000	981.272	1.9	100	0.03
5	S	Phenol-d6(Surr)	1000.000	1015.692	-1.6	99	0.00
6	T	Phenol	1000.000	989.661	1.0	97	0.01
7	T	Aniline	1000.000	836.204	16.4	97	0.02
8	T	Bis(2-chloroethyl) ether	1000.000	1091.651	-9.2	106	0.00
9	T	2-Chlorophenol	1000.000	1008.898	-0.9	100	0.00
10	T	1,3-Dichlorobenzene	1000.000	1009.723	-1.0	105	0.00
11	T	1,4-Dichlorobenzene	1000.000	1002.987	-0.3	102	0.00
12	T	Benzyl alcohol	1000.000	910.785	8.9	91	0.00
13	T	1,2-Dichlorobenzene	1000.000	1024.110	-2.4	104	0.00
14	T	2-Methylphenol	1000.000	1052.523	-5.3	100	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	970.278	3.0	97	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1043.262	-4.3	102	0.00
17	T	3+4-Methylphenol	1000.000	1067.423	-6.7	99	0.00
18	T	Hexachloroethane	1000.000	1040.964	-4.1	109	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1065.680	-6.6	103	0.00
20	T	Nitrobenzene	1000.000	1058.009	-5.8	103	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	102	0.00
22	T	Isophorone	1000.000	1048.414	-4.8	103	0.00
23	T	2-Nitrophenol	1000.000	968.550	3.1	93	0.00
24	T	2,4-Dimethylphenol	1000.000	967.663	3.2	92	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1057.133	-5.7	101	0.00
26	T	Benzoic acid	2000.000	1974.824	1.3	115	0.00
27	T	2,4-Dichlorophenol	1000.000	968.833	3.1	98	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	999.393	0.1	99	0.00
29	T	Naphthalene	1000.000	1048.170	-4.8	101	0.00
30	T	4-Chloroaniline	1000.000	939.273	6.1	90	0.00
31	T	Hexachlorobutadiene	1000.000	1037.179	-3.7	101	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1056.418	-5.6	101	0.00
33	T	2-Methylnaphthalene	1000.000	1097.134	-9.7	104	0.00
34	T	1-Methylnaphthalene	1000.000	1073.196	-7.3	104	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	105	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1072.195	-7.2	102	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1033.651	-3.4	105	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1048.469	-4.8	108	0.00
39	T	1,1'-Biphenyl	1000.000	1032.434	-3.2	102	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1062.096	-6.2	106	0.00
41	T	2-Chloronaphthalene	1000.000	1056.535	-5.7	104	0.00
42	T	2-Nitroaniline	1000.000	1106.583	-10.7	111	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1034.190	-3.4	103	0.00
44	T	1,4-Dinitrobenzene	1000.000	1114.508	-11.5	121	0.00
45	T	Dimethyl phthalate	1000.000	1061.398	-6.1	105	0.00
46	T	1,3-Dinitrobenzene	1000.000	1081.705	-8.2	115	0.00
47	T	2,6-Dinitrotoluene	1000.000	1043.999	-4.4	107	0.00
48	T	1,2-Dinitrobenzene	1000.000	1063.484	-6.3	106	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	1059.382	-5.9	104	0.00
50	T	3-Nitroaniline	1000.000	1060.772	-6.1	107	0.00
51	T	Acenaphthene	1000.000	1001.616	-0.2	103	0.00
52	T	2,4-Dinitrophenol	1000.000	972.001	2.8	122	0.00
53	T	4-Nitrophenol	1000.000	1106.887	-10.7	115	0.00
54	T	2,4-Dinitrotoluene	1000.000	1048.405	-4.8	113	0.00
55	T	Dibenzofuran	1000.000	1071.222	-7.1	106	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1077.305	-7.7	111	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1013.999	-1.4	103	0.00
58	T	Diethyl phthalate	1000.000	1087.436	-8.7	104	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1037.334	-3.7	102	0.00
60	T	Fluorene	1000.000	1045.897	-4.6	106	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1051.565	-5.2	105	0.00
62	T	4-Nitroaniline	1000.000	1080.738	-8.1	113	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1157.716	-15.8	133	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	108	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1064.375	-6.4	108	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1037.259	-3.7	105	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1040.672	-4.1	111	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1032.582	-3.3	107	0.00
69	T	Hexachlorobenzene	1000.000	1010.042	-1.0	104	0.00
70	T	Pentachlorophenol (PCP)	1000.000	975.756	2.4	117	0.00
71	T	Phenanthrene	1000.000	1015.497	-1.5	108	0.00
72	T	Anthracene	1000.000	1058.253	-5.8	108	0.00
73	T	Carbazole	1000.000	964.910	3.5	103	0.00
74	T	Di-n-butyl phthalate	1000.000	1057.534	-5.8	106	0.00
75	T	Fluoranthene	1000.000	1088.446	-8.8	108	0.00
76	T	Benzidine	2000.000	1842.776	7.9	97	0.00
77	T	Pyrene	1000.000	1070.616	-7.1	106	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	109	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1060.782	-6.1	110	0.00
80	T	Butyl benzyl phthalate	1000.000	1003.995	-0.4	105	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1058.578	-5.9	113	-0.01
82	T	3,3-Dichlorobenzidine	2000.000	2062.773	-3.1	106	-0.01
83	T	Benz(a)anthracene	1000.000	1029.118	-2.9	114	-0.01
84	T	Chrysene	1000.000	1009.528	-1.0	108	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1039.182	-3.9	110	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	111	-0.01
87	T	Di-n-octyl phthalate	1000.000	1013.796	-1.4	114	-0.02
88	T	Benzo(b)fluoranthene	1000.000	1008.508	-0.9	112	-0.02
89	T	Benzo(k)fluoranthene	1000.000	992.118	0.8	110	-0.02
90	T	Benzo(b+k)fluoranthene	2000.000	1987.636	0.6	111	-0.02
91	T	Benzo(e)pyrene	1000.000	1042.799	-4.3	108	-0.02
92	T	Benzo(a)pyrene	1000.000	971.420	2.9	105	-0.02
93	T	Perylene	1000.000	1215.264	-21.5	134	-0.02
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	113	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	973.509	2.6	113	-0.02
96 T	Dibenz(a,h)anthracene	1000.000	1019.307	-1.9	113	-0.02
97 T	Benzo(g,h,i)perylene	1000.000	1054.879	-5.5	111	-0.02

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.600	150	134967	2.00	ug/mL	0.00
2) Naphthalene-d8	7.867	136	357596	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.648	162	174398	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.162	188	269663	2.00	ug/mL	0.00
11) Chrysene-d12	14.885	240	230198	2.00	ug/mL	0.00
12) Perylene-d12	17.126	264	213465	2.00	ug/mL	#-0.03
Target Compounds						Qvalue
4) Pentachlorophenol	10.975	266	684363	41.56	ug/mL	84
6) DFTPP	11.456	442	746382	34.29	ug/mL	85
7) Benzidine	12.628	184	2478643	25.84	ug/mL	98
8) 4,4-DDE	12.890	TIC	40067	No Calib		
9) 4,4-DDD	13.403	TIC	23267	No Calib		
10) 4,4-DDT	13.975	TIC	9144669	33.07	ug/mL	95

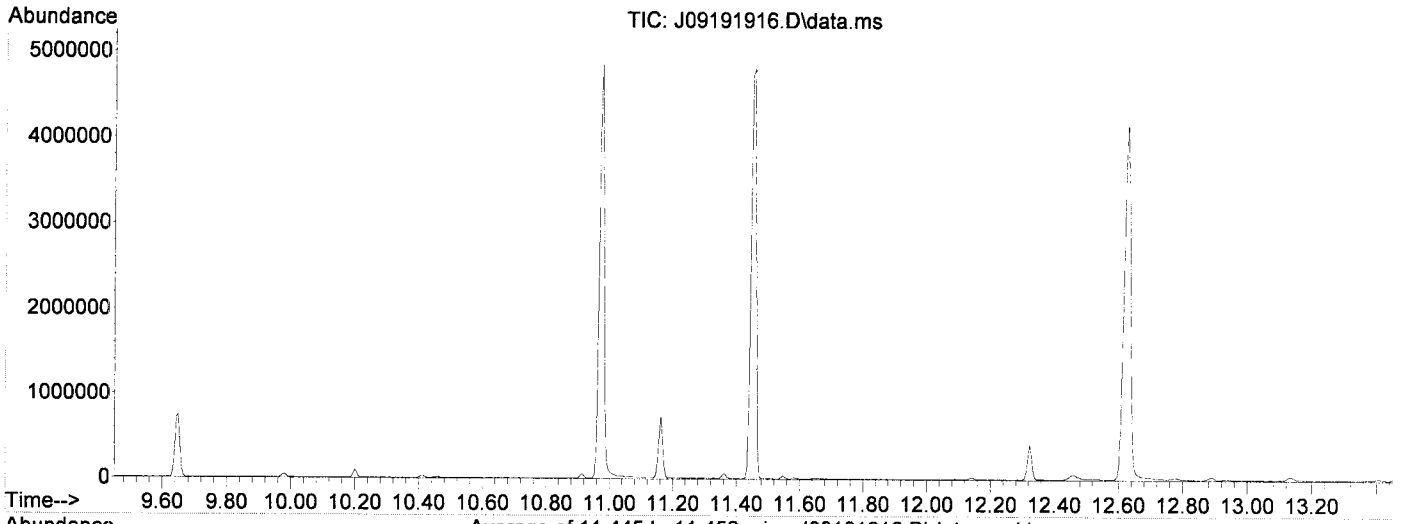
(#) = qualifier out of range (m) = manual integration (+) = signals summed

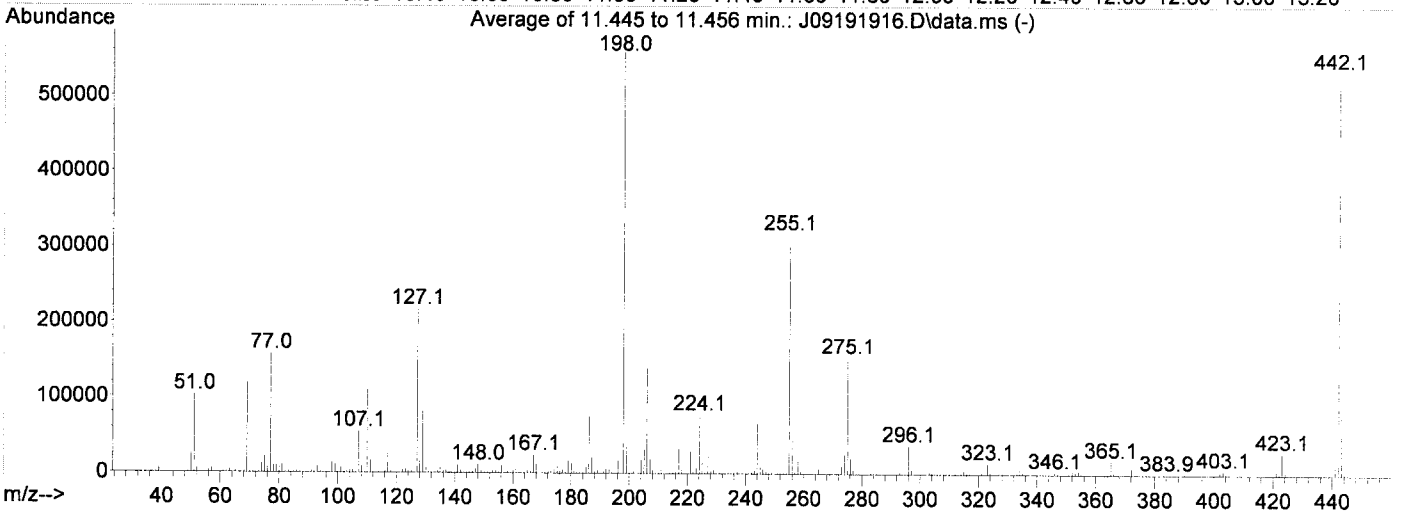
Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Sep 19 15:09:10 2019

JM 9/20/19





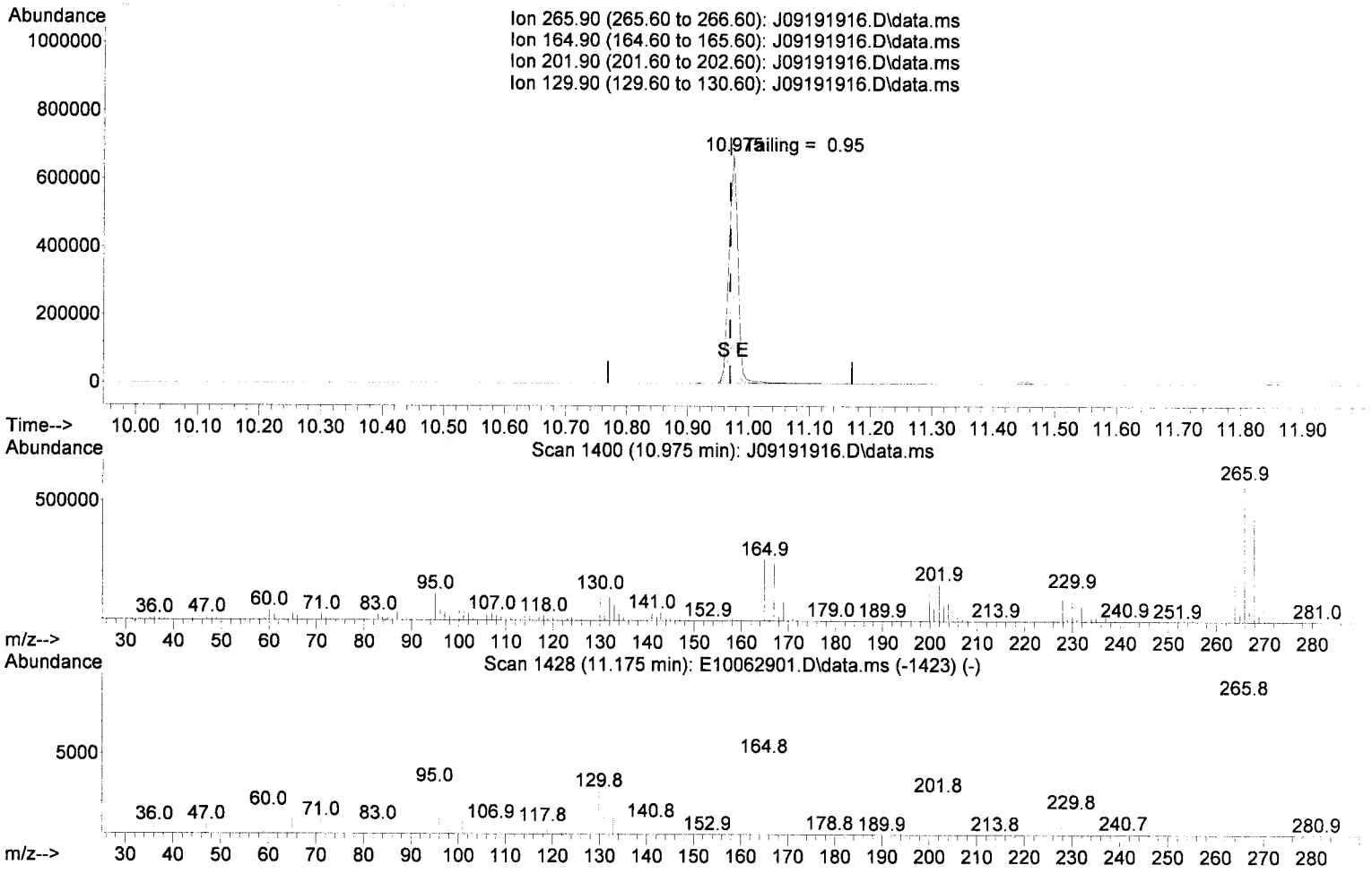
AutoFind: Scans 1488, 1489, 1490; Background Corrected with Scan 1483

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.6	1920	PASS
69	198	0.01	100	21.3	118967	PASS
70	69	0.00	2	0.5	611	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	557760	PASS
199	198	5	9	6.9	38464	PASS
365	198	1	100	3.2	17707	PASS
441	443	0.01	150	73.9	77592	PASS
442	198	0.10	200	95.5	532779	PASS
443	442	15	24	19.7	104995	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191916.D\data.ms

(4) Pentachlorophenol

10.975min (+ 0.005) 41.56 ug/mL

response 684363

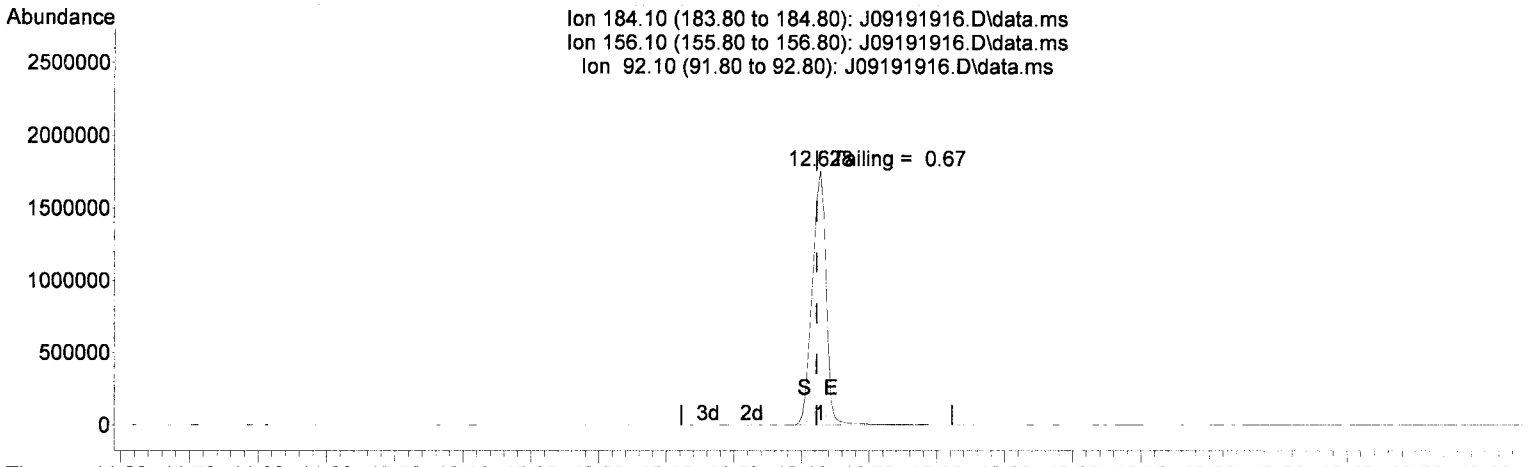
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	38.07
201.90	25.80	22.85
129.90	27.30	16.90

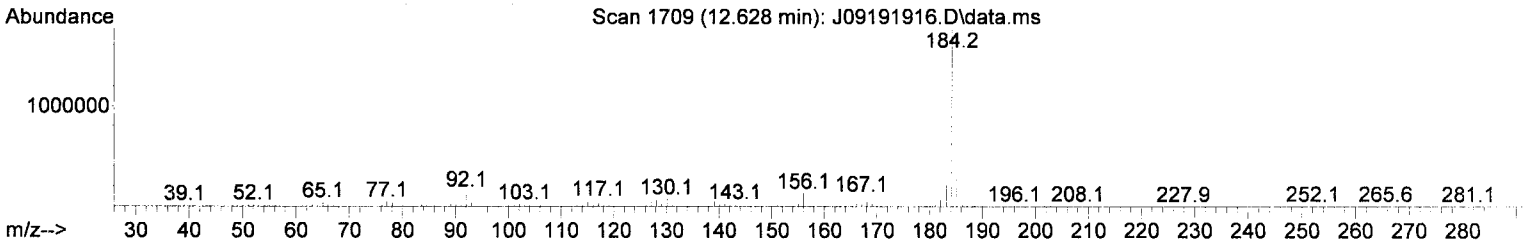
9/20/19

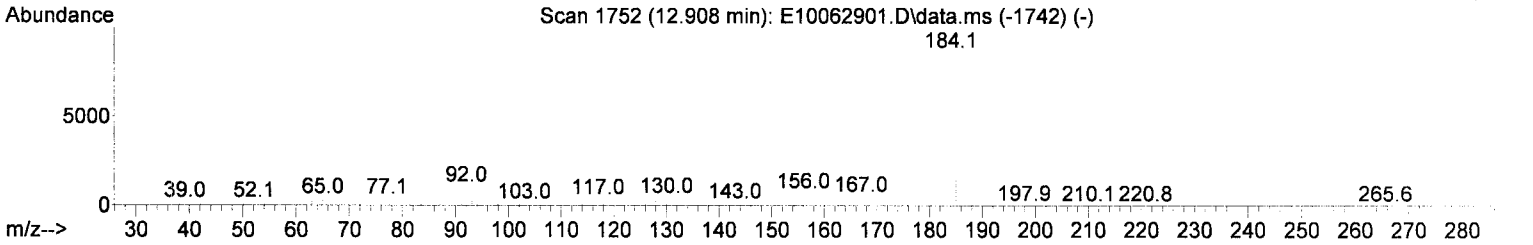
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191916.D\data.ms

(7) Benzidine

12.628min (+ 0.005) 25.84 ug/mL

response 2478643

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.27
92.10	8.20	8.38
0.00	0.00	0.00

JK 9/20/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9I19035-TUN1
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	40067		
DDD	23267		
DDT	9144669	**0.69**	**PASS**

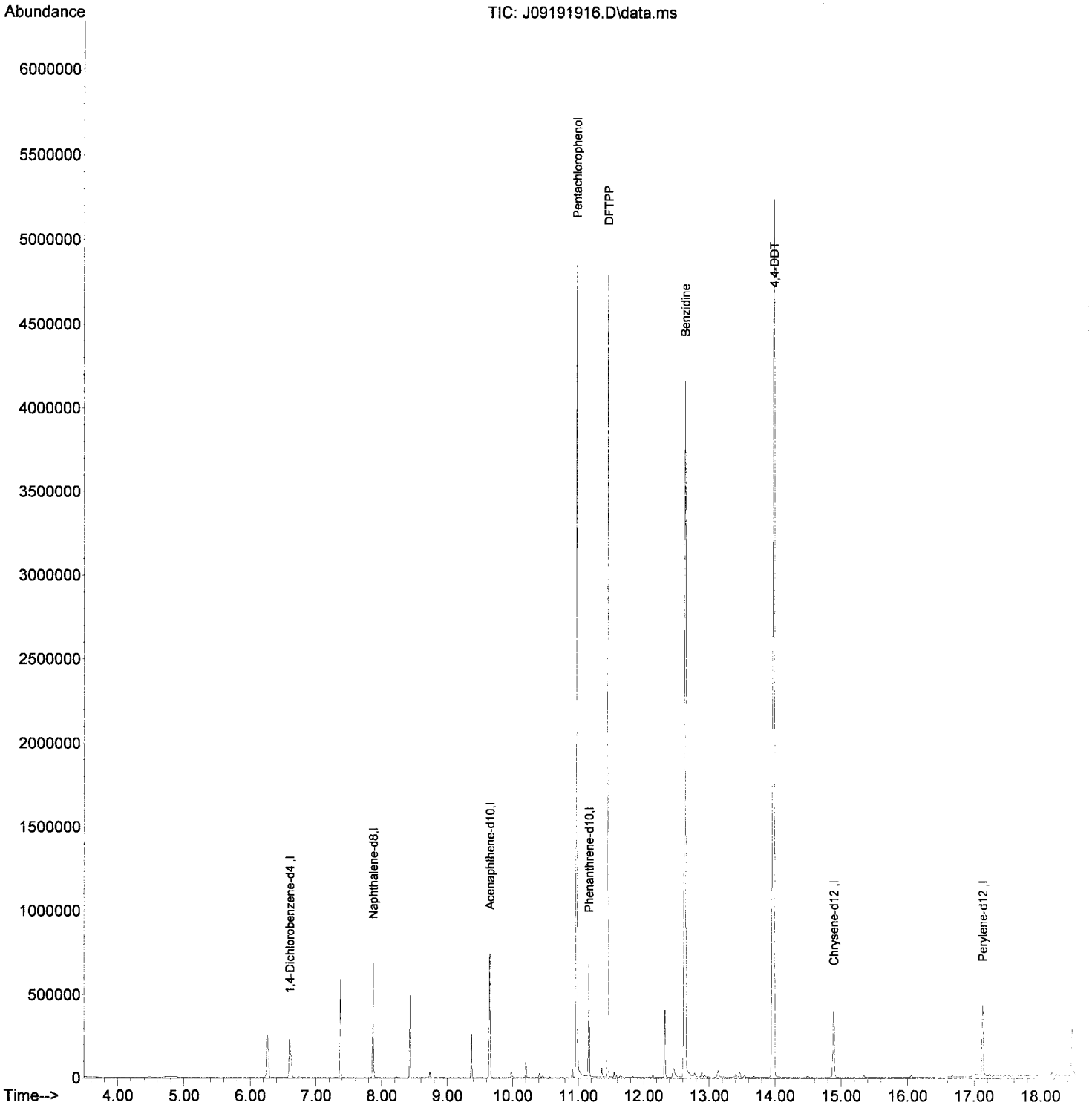
Breakdown must be less than 20% to accept sample data.

9/d 9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JR 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	263426	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1245077	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	634026	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1140103	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1131801	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1099318	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	879454	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	67	0.37	ng/ml	0.11
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.129	82	88	0.42	ng/ml	0.02
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	3.947	79	261	N.D.		
6) Phenol	6.215	94	79	N.D.		
7) Aniline	6.284	93	59	N.D.		
8) Bis(2-chloroethyl) ether	6.306	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	6.744	108	78	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.819	107	109	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.814	45	64	N.D.		
16) N-Nitrosodi-n-propylamine	7.028	70	172	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.086	77	108	N.D.		
22) Isophorone	7.370	82	96	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	7.563	105	152	305.02	ng/ml#	28
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	8.392	107	91	N.D.		
33) 2-Methylnaphthalene	8.557	142	100	N.D.		
34) 1-Methylnaphthalene	8.659	142	61	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 : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

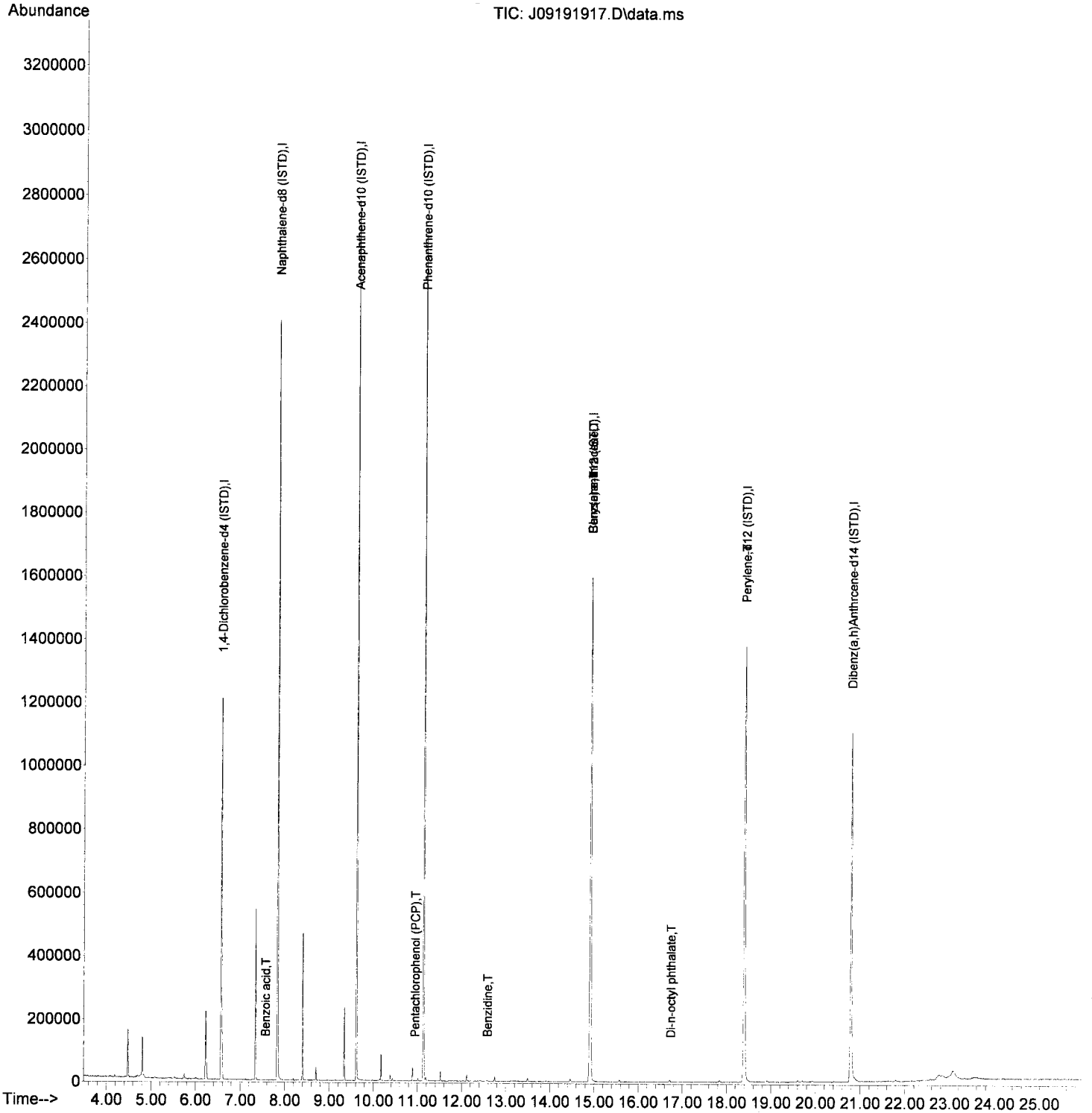
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.344	163	194	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.483	152	84	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.648	153	78	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.777	165	228	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	10.039	149	103	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.146	170	164	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)	10.338	77	165	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.938	266	325	35.51 ng/ml	76
71) Phenanthrene	11.135	178	418	N.D.	
72) Anthracene	11.135	178	418	N.D.	
73) Carbazole	11.381	167	91	N.D.	
74) Di-n-butyl phthalate	11.718	149	81	N.D.	
75) Fluoranthene	12.414	202	105	N.D.	
76) Benzidine	12.580	184	2179	68.20 ng/ml	91
77) Pyrene	12.724	202	64	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.906	129	791	N.D.	
82) 3,3-Dichlorobenzidine	14.863	252	271	Below Cal #	25
83) Benz(a)anthracene	14.912	228	2854	4.80 ng/ml	67
84) Chrysene	14.912	228	2826	4.62 ng/ml	66
85) Bis(2-ethylhexyl) phth...	15.067	149	83	N.D.	
87) Di-n-octyl phthalate	16.735	149	81	30.90 ng/ml#	1
88) Benzo(b)fluoranthene	17.468	252	54	N.D.	
89) Benzo(k)fluoranthene	17.538	252	89	N.D.	
90) Benzo(b+k)fluoranthene	17.538	252	89	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.399	252	3568	6.28 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.790	276	464	N.D.	
96) Dibenz(a,h)anthracene	20.790	278	242	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 : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Reqmnt
9/27/19

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	263426	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1245077	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	634026	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1140103	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1131801	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1099318	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	879454	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	67	0.42	ng/ml	0.11
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.129	82	88	0.55	ng/ml	0.02
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	3.947	79	261	N.D.		
6) Phenol	6.215	94	79	N.D.		
7) Aniline	6.284	93	59	N.D.		
8) Bis(2-chloroethyl) ether	6.306	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	6.744	108	78	25.17	ng/ml#	41
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.819	107	109	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.814	45	64	N.D.		
16) N-Nitrosodi-n-propylamine	7.028	70	172	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.086	77	108	N.D.		
22) Isophorone	7.370	82	96	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	7.563	105	152	807.53	ng/ml#	28
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	8.392	107	91	N.D.		
33) 2-Methylnaphthalene	8.557	142	100	N.D.		
34) 1-Methylnaphthalene	8.659	142	61	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 : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

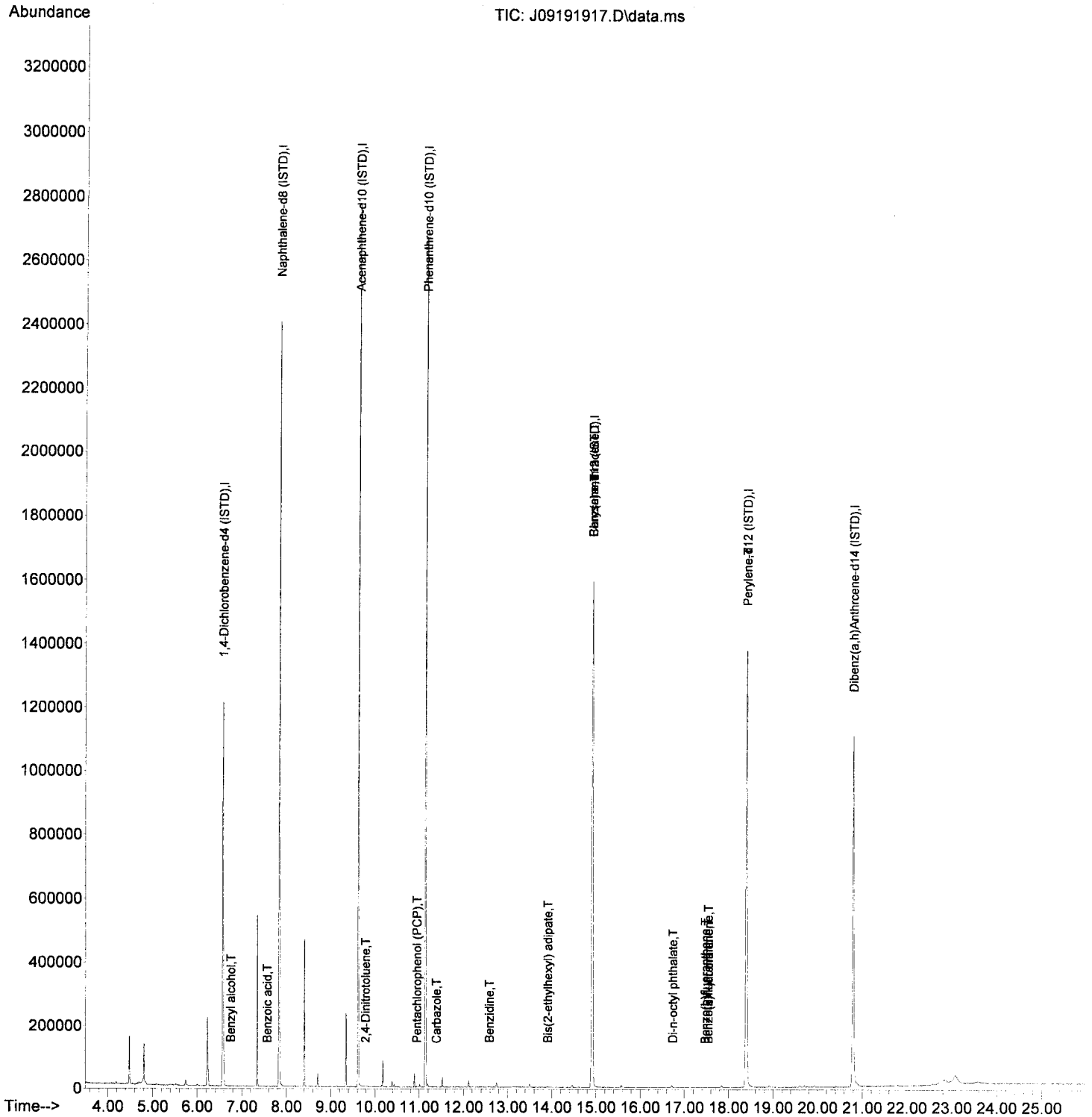
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.344	163	194	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.483	152	84	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.648	153	78	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.777	165	228	55.41 ng/ml#	54
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	10.039	149	103	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.146	170	164	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)	10.338	77	165	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.938	266	325	80.48 ng/ml	76
71) Phenanthrene	11.135	178	418	N.D.	
72) Anthracene	11.135	178	418	N.D.	
73) Carbazole	11.381	167	91	5.75 ng/ml	60
74) Di-n-butyl phthalate	11.718	149	81	N.D.	
75) Fluoranthene	12.414	202	105	N.D.	
76) Benzidine	12.580	184	2179	136.03 ng/ml	91
77) Pyrene	12.724	202	64	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.906	129	791	3.01 ng/ml	88
82) 3,3-Dichlorobenzidine	14.863	252	271	Below Cal #	25
83) Benz(a)anthracene	14.912	228	2854	4.52 ng/ml	67
84) Chrysene	14.912	228	2826	4.77 ng/ml	66
85) Bis(2-ethylhexyl) phth...	15.067	149	83	N.D.	
87) Di-n-octyl phthalate	16.735	149	81	58.06 ng/ml#	1
88) Benzo(b)fluoranthene	17.468	252	54	8.05 ng/ml	57
89) Benzo(k)fluoranthene	17.538	252	89	8.62 ng/ml	57
90) Benzo(b+k)fluoranthene	17.538	252	89	15.88 ng/ml	57
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.399	252	3568	7.20 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.790	276	464	N.D.	
96) Dibenz(a,h)anthracene	20.790	278	242	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 : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	291746	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1221708	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	640527	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1150535	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1159268	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.394	264	1158997	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	913932	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	2742	13.86	ng/ml	0.03
5) Phenol-d6(Surr)	6.204	99	3493	13.74	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	2861	12.28	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	9460	20.11	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.413	330	762	14.12	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	9512	16.78	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.840	79	55	N.D.		
6) Phenol	6.220	94	4498	15.57	ng/ml	89
7) Aniline	6.252	93	2038	7.89	ng/ml	96
8) Bis(2-chloroethyl) ether	6.311	93	4110	15.97	ng/ml	98
9) 2-Chlorophenol	6.370	128	3591	17.25	ng/ml	95
10) 1,3-Dichlorobenzene	6.520	146	4452	19.78	ng/ml	92
11) 1,4-Dichlorobenzene	6.589	146	4492	20.57	ng/ml	93
12) Benzyl alcohol	6.723	108	1506	11.29	ng/ml	96
13) 1,2-Dichlorobenzene	6.744	146	4176	19.02	ng/ml	90
14) 2-Methylphenol	6.808	107	2712	16.21	ng/ml	89
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	4376	13.18	ng/ml	93
16) N-Nitrosodi-n-propylamine	6.964	70	2691	15.96	ng/ml	91
17) 3+4-Methylphenol	6.958	107	3108	15.07	ng/ml	89
18) Hexachloroethane	7.081	201	1267	21.07	ng/ml	89
20) Nitrobenzene	7.135	77	3138	13.45	ng/ml	95
22) Isophorone	7.370	82	6954	15.68	ng/ml	93
23) 2-Nitrophenol	7.456	139	1053	38.03	ng/ml	91
24) 2,4-Dimethylphenol	7.488	122	2375	14.05	ng/ml	83
25) Bis(2-chloroethoxy) me...	7.579	93	4738	19.18	ng/ml	96
26) Benzoic acid	7.552	105	229	305.92	ng/ml#	66
27) 2,4-Dichlorophenol	7.691	162	1603	10.94	ng/ml	76
28) 1,2,4-Trichlorobenzene	7.782	180	4361	24.59	ng/ml	82
29) Naphthalene	7.857	128	14004	22.32	ng/ml	100
30) 4-Chloroaniline	7.910	127	1531	18.26	ng/ml	90
31) Hexachlorobutadiene	7.990	225	2247	23.76	ng/ml	84
32) 4-Chloro-3-methylphenol	8.392	107	1917	10.87	ng/ml#	53
33) 2-Methylnaphthalene	8.552	142	8620	20.12	ng/ml	94
34) 1-Methylnaphthalene	8.654	142	9000	21.86	ng/ml	91
36) Hexachlorocyclopentadiene	8.723	237	1303	12.86	ng/ml	74
37) 2,4,6-Trichlorophenol	8.841	196	1119	20.94	ng/ml	79
38) 2,4,5-Trichlorophenol	8.873	198	1218	11.18	ng/ml	91
39) 1,1'-Biphenyl	9.028	154	10205	19.18	ng/ml	95
41) 2-Chloronaphthalene	9.050	162	7646	19.58	ng/ml	99
42) 2-Nitroaniline	9.146	138	939	7.22	ng/ml	82
43) 2,6-Dimethylnaphthalene	9.189	156	7097	17.82	ng/ml	96

See MJ
See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

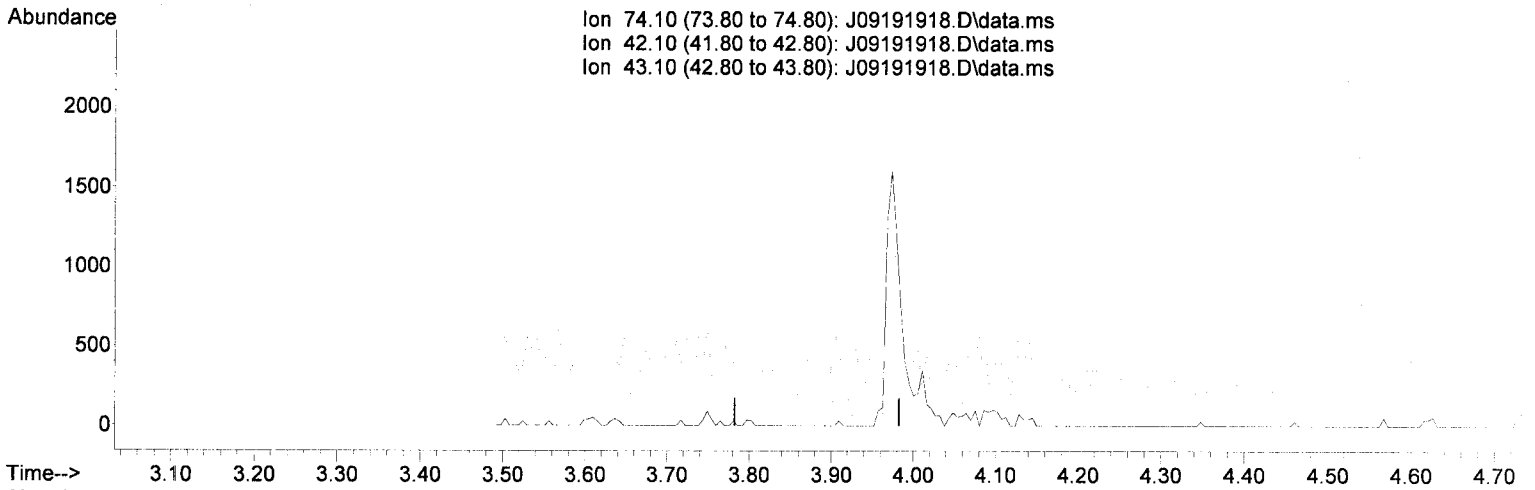
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	381	6.28	ng/ml#	63
45) Dimethyl phthalate	9.328	163	9190	20.06	ng/ml	91
46) 1,3-Dinitrobenzene	9.354	168	417	5.99	ng/ml	67
47) 2,6-Dinitrotoluene	9.386	165	1042	10.58	ng/ml	99
48) 1,2-Dinitrobenzene	9.440	168	304	6.59	ng/ml#	34
49) Acenaphthylene	9.472	152	12450	19.89	ng/ml	95
50) 3-Nitroaniline	9.563	138	592	27.61	ng/ml	93
51) Acenaphthene	9.649	153	8885	21.89	ng/ml	96
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.723	139	120	34.89	ng/ml	85
54) 2,4-Dinitrotoluene	9.798	165	1027	8.10	ng/ml#	60
55) Dibenzofuran	9.825	168	11668	21.08	ng/ml	90
56) 2,3,5,6-Tetrachlorophenol	9.911	232	774	34.62	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.948	232	856	19.53	ng/ml	77
58) Diethyl phthalate	10.044	149	8035	18.39	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.034	170	7629	21.57	ng/ml	95
60) Fluorene	10.173	166	9113	20.91	ng/ml	94
61) 4-Chlorophenyl phenyl ...	10.167	204	4548	22.45	ng/ml	95
62) 4-Nitroaniline	10.183	138	719	8.15	ng/ml	91
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.285	169	5957	16.84	ng/ml	88
66) Azobenzene (1,2-DPH)	10.328	77	6853	14.60	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.670	248	2390	20.18	ng/ml	86
69) Hexachlorobenzene	10.745	284	3454	25.35	ng/ml	83
70) Pentachlorophenol (PCP)	10.938	266	1000	46.06	ng/ml	93
71) Phenanthrene	11.157	178	13749	21.85	ng/ml	98
72) Anthracene	11.205	178	11450	18.50	ng/ml	96
73) Carbazole	11.365	167	9186	17.97	ng/ml	96
74) Di-n-butyl phthalate	11.718	149	11697	16.31	ng/ml	94
75) Fluoranthene	12.425	202	12248	18.61	ng/ml	96
76) Benzidine	12.580	184	3398	75.33	ng/ml	91
77) Pyrene	12.708	202	12641	19.23	ng/ml	93
80) Butyl benzyl phthalate	13.730	149	2535	6.98	ng/ml	75
81) Bis(2-ethylhexyl) adipate	13.906	129	2762	8.49	ng/ml	94
82) 3,3-Dichlorobenzidine	14.853	252	3617	Below	Cal	95
83) Benz(a)anthracene	14.890	228	13459	19.80	ng/ml	92
84) Chrysene	14.970	228	11530	18.39	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.077	149	2659	5.54	ng/ml	99
87) Di-n-octyl phthalate	16.741	149	3334	34.72	ng/ml	97
88) Benzo(b)fluoranthene	17.463	252	8297	11.82	ng/ml	98
89) Benzo(k)fluoranthene	17.538	252	8174	12.27	ng/ml	92
90) Benzo(b+k)fluoranthene	17.463	252	17019	24.40	ng/ml	98
91) Benzo(e)pyrene	18.126	252	8657	12.60	ng/ml	95
92) Benzo(a)pyrene	18.238	252	6648	10.53	ng/ml	84
93) Perylene	18.447	252	9278	15.50	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.774	276	10072	19.60	ng/ml	76
96) Dibenz(a,h)anthracene	20.854	278	8754	19.00	ng/ml	94
97) Benzo(g,h,i)perylene	21.319	276	7772	15.71	ng/ml	96

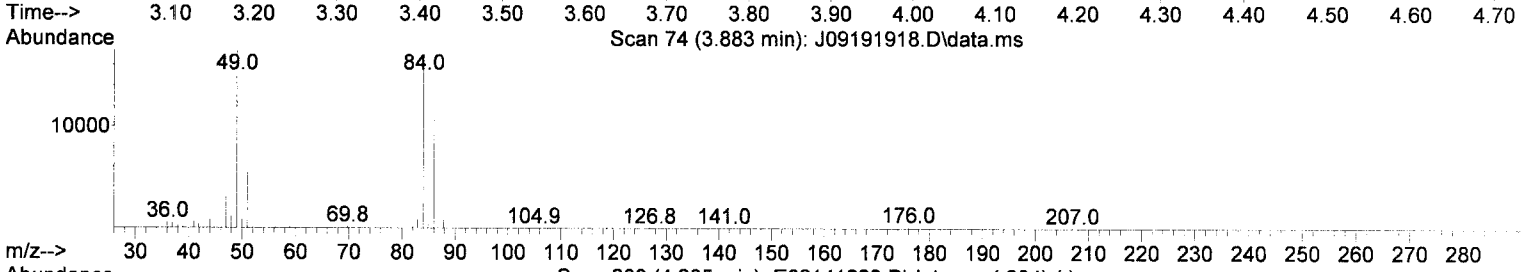
(#) = qualifier out of range (m) = manual integration (+) = signals summed

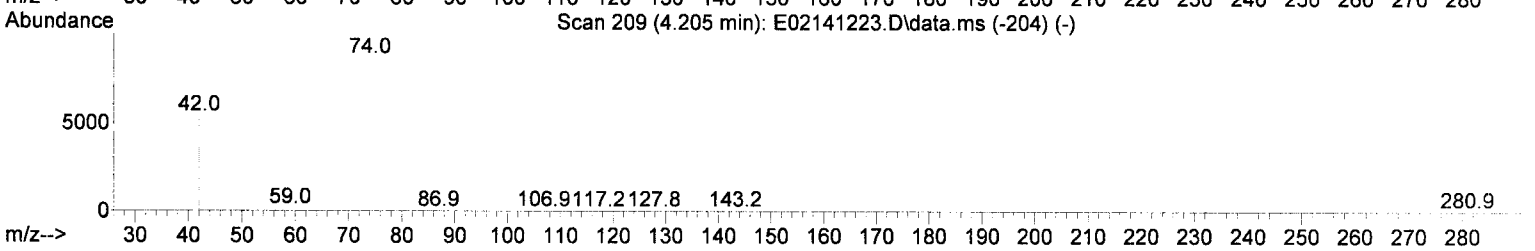
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191918.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.883min (-3.883) 0.00 ng/ml

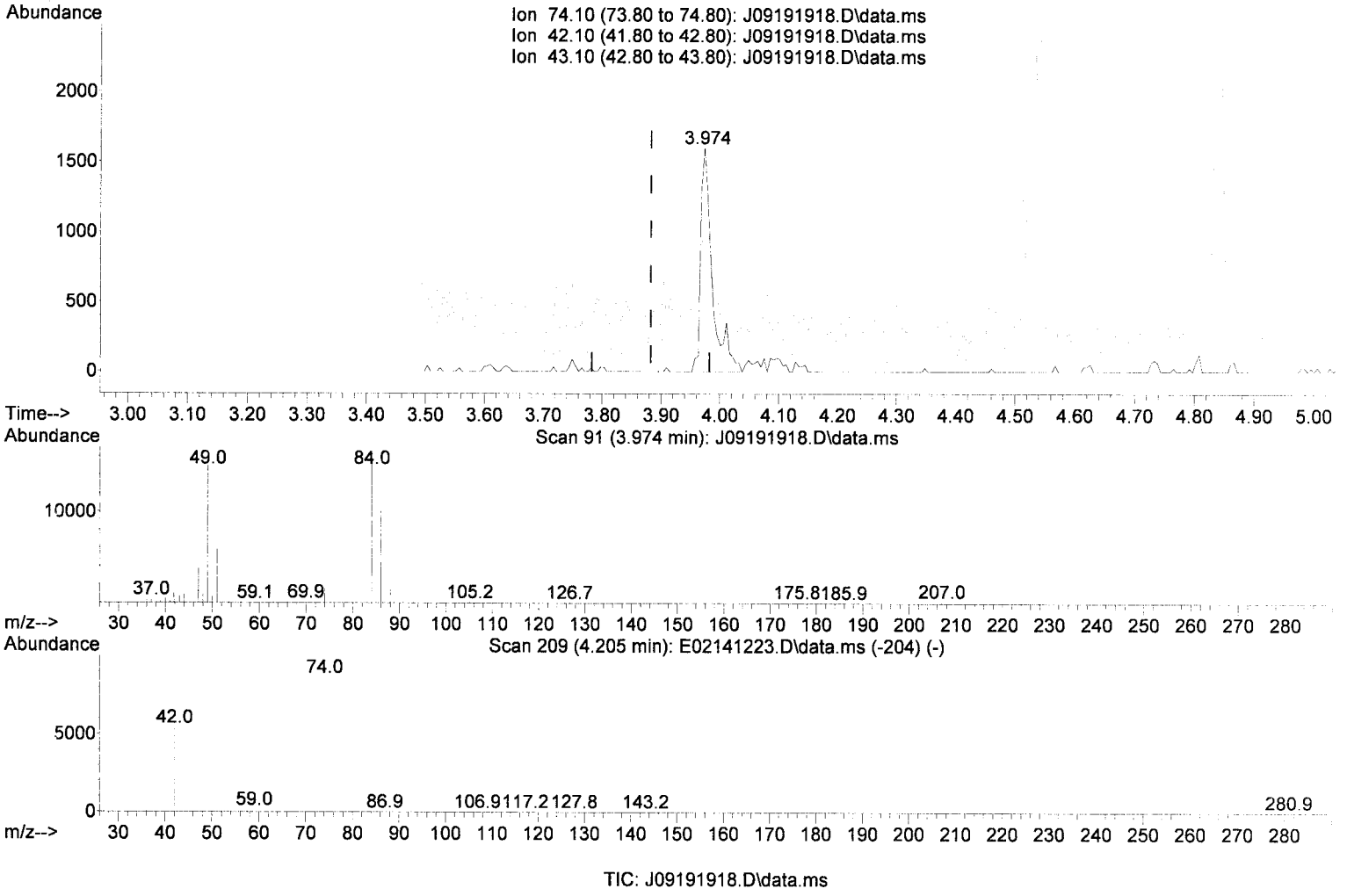
response 0

Ion	Exp%	Act%
74.10	100.00	0.00
42.10	49.40	0.00#
43.10	22.20	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.974min (+ 0.091) 16.33 ng/ml (m)

response 2214

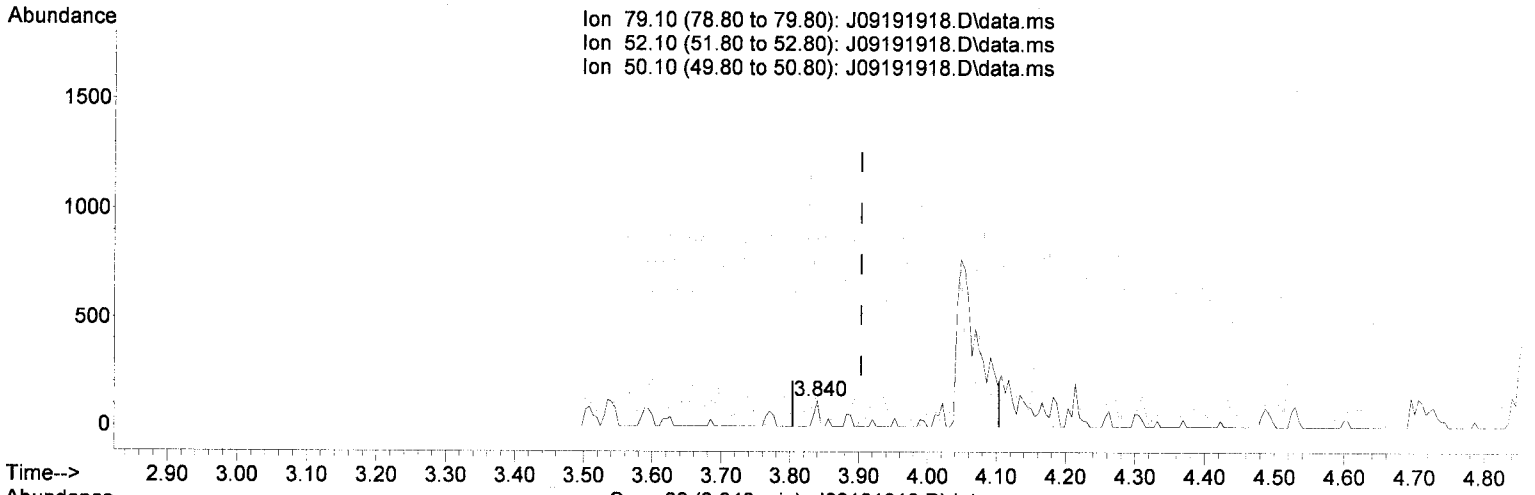
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	66.21
43.10	22.20	47.47
0.00	0.00	0.00

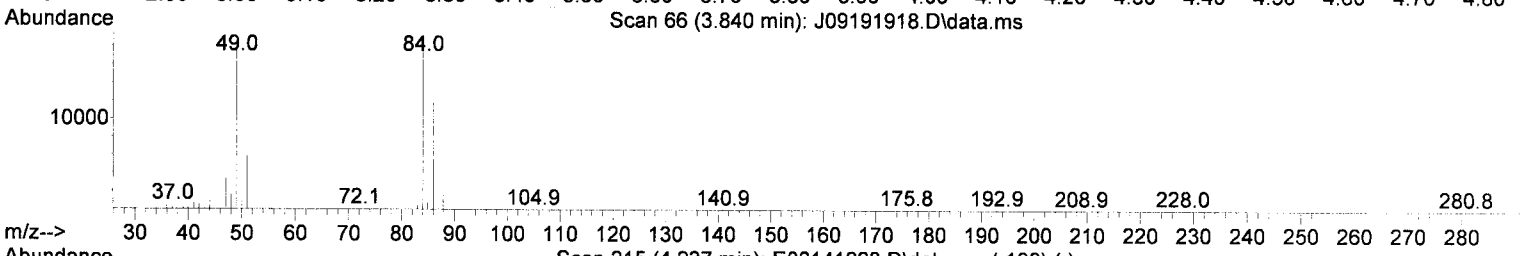
9/20/19

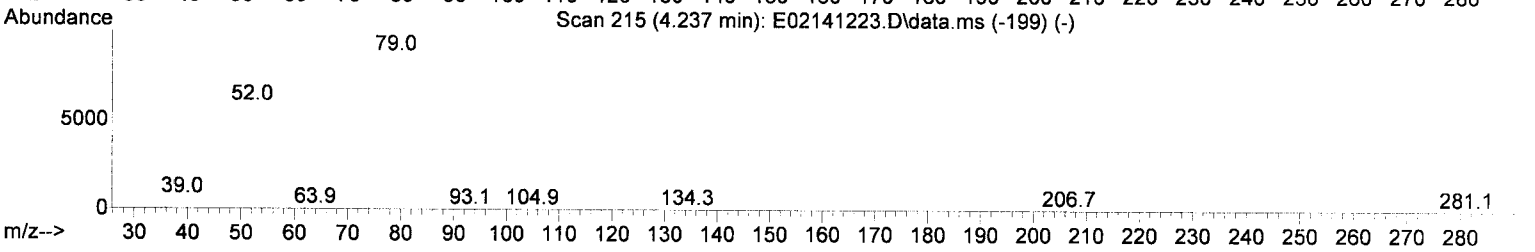
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191918.D\data.ms

(3) Pyridine (TG)

3.840min (-0.064) 0.24 ng/ml

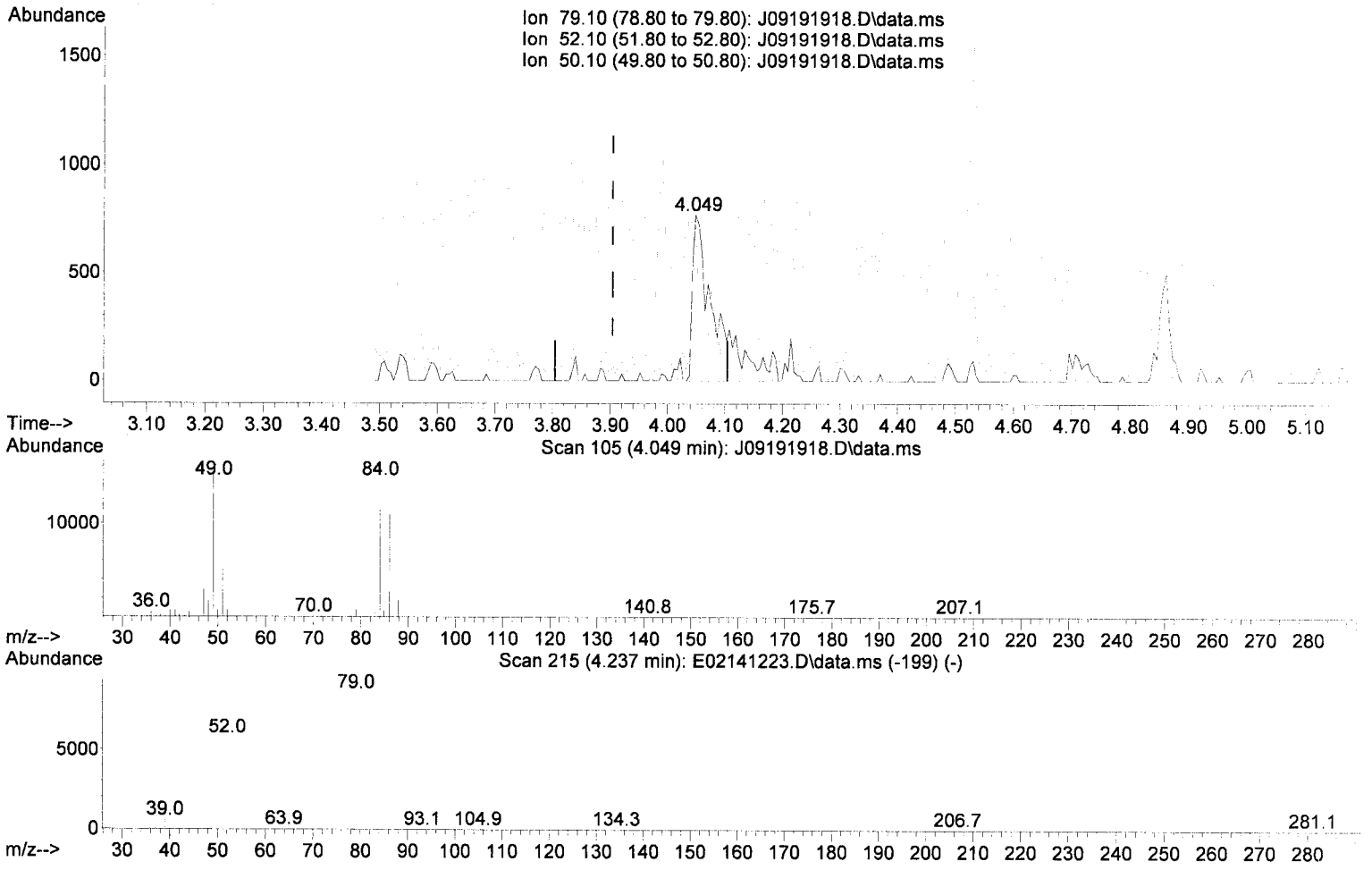
response 55

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	81.20#
50.10	18.70	146.15#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(3) Pyridine (TG)

4.049min (+ 0.145) 9.55 ng/ml m

response 2206

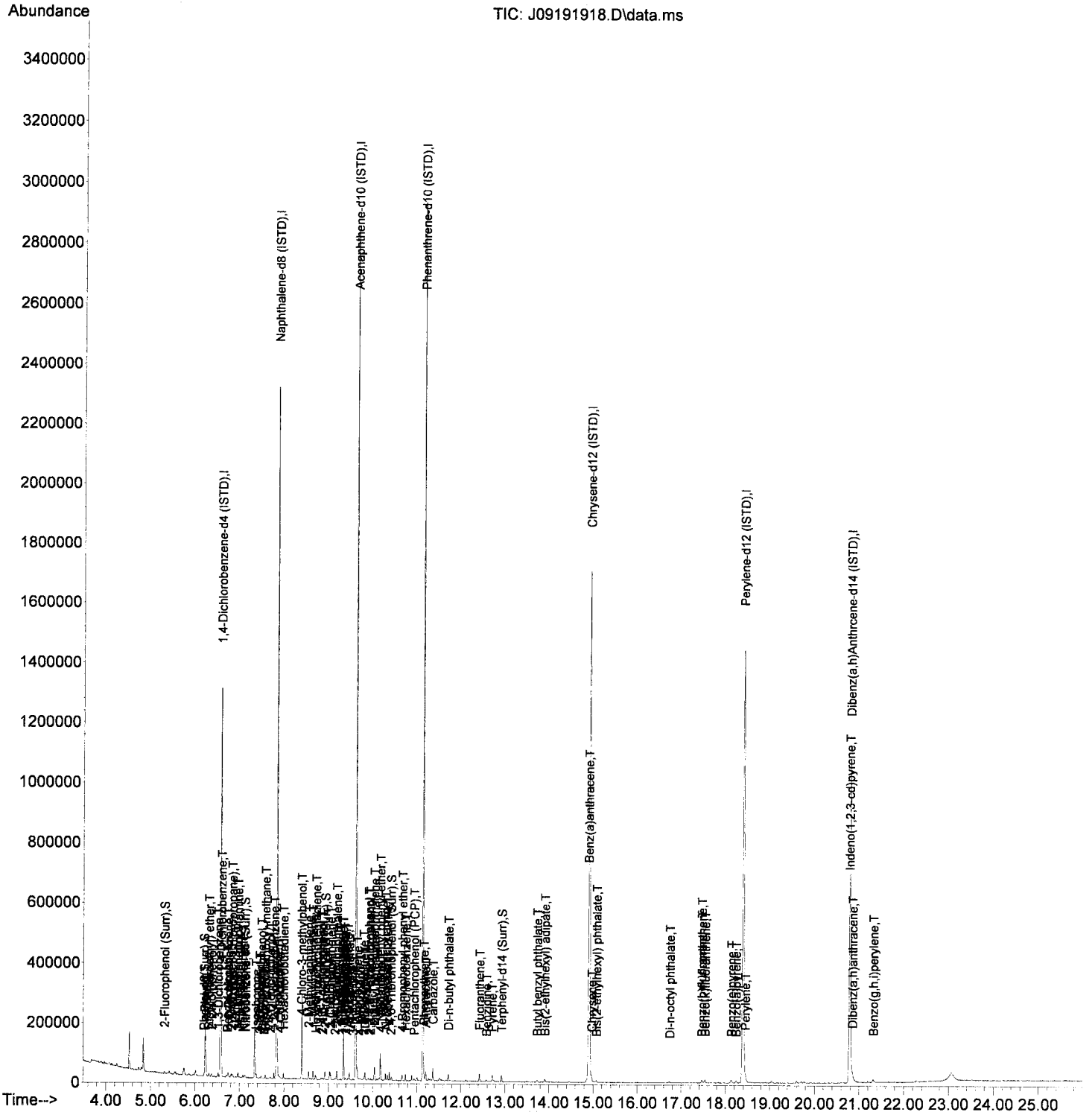
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	96.24#
50.10	18.70	93.39#
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	291253	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1195757	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	616226	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1087898	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1113286	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.393	264	1097209	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	855339	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.311	112	7611	38.53	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	9501	37.44	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	7903	33.99	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	24802	54.81	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	1929	37.79	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	25113	46.14	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	~~3.952~~	~~74~~	~~4569~~	~~33.76~~	~~ng/ml~~	93
3) Pyridine	4.000	79	7667m	33.23	ng/ml#	
6) Phenol	6.215	94	11373	39.43	ng/ml	93
7) Aniline	6.252	93	10955	42.49	ng/ml	95
8) Bis(2-chloroethyl) ether	6.306	93	10198	39.70	ng/ml	95
9) 2-Chlorophenol	6.364	128	9461	45.54	ng/ml	88
10) 1,3-Dichlorobenzene	6.519	146	11576	51.52	ng/ml	97
11) 1,4-Dichlorobenzene	6.589	146	12059	55.30	ng/ml	94
12) Benzyl alcohol	6.707	108	3460	25.97	ng/ml	94
13) 1,2-Dichlorobenzene	6.739	146	12229	55.79	ng/ml	98
14) 2-Methylphenol	6.808	107	6405	38.35	ng/ml	90
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	10585	31.94	ng/ml	90
16) N-Nitrosodi-n-propylamine	6.963	70	6538	38.84	ng/ml	98
17) 3+4-Methylphenol	6.958	107	8248	40.07	ng/ml	95
18) Hexachloroethane	7.076	201	3313	55.18	ng/ml	93
20) Nitrobenzene	7.135	77	8614	36.98	ng/ml	95
22) Isophorone	7.370	82	18082	41.67	ng/ml	97
23) 2-Nitrophenol	7.455	139	3400	54.77	ng/ml	93
24) 2,4-Dimethylphenol	7.488	122	5922	35.79	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.579	93	11523	47.66	ng/ml	92
26) Benzoic acid	7.573	105	200	305.64	ng/ml#	58
27) 2,4-Dichlorophenol	7.691	162	5068	35.35	ng/ml	91
28) 1,2,4-Trichlorobenzene	7.776	180	11103	63.97	ng/ml	92
29) Naphthalene	7.857	128	34402	56.01	ng/ml	99
30) 4-Chloroaniline	7.905	127	7306	53.73	ng/ml	92
31) Hexachlorobutadiene	7.990	225	5972	64.52	ng/ml	97
32) 4-Chloro-3-methylphenol	8.392	107	5211	30.18	ng/ml	82
33) 2-Methylnaphthalene	8.557	142	23135	55.17	ng/ml	94
34) 1-Methylnaphthalene	8.654	142	23006	57.09	ng/ml	92
36) Hexachlorocyclopentadiene	8.723	237	3356	34.42	ng/ml	95
37) 2,4,6-Trichlorophenol	8.835	196	3644	44.63	ng/ml	82
38) 2,4,5-Trichlorophenol	8.873	198	3657	34.90	ng/ml	96
39) 1,1'-Biphenyl	9.028	154	28683	56.03	ng/ml	96
41) 2-Chloronaphthalene	9.049	162	19450	51.76	ng/ml	98
42) 2-Nitroaniline	9.146	138	2728	21.81	ng/ml	70
43) 2,6-Dimethylnaphthalene	9.188	156	20566	53.66	ng/ml	99

See mJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

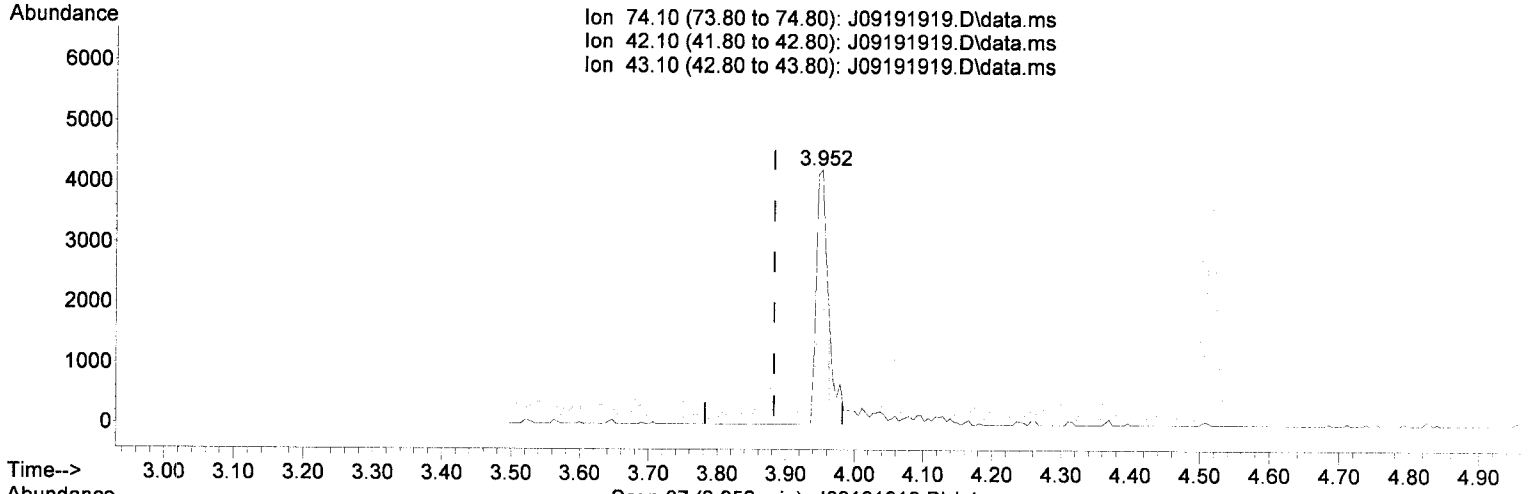
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	915	15.67 ng/ml#	75
45) Dimethyl phthalate	9.328	163	22486	51.02 ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	1390	20.76 ng/ml	79
47) 2,6-Dinitrotoluene	9.386	165	2915	30.76 ng/ml	88
48) 1,2-Dinitrobenzene	9.440	168	1349	30.38 ng/ml	98
49) Acenaphthylene	9.472	152	32192	53.45 ng/ml	98
50) 3-Nitroaniline	9.563	138	2106	41.58 ng/ml#	68
51) Acenaphthene	9.648	153	22572	57.81 ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.723	139	699	42.87 ng/ml	71
54) 2,4-Dinitrotoluene	9.798	165	2508	20.56 ng/ml	84
55) Dibenzofuran	9.825	168	29377	55.18 ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.905	232	1678	45.25 ng/ml	83
57) 2,3,4,6-Tetrachlorophenol	9.948	232	2513	38.75 ng/ml	86
58) Diethyl phthalate	10.044	149	21378	50.87 ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.034	170	19066	56.02 ng/ml	97
60) Fluorene	10.173	166	22247	53.06 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.167	204	11449	58.75 ng/ml	94
62) 4-Nitroaniline	10.178	138	2192	25.82 ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.215	198	206	74.51 ng/ml#	65
65) N-Nitrosodiphenylamine	10.285	169	16461	49.20 ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	17404	39.22 ng/ml	93
68) 4-Bromophenyl phenyl e...	10.665	248	6326	56.49 ng/ml	91
69) Hexachlorobenzene	10.745	284	7615	59.10 ng/ml	98
70) Pentachlorophenol (PCP)	10.937	266	1392	53.47 ng/ml#	61
71) Phenanthrene	11.157	178	32566	54.75 ng/ml	95
72) Anthracene	11.205	178	30636	52.34 ng/ml	98
73) Carbazole	11.365	167	24489	50.68 ng/ml	93
74) Di-n-butyl phthalate	11.718	149	29117	42.93 ng/ml	99
75) Fluoranthene	12.424	202	31166	50.09 ng/ml	93
76) Benzidine	12.579	184	5652	90.66 ng/ml	93
77) Pyrene	12.713	202	32717	52.64 ng/ml	98
80) Butyl benzyl phthalate	13.735	149	6765	19.40 ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.911	129	6924	22.16 ng/ml	92
82) 3,3-Dichlorobenzidine	14.847	252	11318	Below Cal	86
83) Benz(a)anthracene	14.890	228	29779	45.62 ng/ml	97
84) Chrysene	14.960	228	29254	48.57 ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.072	149	8694	18.85 ng/ml	93
87) Di-n-octyl phthalate	16.735	149	9861	43.05 ng/ml	94
88) Benzo(b)fluoranthene	17.468	252	21819	32.83 ng/ml	93
89) Benzo(k)fluoranthene	17.543	252	23687	37.57 ng/ml	95
90) Benzo(b+k)fluoranthene	17.468	252	47809	72.40 ng/ml	93
91) Benzo(e)pyrene	18.121	252	24570	37.78 ng/ml	95
92) Benzo(a)pyrene	18.238	252	18583	31.08 ng/ml	97
93) Perylene	18.447	252	24689	43.56 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.779	276	25006	52.00 ng/ml	88
96) Dibenz(a,h)anthracene	20.848	278	21791	50.52 ng/ml	94
97) Benzo(g,h,i)perylene	21.308	276	20181	43.59 ng/ml	97

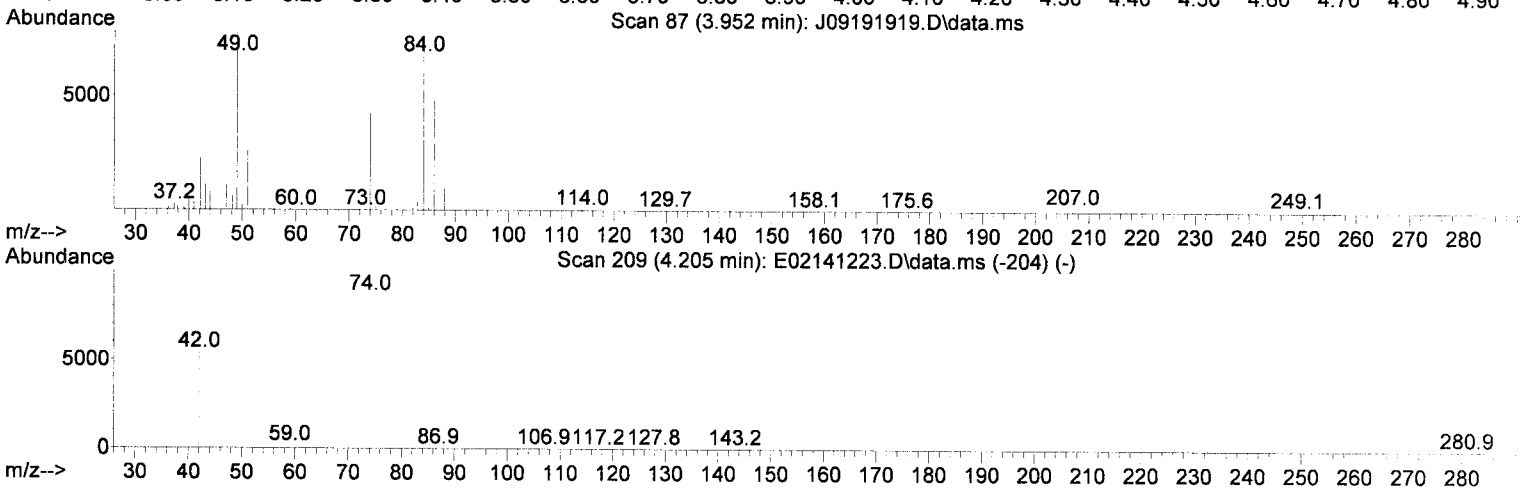
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191919.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 33.76 ng/ml

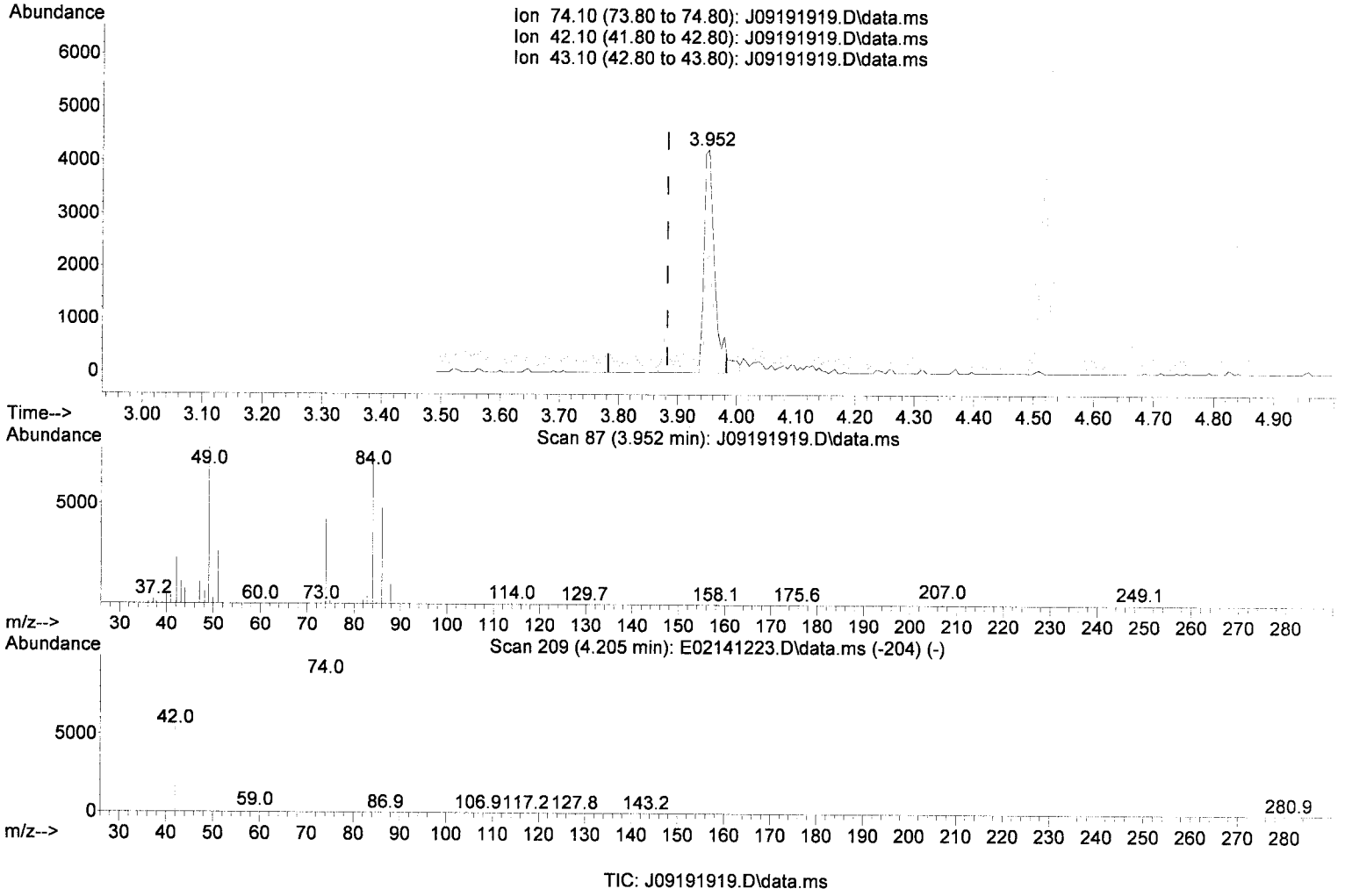
response 4569

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	53.59
43.10	22.20	26.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191919.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 40.76 ng/ml m D 9/20/19

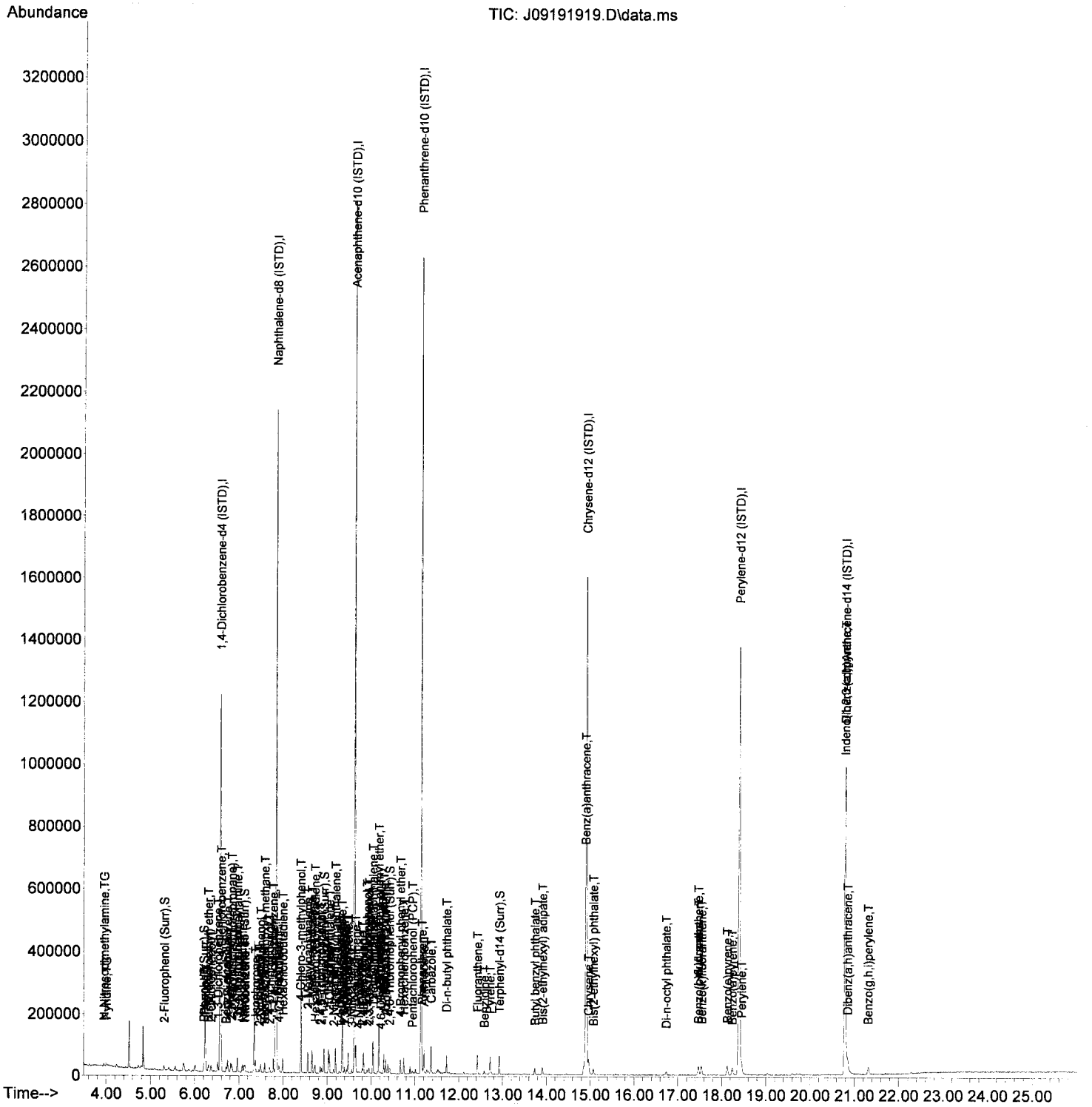
response 5516

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	53.59
43.10	22.20	26.52
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	290594	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1186873	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	615111	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1118597	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1122909	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.394	264	1127380	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	892958	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.311	112	13834	70.19	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	21003	82.96	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	16492	71.09	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	53353	118.12	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	4809	91.63	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	54871	99.96	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.952	74	9178	67.07	ng/ml	91
3) Pyridine	3.990	79	18548m	80.58	ng/ml#	
6) Phenol	6.220	94	23364	81.19	ng/ml	97
7) Aniline	6.252	93	23125	89.89	ng/ml	94
8) Bis(2-chloroethyl) ether	6.311	93	21464	83.74	ng/ml	93
9) 2-Chlorophenol	6.370	128	19462	93.88	ng/ml	97
10) 1,3-Dichlorobenzene	6.520	146	23840	106.35	ng/ml	98
11) 1,4-Dichlorobenzene	6.589	146	23338	107.27	ng/ml	92
12) Benzyl alcohol	6.707	108	8907	67.02	ng/ml	96
13) 1,2-Dichlorobenzene	6.739	146	23746	108.58	ng/ml	95
14) 2-Methylphenol	6.808	107	14254	85.54	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	21848	66.08	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.963	70	13631	81.17	ng/ml	98
17) 3+4-Methylphenol	6.958	107	16854	82.07	ng/ml	89
18) Hexachloroethane	7.076	201	6562	109.55	ng/ml	86
20) Nitrobenzene	7.135	77	17280	74.35	ng/ml	100
22) Isophorone	7.370	82	37997	88.22	ng/ml	97
23) 2-Nitrophenol	7.450	139	7240	82.31	ng/ml	87
24) 2,4-Dimethylphenol	7.488	122	14806	90.15	ng/ml	90
25) Bis(2-chloroethoxy) me...	7.579	93	23395	97.49	ng/ml	95
26) Benzoic acid	7.605	105	129	304.84	ng/ml#	68
27) 2,4-Dichlorophenol	7.691	162	12689	89.17	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.776	180	21292	123.58	ng/ml	98
29) Naphthalene	7.857	128	69263	113.61	ng/ml	96
30) 4-Chloroaniline	7.905	127	15139	102.27	ng/ml	96
31) Hexachlorobutadiene	7.990	225	11598	126.23	ng/ml	93
32) 4-Chloro-3-methylphenol	8.386	107	11698	68.25	ng/ml	89
33) 2-Methylnaphthalene	8.557	142	46039	110.62	ng/ml	99
34) 1-Methylnaphthalene	8.659	142	46134	115.33	ng/ml	98
36) Hexachlorocyclopentadiene	8.723	237	8031	82.51	ng/ml	94
37) 2,4,6-Trichlorophenol	8.841	196	7912	84.10	ng/ml	95
38) 2,4,5-Trichlorophenol	8.873	198	8310	79.46	ng/ml	93
39) 1,1'-Biphenyl	9.028	154	58168	113.83	ng/ml	98
41) 2-Chloronaphthalene	9.049	162	41705	111.19	ng/ml	97
42) 2-Nitroaniline	9.146	138	6877	55.07	ng/ml	89
43) 2,6-Dimethylnaphthalene	9.189	156	43362	113.35	ng/ml	96

See MJ

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

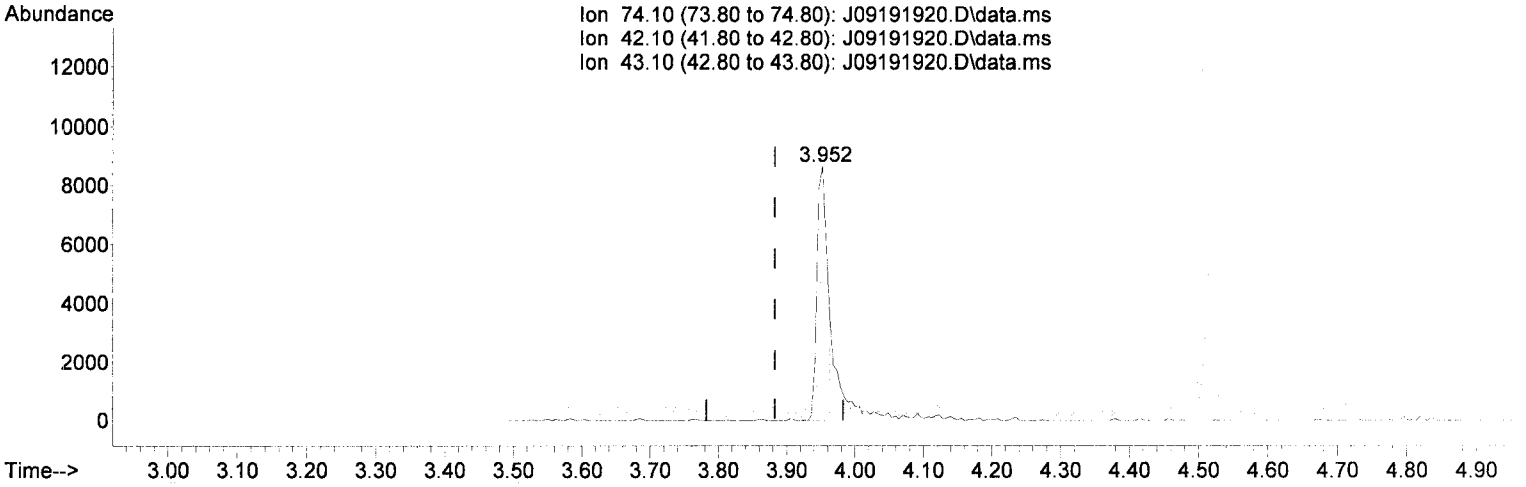
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	2006	34.41	ng/ml	84
45) Dimethyl phthalate	9.328	163	49089	111.58	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	3033	45.87	ng/ml	81
47) 2,6-Dinitrotoluene	9.386	165	6526	68.97	ng/ml	84
48) 1,2-Dinitrobenzene	9.445	168	2742	61.87	ng/ml	83
49) Acenaphthylene	9.472	152	68008	113.12	ng/ml	97
50) 3-Nitroaniline	9.558	138	6036	77.71	ng/ml	97
51) Acenaphthene	9.649	153	44425	113.99	ng/ml	98
52) 2,4-Dinitrophenol	9.670	184	169	146.81	ng/ml	80
53) 4-Nitrophenol	9.723	139	2106	62.15	ng/ml	64
54) 2,4-Dinitrotoluene	9.798	165	6812	55.94	ng/ml	98
55) Dibenzofuran	9.825	168	62656	117.90	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.905	232	5673	90.84	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.948	232	7263	92.88	ng/ml	95
58) Diethyl phthalate	10.044	149	47870	114.11	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.034	170	38608	113.65	ng/ml	97
60) Fluorene	10.173	166	48968	116.99	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.167	204	23837	122.54	ng/ml	99
62) 4-Nitroaniline	10.178	138	5563	65.64	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.210	198	761	84.48	ng/ml	74
65) N-Nitrosodiphenylamine	10.285	169	36899	107.27	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	37821	82.88	ng/ml	96
68) 4-Bromophenyl phenyl e...	10.665	248	13242	115.00	ng/ml	94
69) Hexachlorobenzene	10.745	284	16314	123.13	ng/ml	97
70) Pentachlorophenol (PCP)	10.938	266	4341	100.38	ng/ml	92
71) Phenanthrene	11.151	178	68493	111.98	ng/ml	98
72) Anthracene	11.205	178	65192	108.32	ng/ml	98
73) Carbazole	11.365	167	54742	110.17	ng/ml	98
74) Di-n-butyl phthalate	11.718	149	70280	100.78	ng/ml	99
75) Fluoranthene	12.424	202	70234	109.79	ng/ml	96
76) Benzidine	12.580	184	12748	133.02	ng/ml	98
77) Pyrene	12.713	202	69474	108.72	ng/ml	98
80) Butyl benzyl phthalate	13.735	149	18774	53.39	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.911	129	18358	58.24	ng/ml	95
82) 3,3-Dichlorobenzidine	14.853	252	24584	98.99	ng/ml	93
83) Benz(a)anthracene	14.885	228	64818	98.44	ng/ml	99
84) Chrysene	14.965	228	61418	101.11	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.072	149	26668	57.33	ng/ml	98
87) Di-n-octyl phthalate	16.741	149	33665	71.49	ng/ml	95
88) Benzo(b)fluoranthene	17.468	252	57260	83.86	ng/ml	95
89) Benzo(k)fluoranthene	17.538	252	58523	90.33	ng/ml	99
90) Benzo(b+k)fluoranthene	17.538	252	120376	177.42	ng/ml	99
91) Benzo(e)pyrene	18.121	252	58165	87.04	ng/ml	93
92) Benzo(a)pyrene	18.244	252	50114	81.58	ng/ml	96
93) Perylene	18.447	252	50289	86.35	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.779	276	52504	104.59	ng/ml	97
96) Dibenz(a,h)anthracene	20.854	278	48705	108.17	ng/ml	97
97) Benzo(g,h,i)perylene	21.309	276	49447	102.31	ng/ml	98

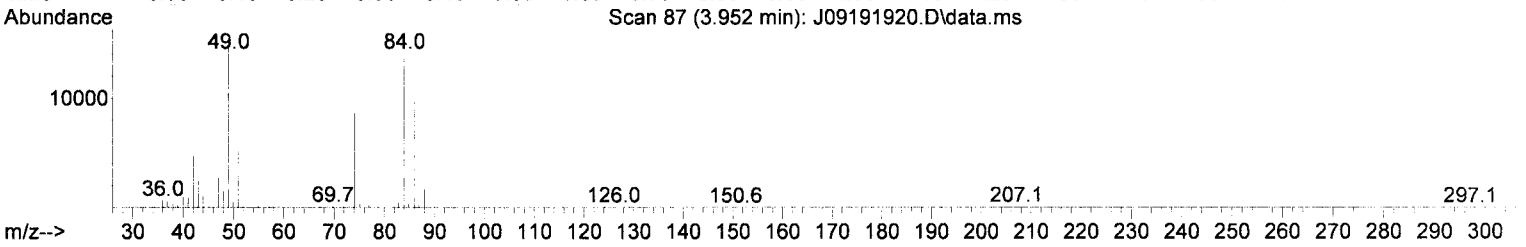
(#) = qualifier out of range (m) = manual integration (+) = signals summed

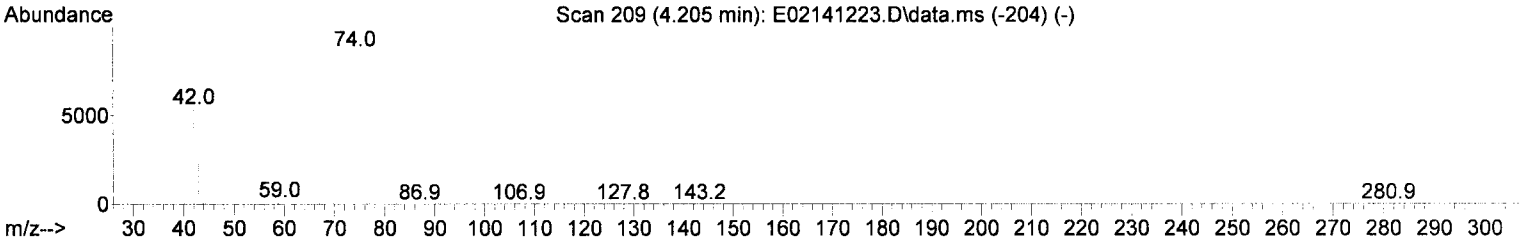
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 67.97 ng/ml

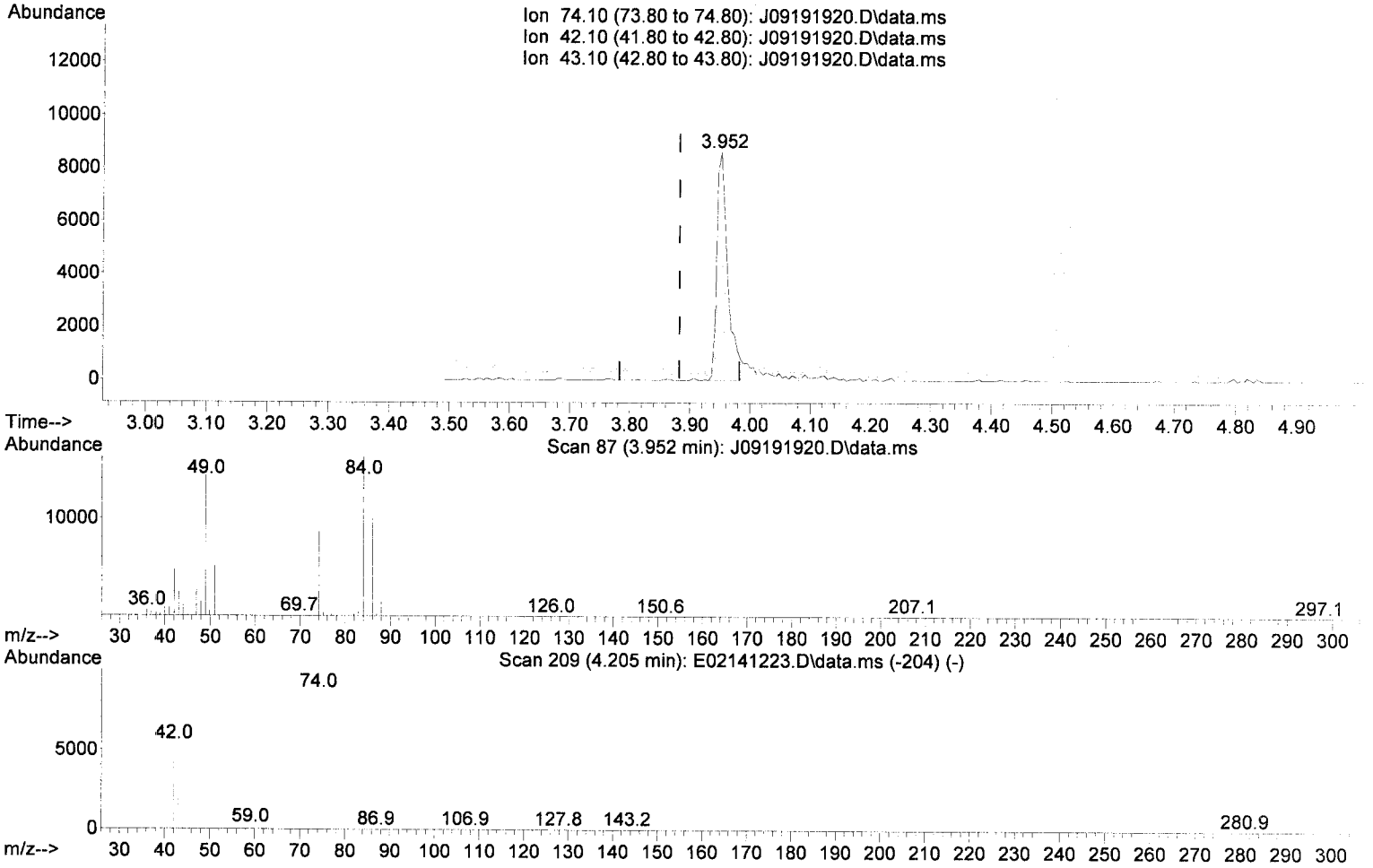
response 9178

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	55.00
43.10	22.20	27.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 86.90 ng/ml (m)

response 11734

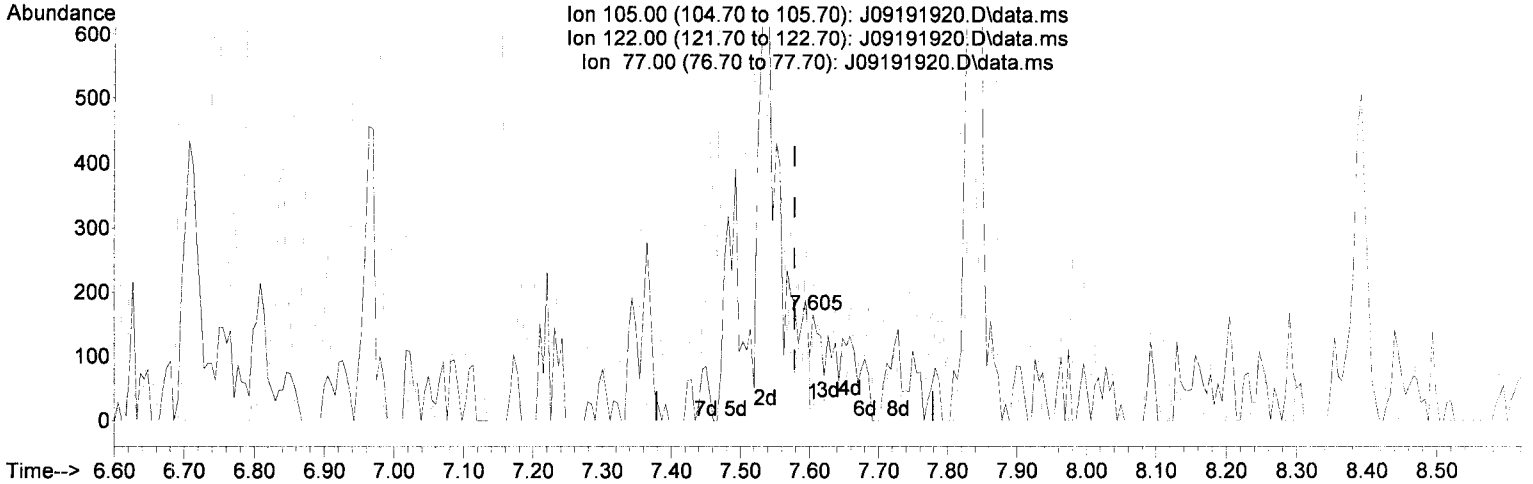
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	55.00
43.10	22.20	27.95
0.00	0.00	0.00

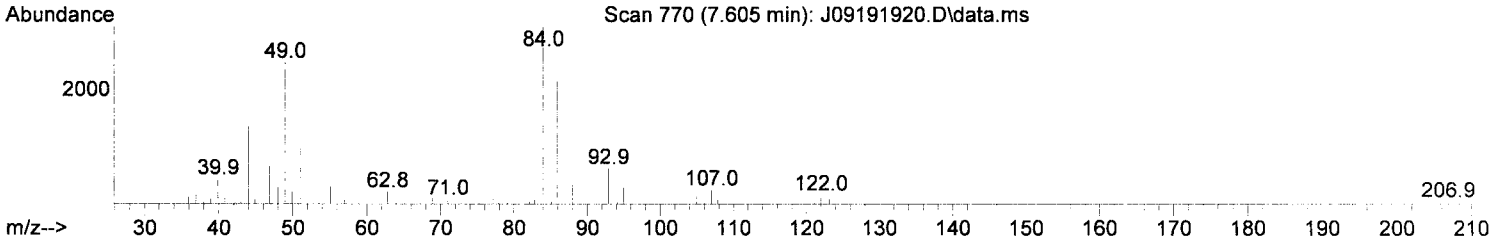
9/20/19

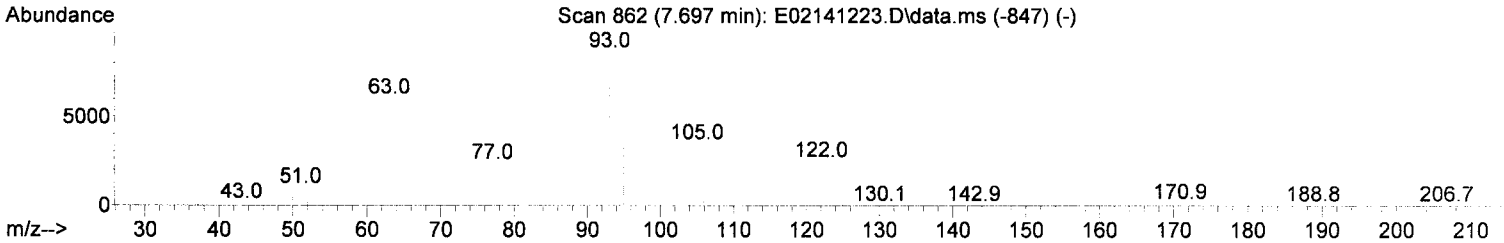
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191920.D\data.ms

(26) Benzoic acid (T)

7.605min (+ 0.027) 304.84 ng/ml

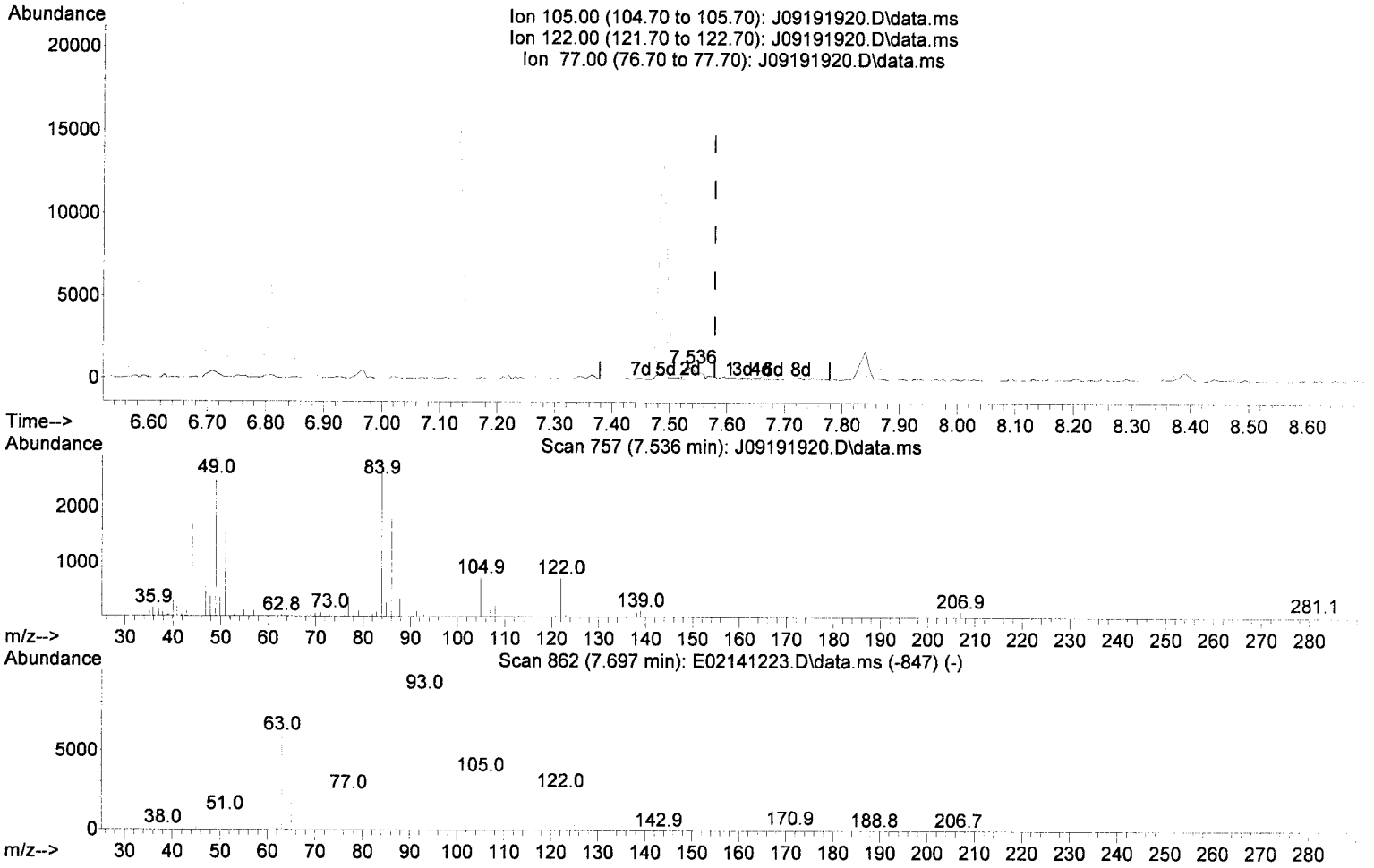
response 129

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	108.48
77.00	72.00	113.33#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191920.D\data.ms

(26) Benzoic acid (T)

7.536min (-0.043) 327.42 ng/ml m GL 9/20/19

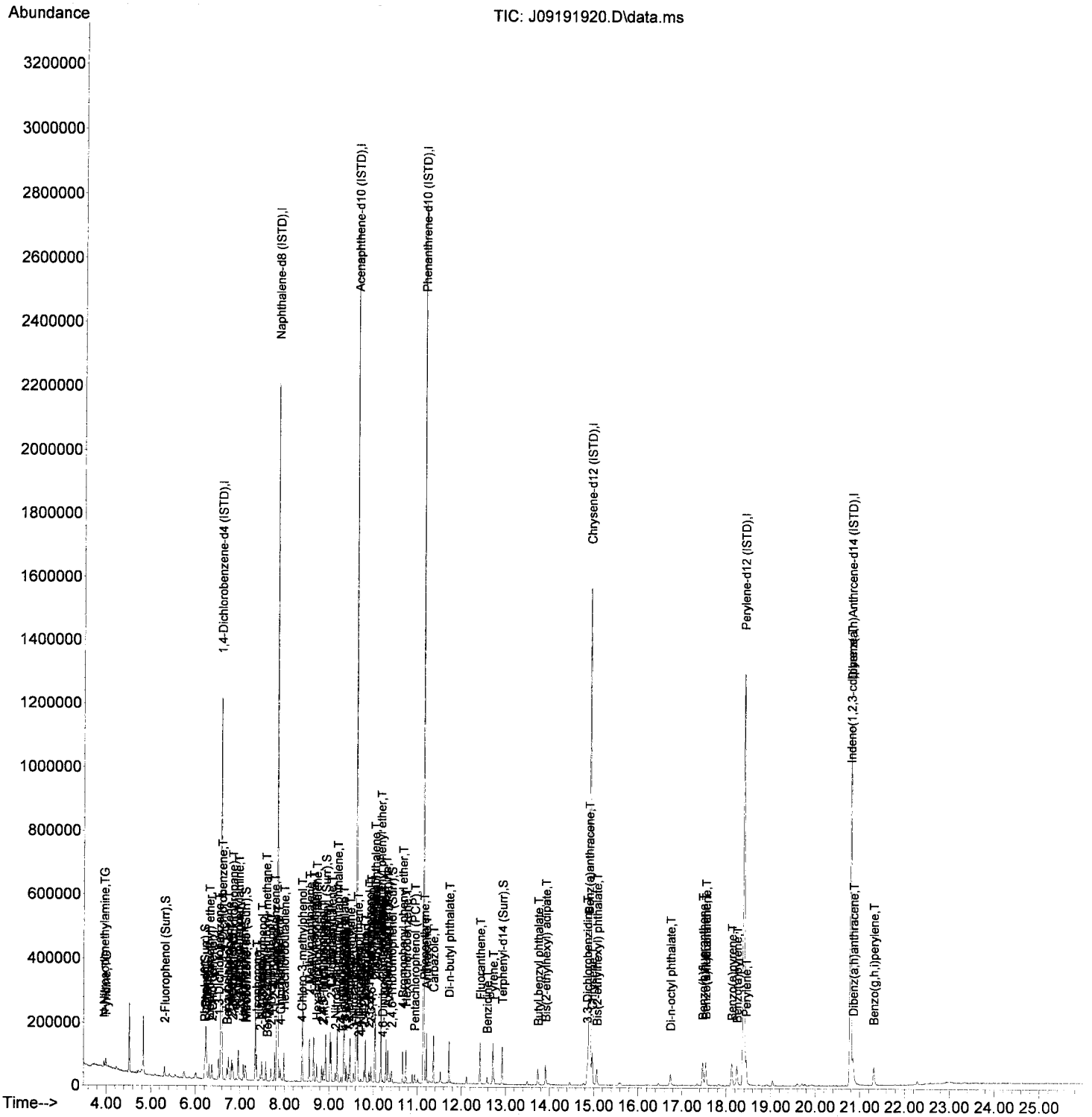
response 2086

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	99.19
77.00	72.00	54.47
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	286105	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1204364	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	611745	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1098102	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1116848	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1089238	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	868590	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.300	112	34817	179.42	ng/ml	0.01
5) Phenol-d6(Surr)	6.204	99	45844	183.93	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	34591	151.44	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	107137	238.50	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	10829	210.19	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	107135	196.23	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.915	74	19941	150.00	ng/ml	98
3) Pyridine	3.947	79	38499m	169.88	ng/ml#	
6) Phenol	6.215	94	51417	181.47	ng/ml	97
7) Aniline	6.247	93	49031	193.59	ng/ml	96
8) Bis(2-chloroethyl) ether	6.306	93	42595	168.79	ng/ml	93
9) 2-Chlorophenol	6.364	128	42160	206.57	ng/ml	96
10) 1,3-Dichlorobenzene	6.514	146	48050	217.71	ng/ml	98
11) 1,4-Dichlorobenzene	6.584	146	46724	218.13	ng/ml	96
12) Benzyl alcohol	6.701	108	18281	139.70	ng/ml	91
13) 1,2-Dichlorobenzene	6.739	146	47924	222.58	ng/ml	95
14) 2-Methylphenol	6.808	107	30801	187.74	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	44401	136.40	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.963	70	28365	171.56	ng/ml	98
17) 3+4-Methylphenol	6.958	107	38484	190.34	ng/ml	97
18) Hexachloroethane	7.076	201	13490	228.75	ng/ml	98
20) Nitrobenzene	7.129	77	37240	162.74	ng/ml	98
22) Isophorone	7.365	82	78525	179.67	ng/ml	96
23) 2-Nitrophenol	7.450	139	16298	145.34	ng/ml	96
24) 2,4-Dimethylphenol	7.488	122	31880	191.29	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.579	93	49149	201.85	ng/ml	96
26) Benzoic acid	7.573	105	338	307.20	ng/ml	78
27) 2,4-Dichlorophenol	7.691	162	30346	210.14	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.776	180	45007	257.44	ng/ml	95
29) Naphthalene	7.857	128	141239	228.31	ng/ml	99
30) 4-Chloroaniline	7.905	127	38526	242.70	ng/ml	98
31) Hexachlorobutadiene	7.990	225	24136	258.88	ng/ml	95
32) 4-Chloro-3-methylphenol	8.386	107	26469	152.19	ng/ml	98
33) 2-Methylnaphthalene	8.557	142	98607	233.48	ng/ml	98
34) 1-Methylnaphthalene	8.654	142	95459	235.18	ng/ml	99
36) Hexachlorocyclopentadiene	8.729	237	17504	180.83	ng/ml	95
37) 2,4,6-Trichlorophenol	8.841	196	18771	185.20	ng/ml	90
38) 2,4,5-Trichlorophenol	8.873	198	18422	177.11	ng/ml	88
39) 1,1'-Biphenyl	9.028	154	117826	231.84	ng/ml	99
41) 2-Chloronaphthalene	9.049	162	86117	230.86	ng/ml	100
42) 2-Nitroaniline	9.146	138	16161	130.13	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.188	156	87215	229.24	ng/ml	96

See MI

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

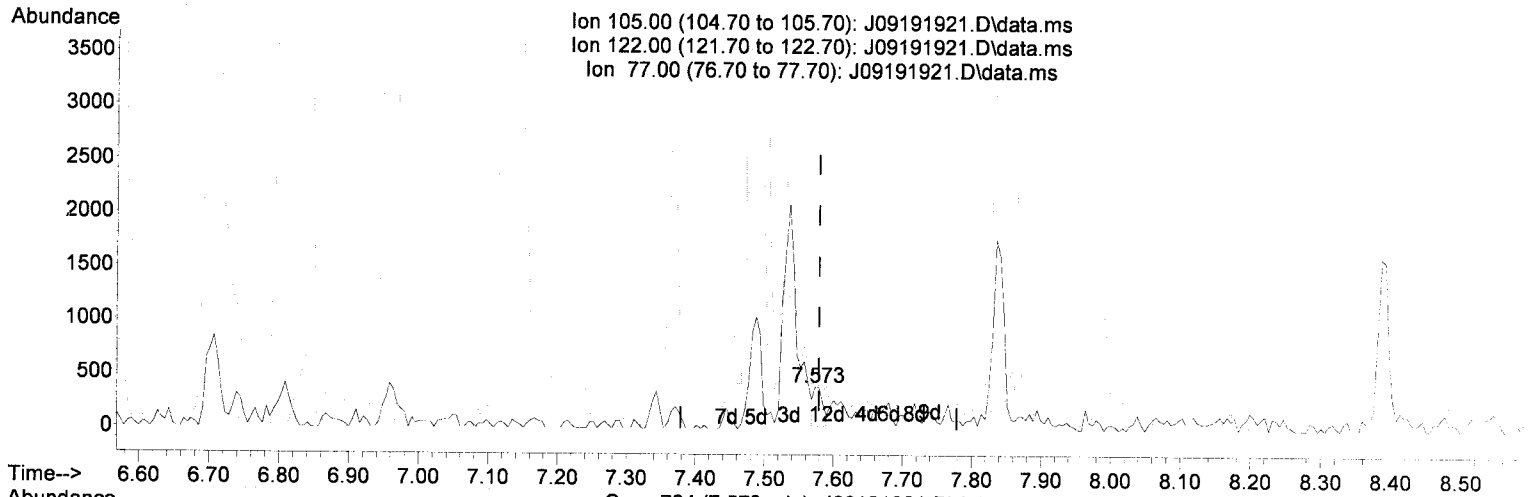
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	5164	89.07	ng/ml	88
45) Dimethyl phthalate	9.328	163	96043	219.51	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	7621	114.64	ng/ml	85
47) 2,6-Dinitrotoluene	9.386	165	16812	178.66	ng/ml	87
48) 1,2-Dinitrobenzene	9.440	168	7269	164.92	ng/ml	83
49) Acenaphthylene	9.472	152	136163	227.72	ng/ml	99
50) 3-Nitroaniline	9.558	138	15637	168.60	ng/ml	93
51) Acenaphthene	9.648	153	89211	230.16	ng/ml	98
52) 2,4-Dinitrophenol	9.665	184	796	162.82	ng/ml	85
53) 4-Nitrophenol	9.723	139	5790	112.91	ng/ml	91
54) 2,4-Dinitrotoluene	9.798	165	16915	139.67	ng/ml	99
55) Dibenzofuran	9.825	168	123476	233.62	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	13193	177.32	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.948	232	16040	193.66	ng/ml	99
58) Diethyl phthalate	10.044	149	92047	220.62	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	78195	231.45	ng/ml	96
60) Fluorene	10.173	166	95574	229.60	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.167	204	45790	236.70	ng/ml	98
62) 4-Nitroaniline	10.178	138	12832	152.25	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.215	198	2504	115.96	ng/ml	91
65) N-Nitrosodiphenylamine	10.285	169	77183	228.56	ng/ml	96
66) Azobenzene (1,2-DPH)	10.328	77	76676	171.16	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.670	248	26212	231.88	ng/ml	97
69) Hexachlorobenzene	10.745	284	30519	234.65	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	7638	155.67	ng/ml	93
71) Phenanthrene	11.151	178	134878	224.63	ng/ml	96
72) Anthracene	11.205	178	132343	224.01	ng/ml	97
73) Carbazole	11.365	167	110985	227.54	ng/ml	99
74) Di-n-butyl phthalate	11.718	149	138215	201.89	ng/ml	98
75) Fluoranthene	12.424	202	138551	220.63	ng/ml	99
76) Benzidine	12.580	184	43242	323.12	ng/ml	97
77) Pyrene	12.713	202	143586	228.88	ng/ml	99
80) Butyl benzyl phthalate	13.735	149	42397	121.22	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.911	129	37581	119.87	ng/ml	98
82) 3,3-Dichlorobenzidine	14.858	252	53778	529.15	ng/ml	97
83) Benz(a)anthracene	14.885	228	124472	190.07	ng/ml	97
84) Chrysene	14.965	228	120574	199.57	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.072	149	58143	125.67	ng/ml	100
87) Di-n-octyl phthalate	16.741	149	75567	125.21	ng/ml	98
88) Benzo(b)fluoranthene	17.479	252	113080	171.41	ng/ml	95
89) Benzo(k)fluoranthene	17.538	252	115987	185.29	ng/ml	97
90) Benzo(b+k)fluoranthene	17.479	252	234995	358.49	ng/ml	95
91) Benzo(e)pyrene	18.126	252	113143	175.23	ng/ml	91
92) Benzo(a)pyrene	18.244	252	99882	168.29	ng/ml	97
93) Perylene	18.447	252	100217	178.11	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.784	276	100411	205.68	ng/ml	96
96) Dibenz(a,h)anthracene	20.854	278	95316	217.63	ng/ml	99
97) Benzo(g,h,i)perylene	21.319	276	101188	215.24	ng/ml	98

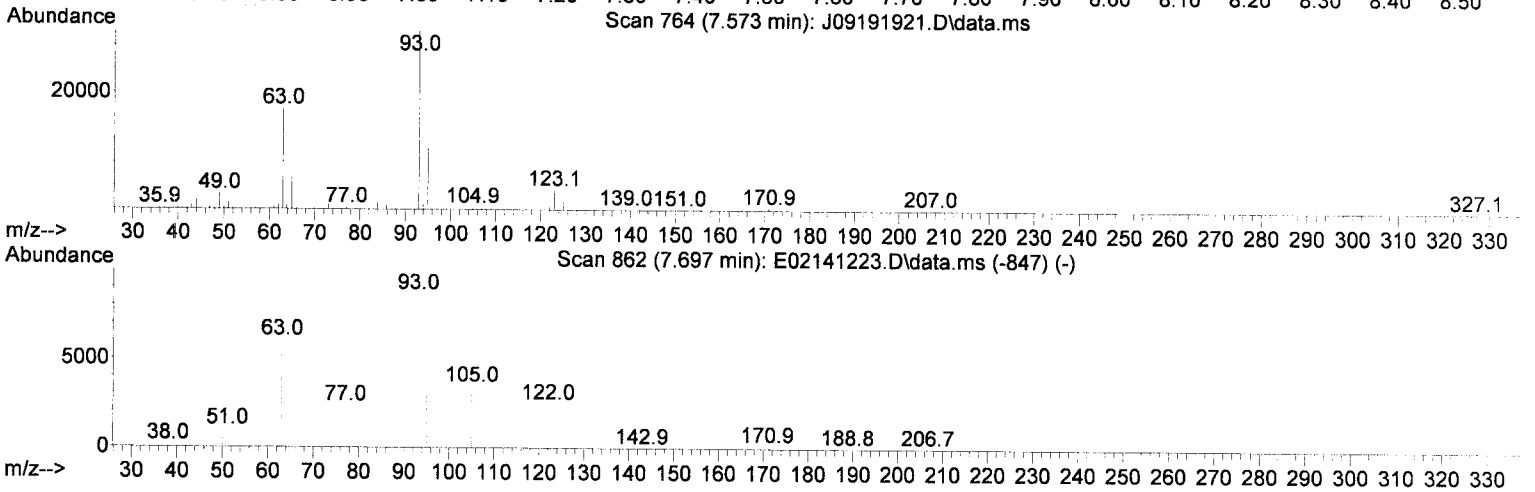
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191921.D\data.ms

(26) Benzoic acid (T)

7.573min (-0.005) 307.20 ng/ml

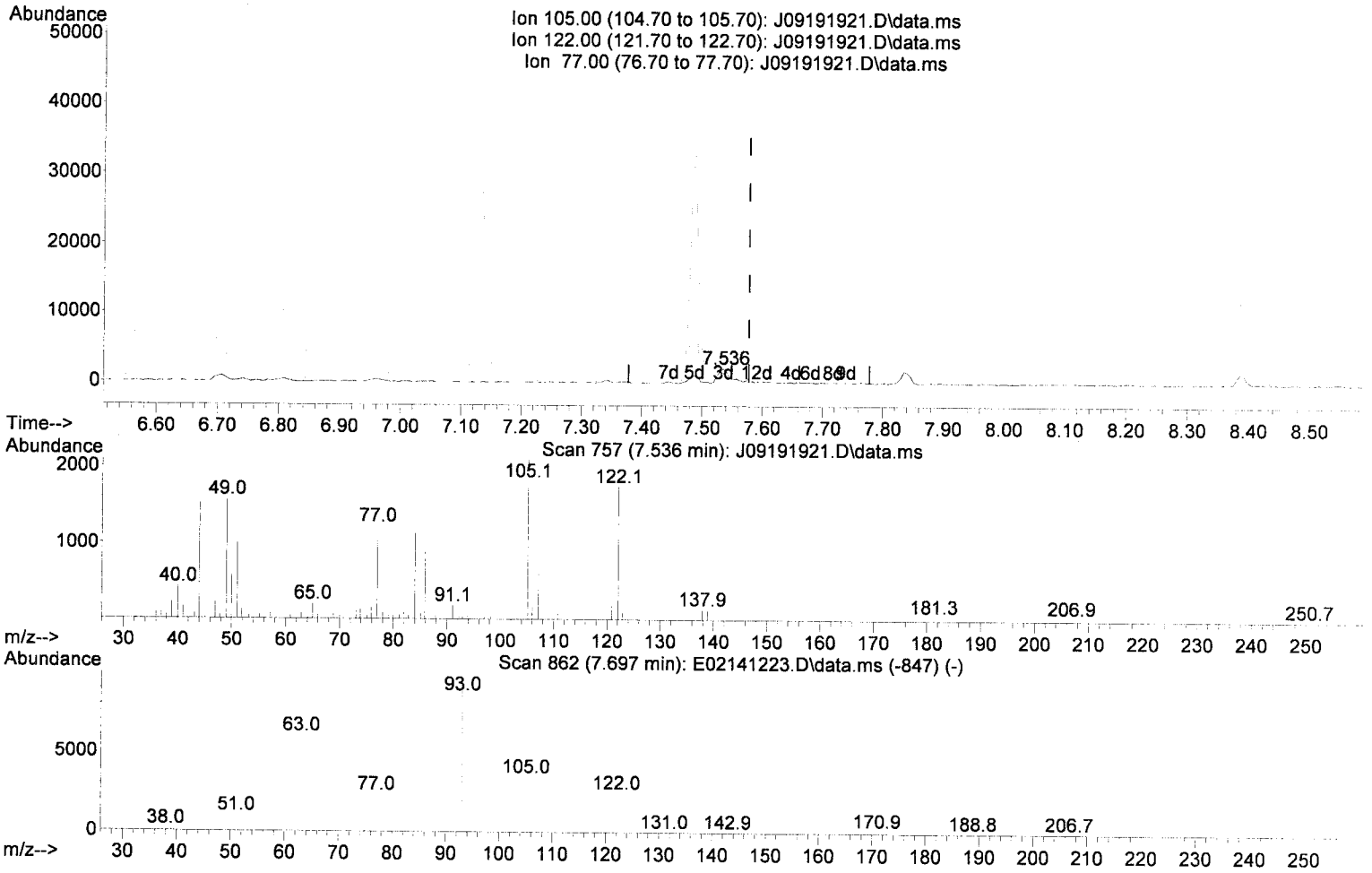
response 338

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	119.23
77.00	72.00	82.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191921.D\data.ms

(26) Benzoic acid (T)

7.536min (-0.043) 341.24 ng/ml m

response 3335

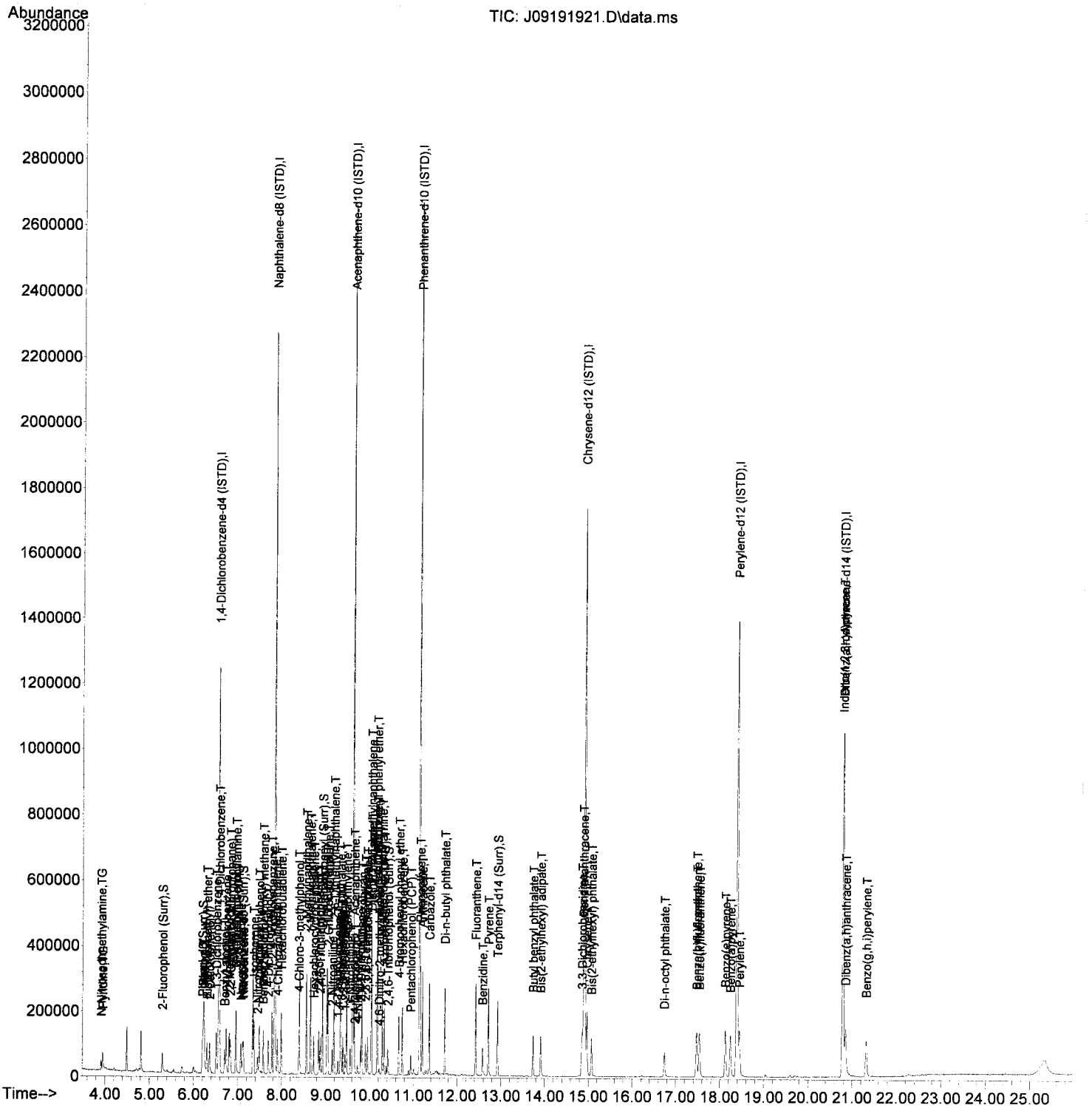
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	83.48
77.00	72.00	58.50
0.00	0.00	0.00

9/20/2019

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	299020	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1217422	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	625555	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1123094	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.917	240	1146727	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1149483	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	954508	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.306	112	95687	471.80	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	124621	478.38	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	98184	411.28	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	272047	592.23	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	33701	639.58	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	285146	508.67	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.931	74	52485m	377.75	ng/ml#	
3) Pyridine	3.958	79	83583	352.88	ng/ml	96
6) Phenol	6.215	94	136576	461.22	ng/ml	97
7) Aniline	6.247	93	124901	471.84	ng/ml	97
8) Bis(2-chloroethyl) ether	6.306	93	115667	438.55	ng/ml	97
9) 2-Chlorophenol	6.365	128	113634	532.72	ng/ml	95
10) 1,3-Dichlorobenzene	6.514	146	126152	546.89	ng/ml	98
11) 1,4-Dichlorobenzene	6.589	146	123497	551.64	ng/ml	99
12) Benzyl alcohol	6.702	108	59263	433.38	ng/ml	97
13) 1,2-Dichlorobenzene	6.739	146	124976	555.38	ng/ml	99
14) 2-Methylphenol	6.808	107	86329	503.48	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	112933	331.95	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.964	70	74700	432.29	ng/ml	99
17) 3+4-Methylphenol	6.958	107	107685	509.59	ng/ml	99
18) Hexachloroethane	7.076	201	36961	599.67	ng/ml	99
20) Nitrobenzene	7.129	77	100238	419.13	ng/ml	95
22) Isophorone	7.370	82	207804	470.36	ng/ml	99
23) 2-Nitrophenol	7.450	139	54694	414.23	ng/ml	98
24) 2,4-Dimethylphenol	7.488	122	86093	511.06	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.579	93	131344	533.62	ng/ml	98
26) Benzoic acid	7.605	105	979	314.37	ng/ml#	66
27) 2,4-Dichlorophenol	7.691	162	89833	615.41	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.777	180	113367	641.50	ng/ml	99
29) Naphthalene	7.857	128	361018	577.32	ng/ml	99
30) 4-Chloroaniline	7.905	127	106945	650.30	ng/ml	98
31) Hexachlorobutadiene	7.991	225	61063	647.92	ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	84667	481.59	ng/ml	100
33) 2-Methylnaphthalene	8.557	142	253485	593.76	ng/ml	98
34) 1-Methylnaphthalene	8.659	142	244797	596.63	ng/ml	99
36) Hexachlorocyclopentadiene	8.723	237	51180	517.04	ng/ml	98
37) 2,4,6-Trichlorophenol	8.841	196	59985	553.45	ng/ml	98
38) 2,4,5-Trichlorophenol	8.873	198	59608	560.44	ng/ml	98
39) 1,1'-Biphenyl	9.028	154	300735	578.68	ng/ml	99
41) 2-Chloronaphthalene	9.050	162	223930	587.06	ng/ml	97
42) 2-Nitroaniline	9.146	138	55795	439.35	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	219677	564.67	ng/ml	99

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

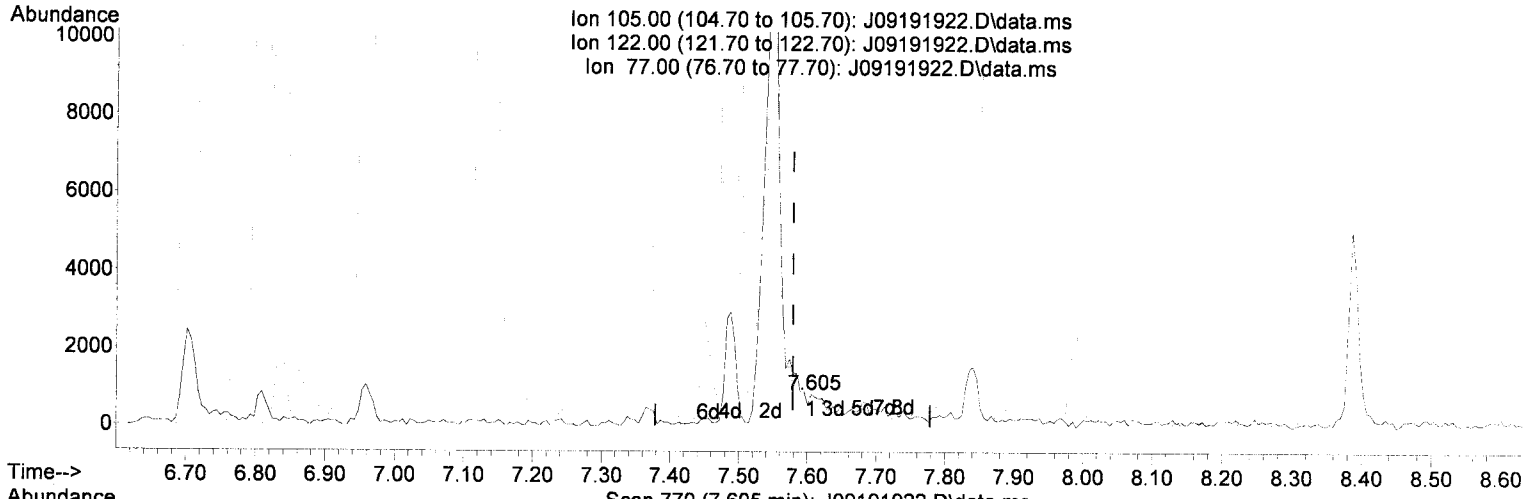
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	19841	334.66	ng/ml	93
45) Dimethyl phthalate	9.328	163	250192	559.21	ng/ml	100
46) 1,3-Dinitrobenzene	9.354	168	28132	413.82	ng/ml	96
47) 2,6-Dinitrotoluene	9.387	165	51160	531.66	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	22807	506.03	ng/ml	94
49) Acenaphthylene	9.472	152	361152	590.67	ng/ml	99
50) 3-Nitroaniline	9.558	138	44178	446.02	ng/ml	100
51) Acenaphthene	9.649	153	224540	566.51	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	4568	255.77	ng/ml	95
53) 4-Nitrophenol	9.723	139	25654	375.44	ng/ml	94
54) 2,4-Dinitrotoluene	9.798	165	57760	466.41	ng/ml	98
55) Dibenzofuran	9.825	168	310051	573.66	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.905	232	46260	542.89	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	9.948	232	50476	572.73	ng/ml	99
58) Diethyl phthalate	10.044	149	232776	545.61	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.034	170	199252	576.75	ng/ml	99
60) Fluorene	10.173	166	244304	573.93	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.167	204	117369	593.31	ng/ml	99
62) 4-Nitroaniline	10.178	138	36541	423.99	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.216	198	14208	319.68	ng/ml	90
65) N-Nitrosodiphenylamine	10.285	169	197334	571.35	ng/ml	99
66) Azobenzene (1,2-DPH)	10.328	77	199437	435.30	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.670	248	66857	578.28	ng/ml	97
69) Hexachlorobenzene	10.745	284	82813	622.55	ng/ml	99
70) Pentachlorophenol (PCP)	10.938	266	30348	512.59	ng/ml	94
71) Phenanthrene	11.157	178	343840	559.91	ng/ml	98
72) Anthracene	11.205	178	335865	555.84	ng/ml	99
73) Carbazole	11.366	167	281210	563.69	ng/ml	99
74) Di-n-butyl phthalate	11.719	149	369981	528.41	ng/ml	99
75) Fluoranthene	12.425	202	369455	575.22	ng/ml	98
76) Benzidine	12.580	184	152022	962.70	ng/ml	100
77) Pyrene	12.713	202	375136	584.68	ng/ml	99
80) Butyl benzyl phthalate	13.735	149	139695	388.99	ng/ml	98
81) Bis(2-ethylhexyl) adipate	13.911	129	126449	392.82	ng/ml	98
82) 3,3-Dichlorobenzidine	14.858	252	110907	1341.90	ng/ml	97
83) Benz(a)anthracene	14.890	228	327557	487.16	ng/ml	98
84) Chrysene	14.970	228	313539	505.43	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.077	149	202494	426.28	ng/ml	96
87) Di-n-octyl phthalate	16.746	149	281414	361.89	ng/ml	98
88) Benzo(b)fluoranthene	17.479	252	318669	457.74	ng/ml	99
89) Benzo(k)fluoranthene	17.543	252	321918	487.31	ng/ml	99
90) Benzo(b+k)fluoranthene	17.543	252	653019	943.99	ng/ml	99
91) Benzo(e)pyrene	18.132	252	316818	464.95	ng/ml	99
92) Benzo(a)pyrene	18.249	252	295305	471.49	ng/ml	97
93) Perylene	18.452	252	273199	460.10	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.784	276	279363	520.62	ng/ml	99
96) Dibenz(a,h)anthracene	20.859	278	270778	562.60	ng/ml	97
97) Benzo(g,h,i)perylene	21.325	276	291609	564.45	ng/ml	96

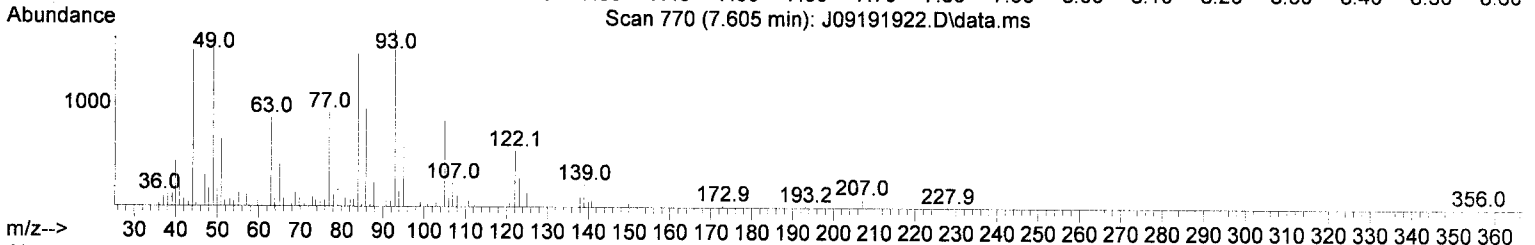
(#) = qualifier out of range (m) = manual integration (+) = signals summed

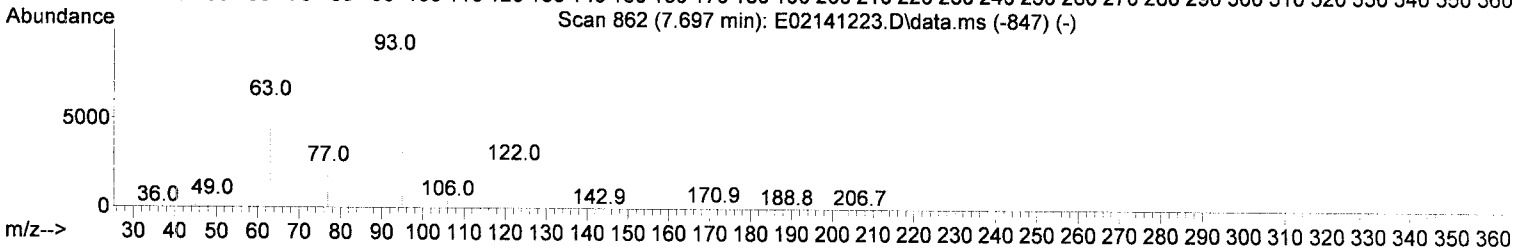
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191922.D\data.ms

(26) Benzoic acid (T)

7.605min (+ 0.027) 314.37 ng/ml

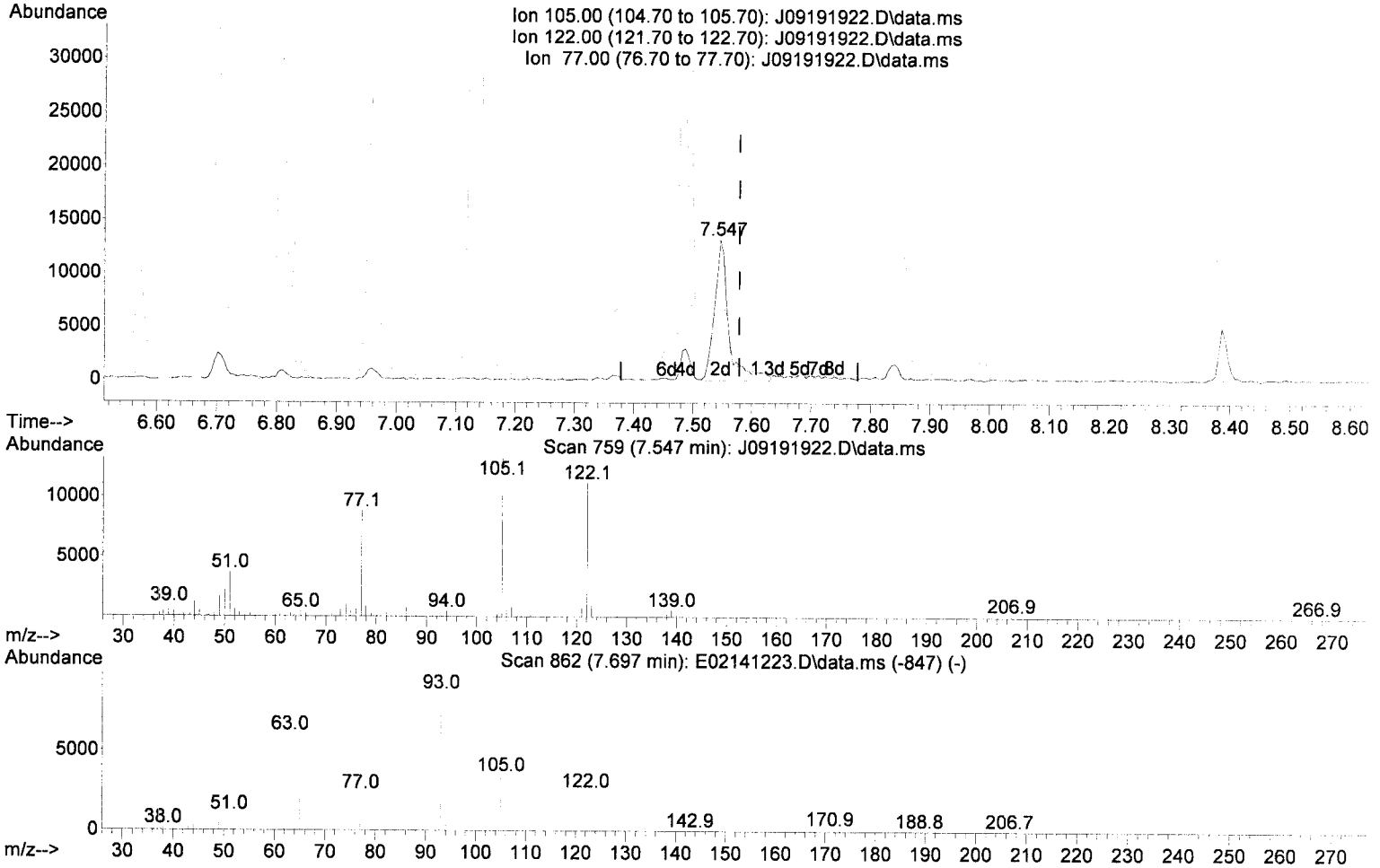
response 979

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	66.67
77.00	72.00	109.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191922.D\data.ms

(26) Benzoic acid (T)

7.547min (-0.032) 552.34 ng/ml m

response 22389

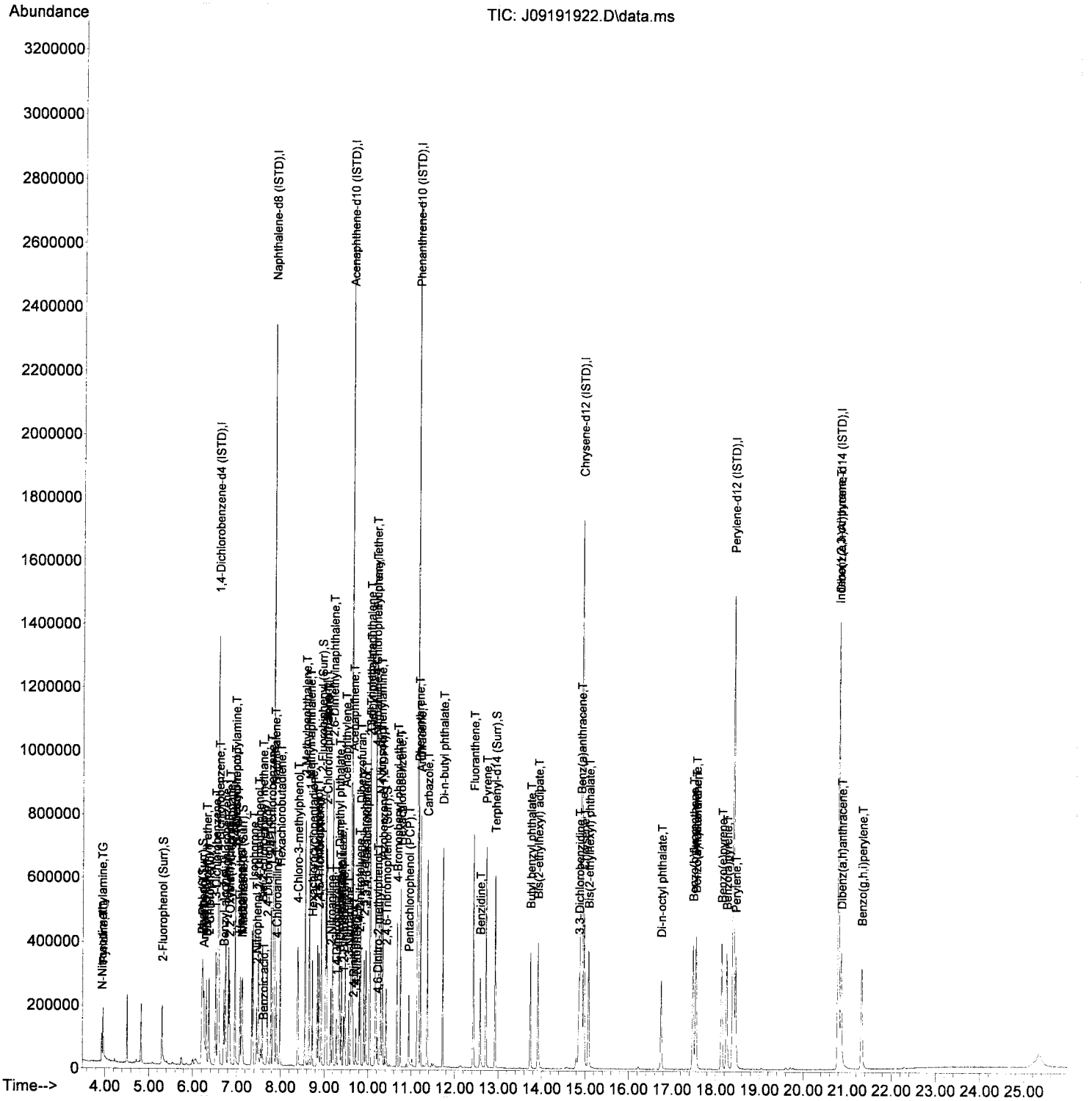
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	83.94
77.00	72.00	66.43
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	283511	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1143968	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	583825	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1065192	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.917	240	1048464	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1042709	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	886236	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.289	112	179108	931.44	ng/ml	0.00
5) Phenol-d6(Surr)	6.204	99	238398	965.20	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	187377	827.84	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	482290	1124.97	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	65055	1301.74	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	507926	991.00	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.883	74	104763m	795.26	ng/ml	
3) Pyridine	3.904	79	182180	811.23	ng/ml	100
6) Phenol	6.215	94	261231	930.43	ng/ml	100
7) Aniline	6.241	93	189393	754.62	ng/ml	100
8) Bis(2-chloroethyl) ether	6.306	93	237931	951.45	ng/ml	100
9) 2-Chlorophenol	6.364	128	213396	1055.12	ng/ml	100
10) 1,3-Dichlorobenzene	6.514	146	230358	1053.27	ng/ml	100
11) 1,4-Dichlorobenzene	6.584	146	229877	1082.99	ng/ml	100
12) Benzyl alcohol	6.701	108	124850	962.84	ng/ml	100
13) 1,2-Dichlorobenzene	6.739	146	227139	1064.59	ng/ml	100
14) 2-Methylphenol	6.808	107	162716	1000.89	ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	204366	633.56	ng/ml	100
16) N-Nitrosodi-n-propylamine	6.963	70	136460	832.90	ng/ml	100
17) 3+4-Methylphenol	6.958	107	206745	1031.88	ng/ml	100
18) Hexachloroethane	7.076	201	68545	1172.94	ng/ml	100
20) Nitrobenzene	7.129	77	188065	829.39	ng/ml	100
22) Isophorone	7.370	82	377941	910.39	ng/ml	100
23) 2-Nitrophenol	7.450	139	114845	900.33	ng/ml	100
24) 2,4-Dimethylphenol	7.488	122	164250	1037.61	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.579	93	236290	1021.63	ng/ml	100
26) Benzoic acid	7.579	105	99342	1429.28	ng/ml	100
27) 2,4-Dichlorophenol	7.691	162	173249	1263.07	ng/ml	100
28) 1,2,4-Trichlorobenzene	7.782	180	206953	1246.26	ng/ml	100
29) Naphthalene	7.857	128	638989	1087.45	ng/ml	100
30) 4-Chloroaniline	7.905	127	199585	1281.62	ng/ml	100
31) Hexachlorobutadiene	7.990	225	113762	1284.60	ng/ml	100
32) 4-Chloro-3-methylphenol	8.386	107	162469	983.46	ng/ml	100
33) 2-Methylnaphthalene	8.557	142	453493	1130.47	ng/ml	100
34) 1-Methylnaphthalene	8.659	142	430139	1115.66	ng/ml	100
36) Hexachlorocyclopentadiene	8.728	237	99801	1080.30	ng/ml	100
37) 2,4,6-Trichlorophenol	8.841	196	117480	1142.89	ng/ml	100
38) 2,4,5-Trichlorophenol	8.873	198	113799	1146.42	ng/ml	100
39) 1,1'-Biphenyl	9.028	154	533233	1099.40	ng/ml	100
41) 2-Chloronaphthalene	9.049	162	386877	1086.74	ng/ml	100
42) 2-Nitroaniline	9.146	138	113482	957.47	ng/ml	100
43) 2,6-Dimethylnaphthalene	9.188	156	389863	1073.75	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

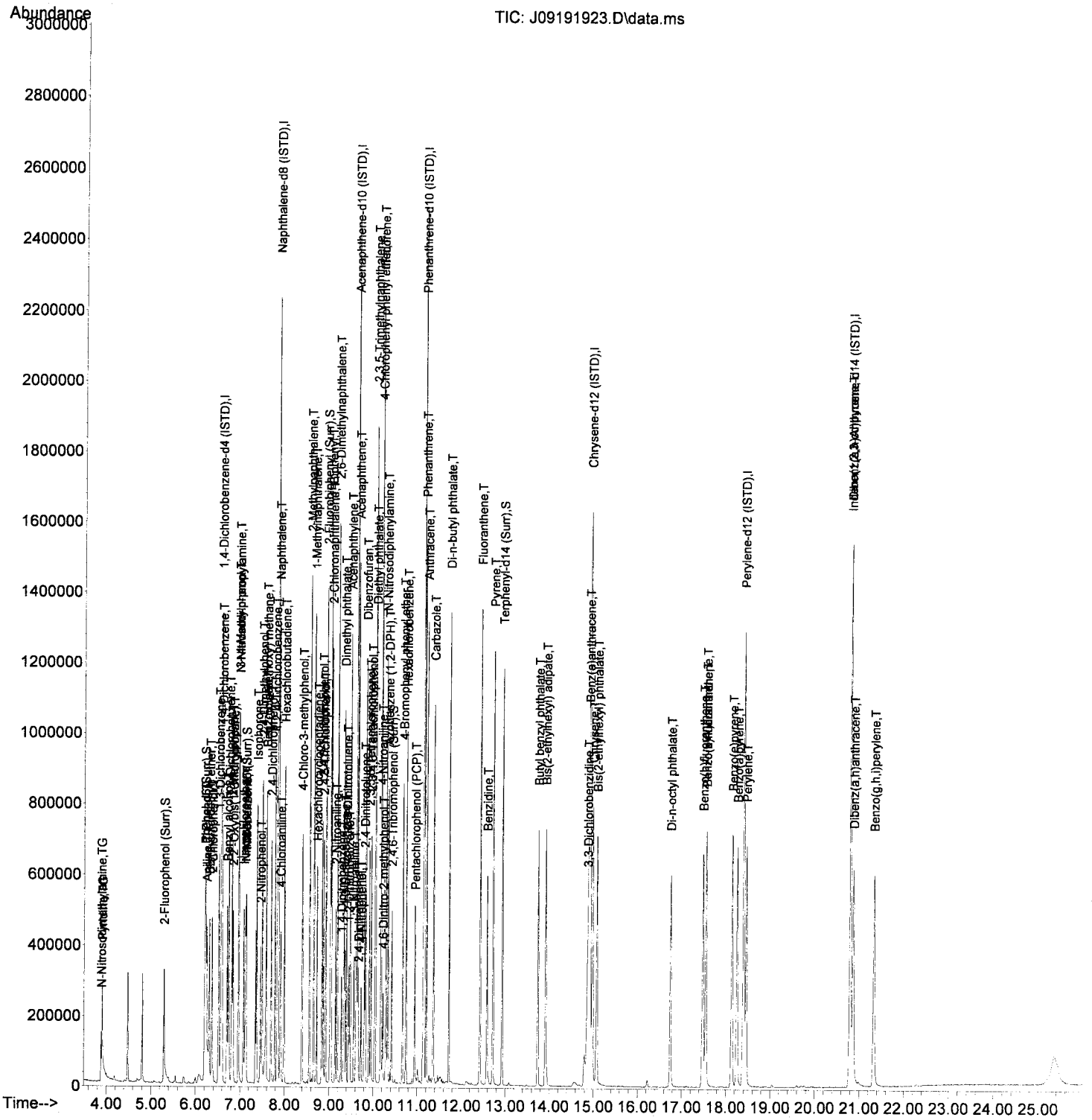
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	44207	798.94	ng/ml	100
45) Dimethyl phthalate	9.333	163	449574	1076.67	ng/ml	100
46) 1,3-Dinitrobenzene	9.354	168	57342	903.80	ng/ml	100
47) 2,6-Dinitrotoluene	9.392	165	97373	1084.24	ng/ml	100
48) 1,2-Dinitrobenzene	9.445	168	45222	1075.08	ng/ml	100
49) Acenaphthylene	9.472	152	637470	1117.11	ng/ml	100
50) 3-Nitroaniline	9.563	138	76212	868.39	ng/ml	100
51) Acenaphthene	9.648	153	399993	1081.31	ng/ml	100
52) 2,4-Dinitrophenol	9.664	184	18042	611.46	ng/ml	100
53) 4-Nitrophenol	9.723	139	58727	860.32	ng/ml	100
54) 2,4-Dinitrotoluene	9.798	165	116247	1005.79	ng/ml	100
55) Dibenzofuran	9.825	168	550893	1092.13	ng/ml	100
56) 2,3,5,6-Tetrachlorophenol	9.905	232	91879	1120.36	ng/ml	100
57) 2,3,4,6-Tetrachlorophenol	9.948	232	101167	1210.65	ng/ml	100
58) Diethyl phthalate	10.050	149	426259	1070.54	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	10.039	170	355247	1101.79	ng/ml	100
60) Fluorene	10.173	166	426158	1072.71	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	209713	1135.90	ng/ml	100
62) 4-Nitroaniline	10.183	138	63138	784.97	ng/ml	100
63) 4,6-Dinitro-2-methylph...	10.215	198	38878	789.70	ng/ml	100
65) N-Nitrosodiphenylamine	10.285	169	350586	1070.25	ng/ml	100
66) Azobenzene (1,2-DPH)	10.328	77	355316	817.68	ng/ml	100
68) 4-Bromophenyl phenyl e...	10.670	248	125621	1145.62	ng/ml	100
69) Hexachlorobenzene	10.745	284	152211	1206.46	ng/ml	100
70) Pentachlorophenol (PCP)	10.943	266	65122	1104.57	ng/ml	100
71) Phenanthrene	11.157	178	610421	1048.04	ng/ml	100
72) Anthracene	11.210	178	608748	1062.21	ng/ml	100
73) Carbazole	11.365	167	458747	969.56	ng/ml	100
74) Di-n-butyl phthalate	11.718	149	683398	1029.09	ng/ml	100
75) Fluoranthene	12.424	202	669325	1098.75	ng/ml	100
76) Benzidine	12.579	184	302104	1915.60	ng/ml	100
77) Pyrene	12.713	202	683508	1123.21	ng/ml	100
80) Butyl benzyl phthalate	13.735	149	279356	850.79	ng/ml	100
81) Bis(2-ethylhexyl) adipate	13.911	129	247877	842.20	ng/ml	100
82) 3,3-Dichlorobenzidine	14.863	252	174855	2557.16	ng/ml	100
83) Benz(a)anthracene	14.890	228	577553	939.46	ng/ml	100
84) Chrysene	14.976	228	556735	981.53	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.072	149	389483	896.77	ng/ml	100
87) Di-n-octyl phthalate	16.746	149	592055	790.12	ng/ml	100
88) Benzo(b)fluoranthene	17.479	252	578435	915.96	ng/ml	100
89) Benzo(k)fluoranthene	17.548	252	582389	971.88	ng/ml	100
90) Benzo(b+k)fluoranthene	17.548	252	1182652	1884.67	ng/ml	100
91) Benzo(e)pyrene	18.137	252	576088	932.03	ng/ml	100
92) Benzo(a)pyrene	18.254	252	535317	942.21	ng/ml	100
93) Perylene	18.458	252	476752	885.12	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.790	276	510691	1025.03	ng/ml	100
96) Dibenz(a,h)anthracene	20.865	278	489557	1095.51	ng/ml	100
97) Benzo(g,h,i)perylene	21.325	276	538150	1121.91	ng/ml	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	285023	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1095362	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	586466	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1091855	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.922	240	1089712	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.404	264	1076142	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.800	292	949148	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.305	112	379802	1964.65	ng/ml	0.02
5) Phenol-d6(Surr)	6.209	99	477001	1920.99	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	365358	1605.60	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	917452	2130.37	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.424	330	142266	2777.20	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.927	244	1038865	1950.18	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.941	74	217151	1639.66	ng/ml	99
3) Pyridine	3.958	79	392152m	1736.94	ng/ml	
6) Phenol	6.220	94	506313	1793.78	ng/ml	98
7) Aniline	6.252	93	321662	1274.83	ng/ml	97
8) Bis(2-chloroethyl) ether	6.311	93	501220	1993.67	ng/ml	99
9) 2-Chlorophenol	6.370	128	423147	2081.13	ng/ml	99
10) 1,3-Dichlorobenzene	6.519	146	464902	2114.40	ng/ml	99
11) 1,4-Dichlorobenzene	6.589	146	453326	2124.37	ng/ml	99
12) Benzyl alcohol	6.707	108	261354	2004.87	ng/ml	98
13) 1,2-Dichlorobenzene	6.744	146	442316	2062.13	ng/ml	99
14) 2-Methylphenol	6.814	107	318341	1947.77	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.840	45	366117	1128.98	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.969	70	256713	1558.56	ng/ml	99
17) 3+4-Methylphenol	6.963	107	399183	1981.79	ng/ml	98
18) Hexachloroethane	7.076	201	143490	2442.36	ng/ml	97
20) Nitrobenzene	7.135	77	365107	1601.63	ng/ml	98
22) Isophorone	7.375	82	734609	1848.05	ng/ml	100
23) 2-Nitrophenol	7.456	139	207149	1710.18	ng/ml	94
24) 2,4-Dimethylphenol	7.493	122	333523	2200.44	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.584	93	449978	2031.87	ng/ml	99
26) Benzoic acid	7.611	105	311714	3637.31	ng/ml	96
27) 2,4-Dichlorophenol	7.691	162	350635	2669.74	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	388384	2442.61	ng/ml	100
29) Naphthalene	7.862	128	1178988	2095.46	ng/ml	99
30) 4-Chloroaniline	7.915	127	372183	2483.94	ng/ml	99
31) Hexachlorobutadiene	7.990	225	208693	2461.13	ng/ml	98
32) 4-Chloro-3-methylphenol	8.392	107	338452	2139.63	ng/ml	97
33) 2-Methylnaphthalene	8.557	142	857631	2232.77	ng/ml	98
34) 1-Methylnaphthalene	8.659	142	810434	2195.32	ng/ml	99
36) Hexachlorocyclopentadiene	8.723	237	213088	2296.19	ng/ml	97
37) 2,4,6-Trichlorophenol	8.841	196	248218	2364.26	ng/ml	100
38) 2,4,5-Trichlorophenol	8.873	198	245074	2457.78	ng/ml	99
39) 1,1'-Biphenyl	9.028	154	1010736	2074.51	ng/ml	98
41) 2-Chloronaphthalene	9.049	162	759926	2125.02	ng/ml	100
42) 2-Nitroaniline	9.151	138	248865	2090.27	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.188	156	740663	2030.74	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

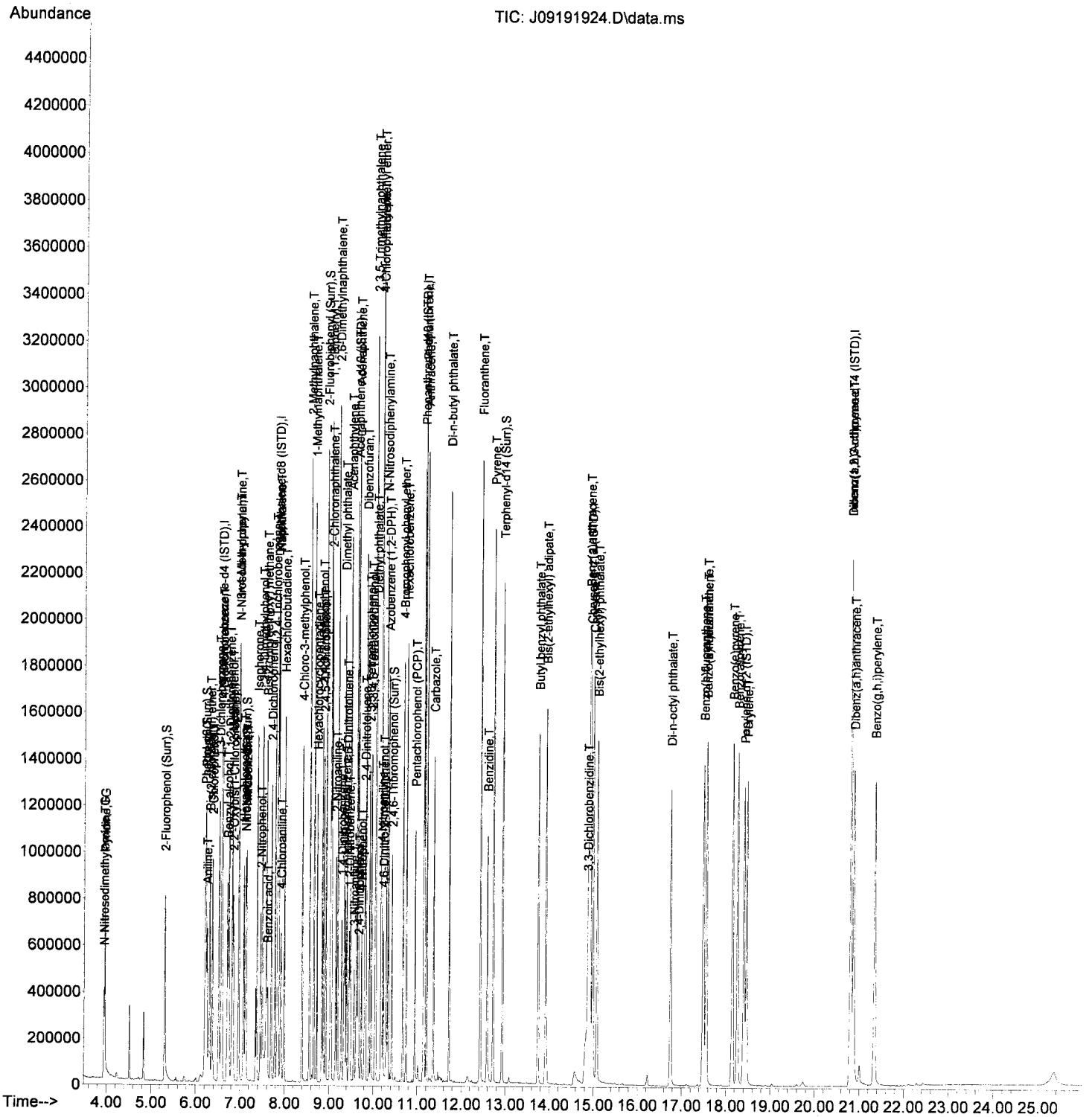
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.279	168	108019	1943.39	ng/ml	94
45) Dimethyl phthalate	9.338	163	868820	2071.34	ng/ml	99
46) 1,3-Dinitrobenzene	9.360	168	128986	2023.86	ng/ml	95
47) 2,6-Dinitrotoluene	9.392	165	201552	2234.16	ng/ml	96
48) 1,2-Dinitrobenzene	9.451	168	94079	2226.50	ng/ml	97
49) Acenaphthylene	9.477	152	1211941	2114.25	ng/ml	99
50) 3-Nitroaniline	9.563	138	114743	1447.64	ng/ml	96
51) Acenaphthene	9.654	153	770675	2074.00	ng/ml	99
52) 2,4-Dinitrophenol	9.670	184	58400	1570.56	ng/ml	93
53) 4-Nitrophenol	9.729	139	141903	1959.29	ng/ml	98
54) 2,4-Dinitrotoluene	9.804	165	257547	2218.31	ng/ml	97
55) Dibenzofuran	9.825	168	1086183	2143.62	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.905	232	201504	2389.21	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	9.953	232	213539	2500.78	ng/ml	97
58) Diethyl phthalate	10.055	149	811497	2028.87	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	685050	2115.10	ng/ml	99
60) Fluorene	10.178	166	812478	2035.94	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.173	204	412942	2226.61	ng/ml	94
62) 4-Nitroaniline	10.189	138	129234	1599.47	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.221	198	101854	1883.45	ng/ml	99
65) N-Nitrosodiphenylamine	10.290	169	659355	1963.69	ng/ml	97
66) Azobenzene (1,2-DPH)	10.333	77	684303	1536.81	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.670	248	256334	2280.59	ng/ml	96
69) Hexachlorobenzene	10.750	284	304969	2358.22	ng/ml	98
70) Pentachlorophenol (PCP)	10.943	266	154858	2438.76	ng/ml	99
71) Phenanthrene	11.157	178	1191270	1995.35	ng/ml	99
72) Anthracene	11.210	178	1187408	2021.38	ng/ml	98
73) Carbazole	11.365	167	646631	1333.27	ng/ml	99
74) Di-n-butyl phthalate	11.718	149	1348435	1980.94	ng/ml	100
75) Fluoranthene	12.430	202	1341415	2148.26	ng/ml	98
76) Benzidine	12.585	184	601547	3540.61	ng/ml	100
77) Pyrene	12.719	202	1337637	2144.45	ng/ml	98
80) Butyl benzyl phthalate	13.740	149	621242	1820.39	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.917	129	551677	1803.46	ng/ml	99
82) 3,3-Dichlorobenzidine	14.863	252	281736	4236.61	ng/ml	94
83) Benz(a)anthracene	14.895	228	1225586	1918.11	ng/ml	99
84) Chrysene	14.981	228	1148470	1948.23	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.077	149	846014	1874.18	ng/ml	98
87) Di-n-octyl phthalate	16.746	149	1439135	1774.42	ng/ml	99
88) Benzo(b)fluoranthene	17.490	252	1267321	1944.46	ng/ml	99
89) Benzo(k)fluoranthene	17.554	252	1256906	2032.34	ng/ml	98
90) Benzo(b+k)fluoranthene	17.554	252	2563432	3958.17	ng/ml	98
91) Benzo(e)pyrene	18.142	252	1218818	1910.61	ng/ml	98
92) Benzo(a)pyrene	18.260	252	1174506	2003.02	ng/ml	99
93) Perylene	18.468	252	1026574	1846.69	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.800	276	1143875	2143.74	ng/ml	99
96) Dibenz(a,h)anthracene	20.875	278	1087002	2271.22	ng/ml	97
97) Benzo(g,h,i)perylene	21.341	276	1186793	2310.18	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	305814	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1197569	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	636039	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1224924	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.938	240	1138264	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.420	264	1185024	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.827	292	1037191	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.305	112	844515	4071.54	ng/ml	0.02
5) Phenol-d6(Surr)	6.215	99	1043086	3915.14	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.124	82	786633	3221.91	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	8.932	172	1718307	3679.02	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.429	330	305471	5315.35	ng/ml	0.01
79) Terphenyl-d14 (Surr)	12.938	244	2102593	3778.67	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.925	74	480484	3381.37	ng/ml	99
3) Pyridine	3.942	79	866960	3578.93	ng/ml	99
6) Phenol	6.231	94	1097096	3622.58	ng/ml	98
7) Aniline	6.252	93	840844	3105.93	ng/ml	96
8) Bis(2-chloroethyl) ether	6.316	93	962255	3567.28	ng/ml	99
9) 2-Chlorophenol	6.370	128	902056	4134.88	ng/ml	98
10) 1,3-Dichlorobenzene	6.520	146	965051	4090.70	ng/ml	99
11) 1,4-Dichlorobenzene	6.589	146	926647	4047.22	ng/ml	99
12) Benzyl alcohol	6.712	108	581465	4157.22	ng/ml	99
13) 1,2-Dichlorobenzene	6.744	146	906070	3937.01	ng/ml	99
14) 2-Methylphenol	6.814	107	646688	3687.77	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.840	45	739481	2125.28	ng/ml	94
16) N-Nitrosodi-n-propylamine	6.980	70	504346	2853.83	ng/ml	95
17) 3+4-Methylphenol	6.969	107	797964	3692.25	ng/ml	97
18) Hexachloroethane	7.076	201	311702	4944.82	ng/ml	98
20) Nitrobenzene	7.140	77	754990	3086.77	ng/ml	95
22) Isophorone	7.381	82	1524753	3508.45	ng/ml	100
23) 2-Nitrophenol	7.456	139	481353	3856.12	ng/ml	95
24) 2,4-Dimethylphenol	7.498	122	686286	4141.39	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.589	93	900203	3717.94	ng/ml	99
26) Benzoic acid	~~7.498~~	~~105~~	~~22439~~	~~556.08~~	~~ng/ml#~~	1
27) 2,4-Dichlorophenol	7.702	162	731346	5093.24	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	805154	4631.57	ng/ml	99
29) Naphthalene	7.862	128	2214900	3600.66	ng/ml	97
30) 4-Chloroaniline	7.926	127	663200	4035.49	ng/ml	99
31) Hexachlorobutadiene	7.990	225	442903	4777.41	ng/ml	97
32) 4-Chloro-3-methylphenol	8.392	107	698064	4036.41	ng/ml	97
33) 2-Methylnaphthalene	8.563	142	1625949	3871.75	ng/ml	97
34) 1-Methylnaphthalene	8.664	142	1521185	3768.94	ng/ml	99
36) Hexachlorocyclopentadiene	8.729	237	417829	4151.52	ng/ml	96
37) 2,4,6-Trichlorophenol	8.846	196	532499	4570.85	ng/ml	99
38) 2,4,5-Trichlorophenol	8.878	198	516958	4780.35	ng/ml	99
39) 1,1'-Biphenyl	9.033	154	1845876	3493.33	ng/ml	96
41) 2-Chloronaphthalene	9.055	162	1467799	3784.57	ng/ml	99
42) 2-Nitroaniline	9.156	138	528406	4092.28	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.194	156	1385514	3502.70	ng/ml	97

See MS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.285	168	258106	4281.72	ng/ml	92
45) Dimethyl phthalate	9.349	163	1712764	3765.11	ng/ml	98
46) 1,3-Dinitrobenzene	9.370	168	289563	4189.29	ng/ml	93
47) 2,6-Dinitrotoluene	9.402	165	424265	4336.35	ng/ml	97
48) 1,2-Dinitrobenzene	9.467	168	202294	4414.41	ng/ml	92
49) Acenaphthylene	9.483	152	2224222	3577.77	ng/ml	97
50) 3-Nitroaniline	9.574	138	123216	1427.55	ng/ml	97
51) Acenaphthene	9.659	153	1433796	3557.81	ng/ml	99
52) 2,4-Dinitrophenol	9.675	184	174238	3652.38	ng/ml	99
53) 4-Nitrophenol	9.739	139	326661	3903.35	ng/ml	98
54) 2,4-Dinitrotoluene	9.814	165	555824	4414.31	ng/ml	93
55) Dibenzofuran	9.830	168	2040744	3713.59	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	9.911	232	434819	4639.23	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.959	232	451267	4758.24	ng/ml	95
58) Diethyl phthalate	10.060	149	1534521	3537.53	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.044	170	1276533	3634.12	ng/ml	98
60) Fluorene	10.183	166	1464263	3383.22	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.173	204	786385	3909.75	ng/ml	95
62) 4-Nitroaniline	10.199	138	281600	3213.60	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.232	198	258196	4046.65	ng/ml	96
65) N-Nitrosodiphenylamine	10.296	169	1182676	3139.61	ng/ml	98
66) Azobenzene (1,2-DPH)	10.338	77	1316342	2634.24	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.675	248	546207	4331.66	ng/ml	97
69) Hexachlorobenzene	10.750	284	617226	4254.30	ng/ml	98
70) Pentachlorophenol (PCP)	10.943	266	363768	4791.33	ng/ml	99
71) Phenanthrene	11.162	178	2302690	3437.96	ng/ml	97
72) Anthracene	11.216	178	2312152	3508.40	ng/ml	96
73) Carbazole	11.371	167	858655	1578.11	ng/ml	99
74) Di-n-butyl phthalate	11.724	149	2651399	3471.94	ng/ml	98
75) Fluoranthene	12.435	202	2665095	3804.46	ng/ml	97
76) Benzidine	12.596	184	1506619	7251.57	ng/ml	99
77) Pyrene	12.729	202	2681088	3831.29	ng/ml	95
80) Butyl benzyl phthalate	13.751	149	1344154	3770.70	ng/ml	94
81) Bis(2-ethylhexyl) adipate	13.922	129	1183408	3703.61	ng/ml	99
82) 3,3-Dichlorobenzidine	~~14.879~~	~~252~~	~~448650~~	~~6944.09~~	~~ng/ml~~	~~96~~
83) Benz(a)anthracene	14.912	228	2538581	3803.56	ng/ml	99
84) Chrysene	15.003	228	2370714	3850.07	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.088	149	1799096	3815.54	ng/ml	97
87) Di-n-octyl phthalate	16.762	149	3203842	3414.68	ng/ml	99
88) Benzo(b)fluoranthene	17.516	252	2803227	3905.83	ng/ml	98
89) Benzo(k)fluoranthene	17.586	252	2555733	3752.77	ng/ml	99
90) Benzo(b+k)fluoranthene	17.586	252	5439284	7627.06	ng/ml	99
91) Benzo(e)pyrene	18.174	252	2630004	3743.97	ng/ml	99
92) Benzo(a)pyrene	18.292	252	2485829	3849.85	ng/ml	99
93) Perylene	18.500	252	2164033	3535.17	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.838	276	2539375	4355.08	ng/ml	98
96) Dibenz(a,h)anthracene	20.902	278	2389624	4569.13	ng/ml	98
97) Benzo(g,h,i)perylene	21.378	276	2579448	4594.87	ng/ml	98

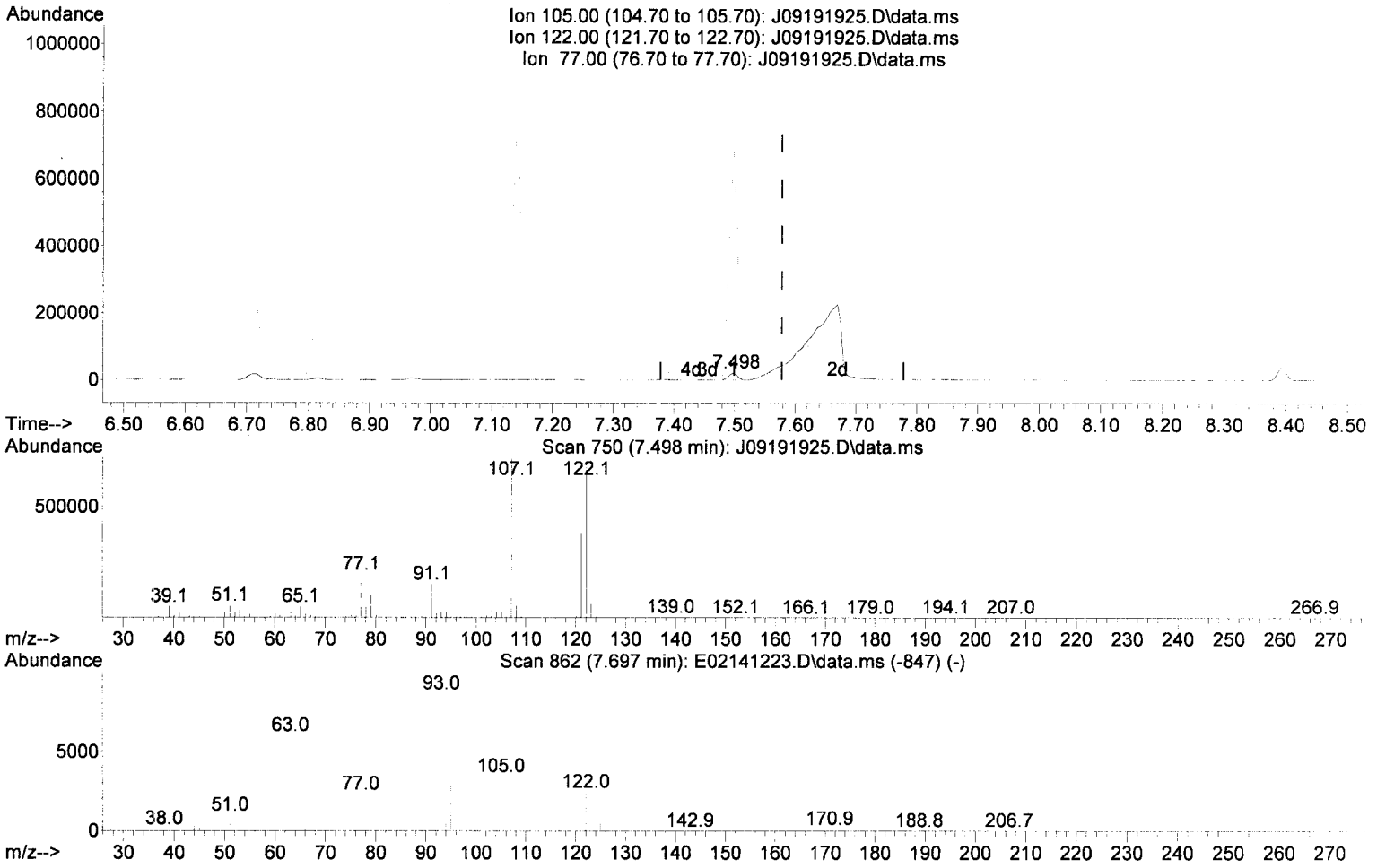
See MJ

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191925.D\data.ms

(26) Benzoic acid (T)

7.498min (-0.080) 556.98 ng/ml

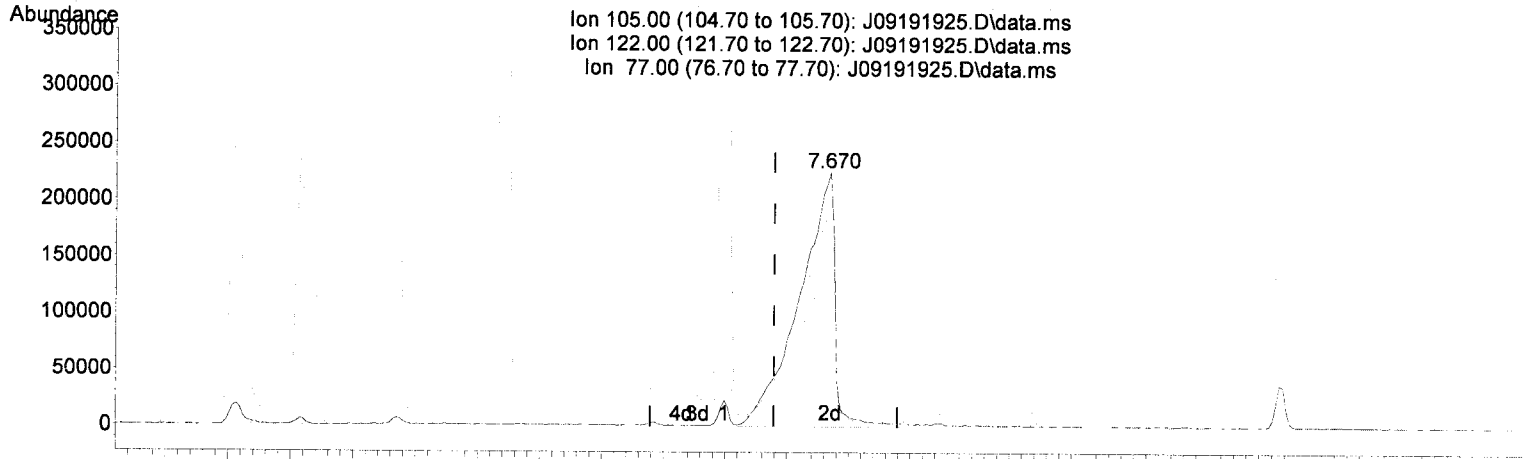
response 22439

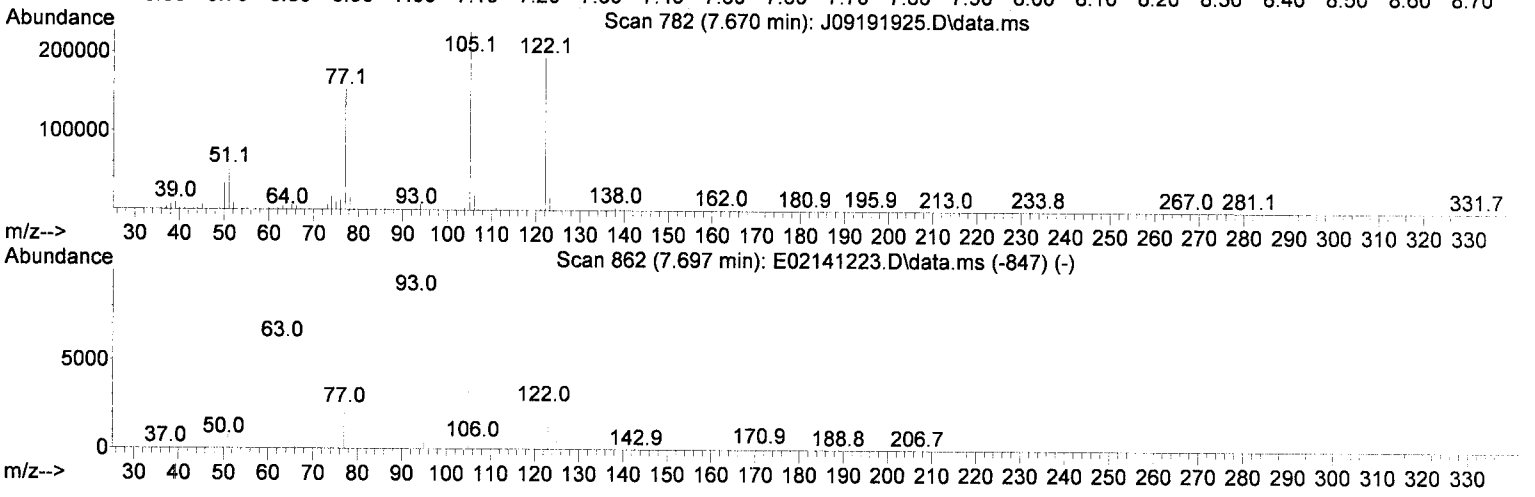
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	2944.12#
77.00	72.00	841.49#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191925.D\data.ms

(26) Benzoic acid (T)

7.670min (+ 0.091) 7780.16 ng/ml m

response 902544

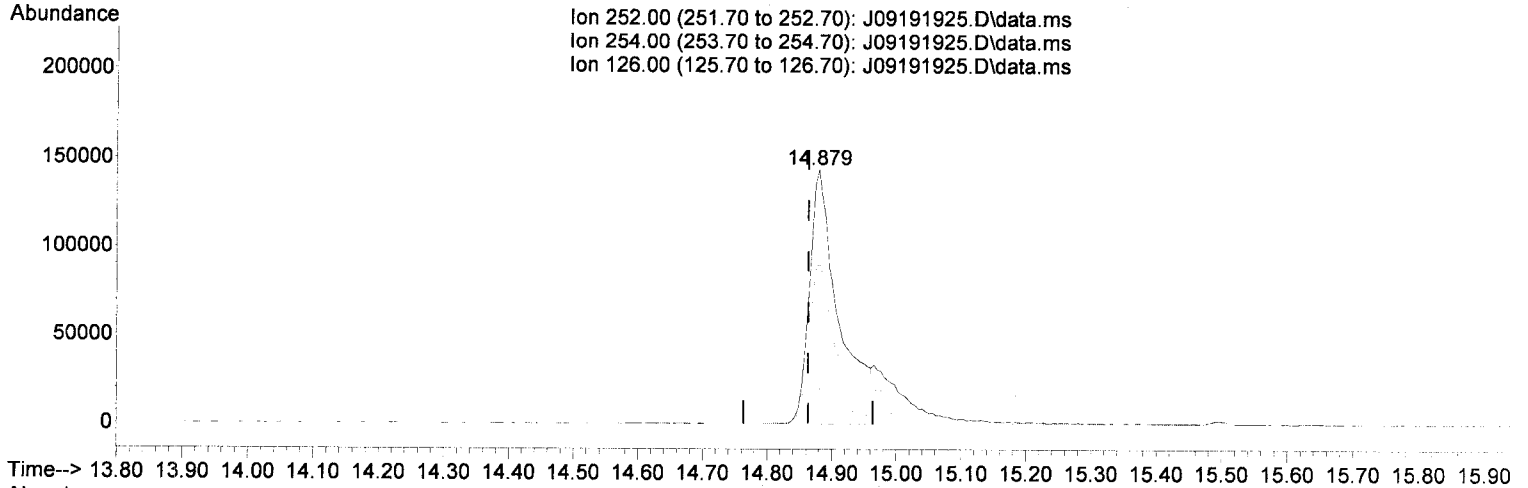
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	85.67
77.00	72.00	68.01
0.00	0.00	0.00

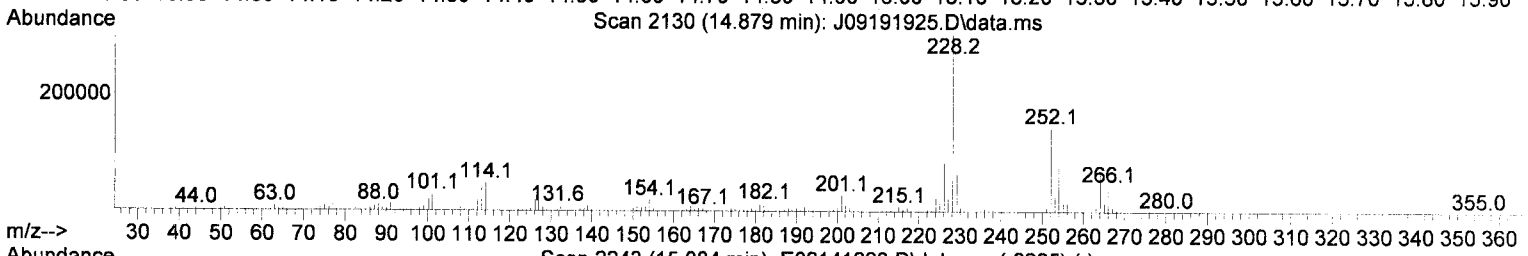
9/20/19

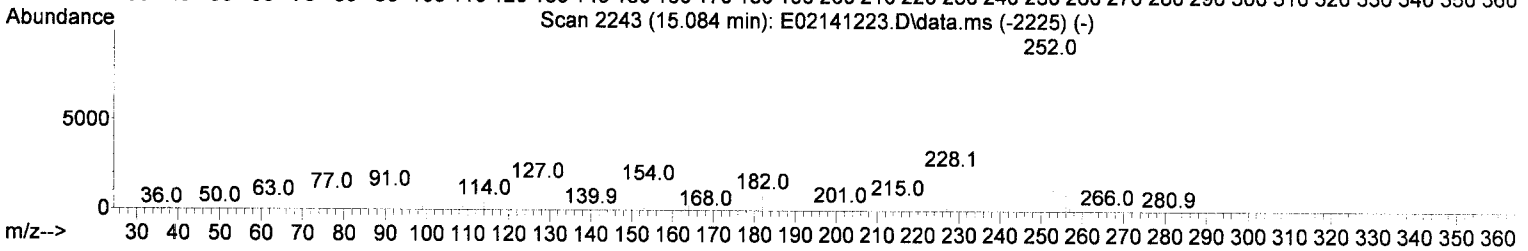
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191925.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.879min (+ 0.016) 6944.09 ng/ml

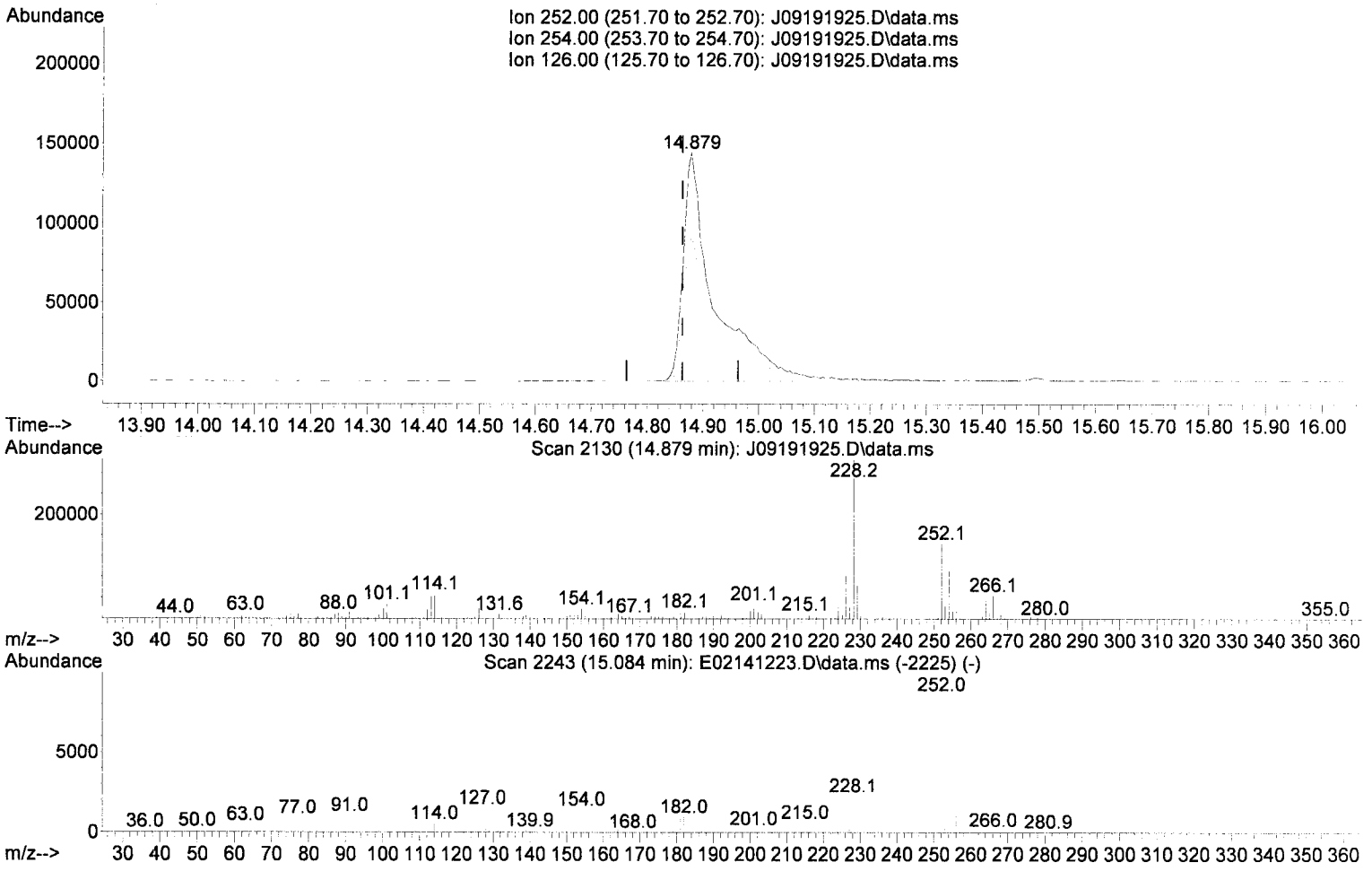
response 448650

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.38
126.00	12.00	13.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191925.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.879min (+ 0.016) 9026.86 ng/ml

response 555604

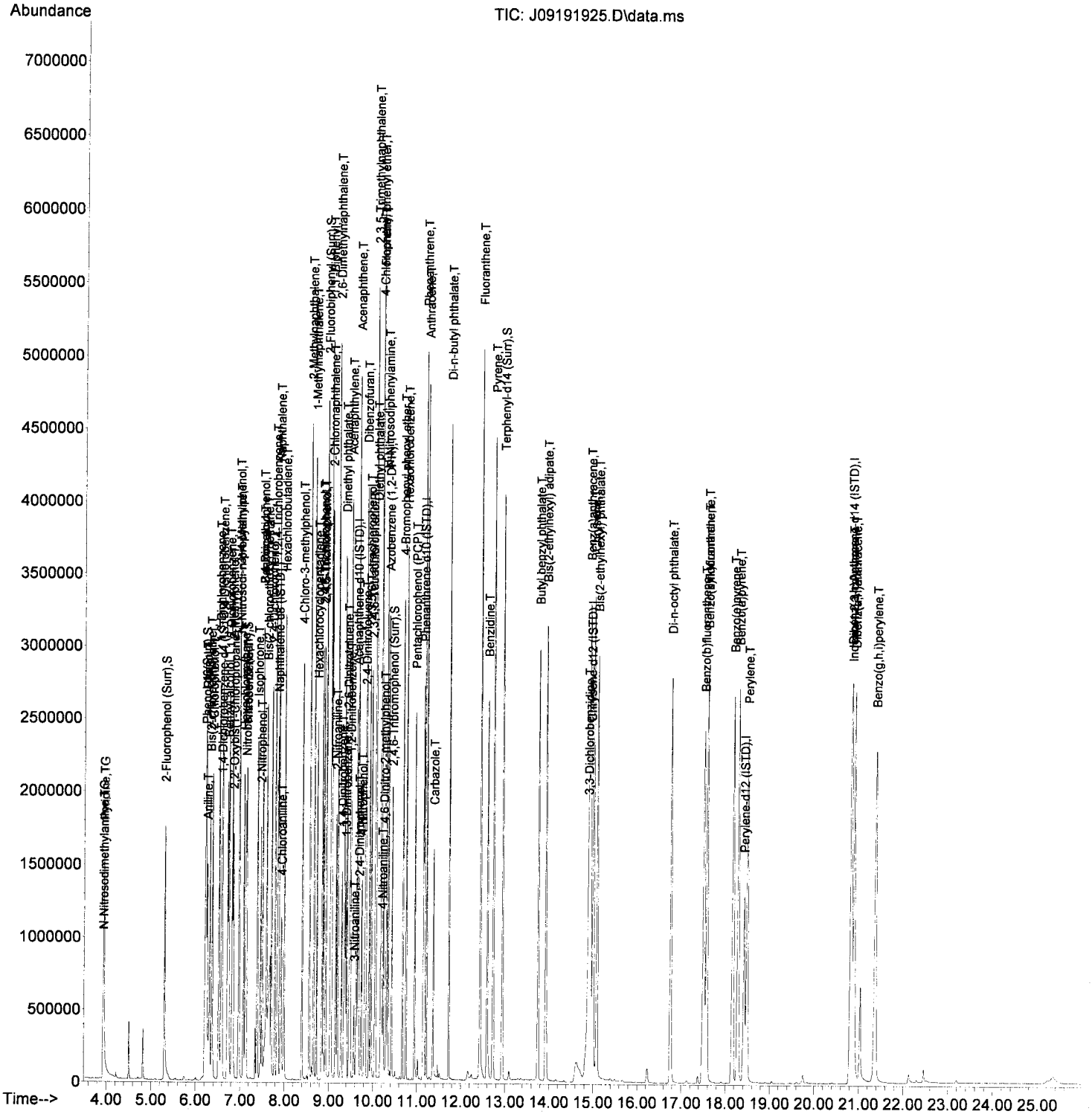
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.38
126.00	12.00	13.81
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	279602	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1094080	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	593235	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.141	188	1148482	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.944	240	1022230	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.426	264	1067597	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	20.838	292	945822	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.295	112	1150405	6066.23	ng/ml	0.00
5) Phenol-d6(Surr)	6.215	99	1391310	5711.74	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.124	82	1045001	4681.39	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	8.932	172	2148364	4931.70	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.429	330	407389	7560.59	ng/ml	0.01
79) Terphenyl-d14 (Surr)	12.938	244	2699067	5401.22	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.883	74	674636m	5192.78	ng/ml	
3) Pyridine	3.893	79	1210013m	5463.38	ng/ml	
6) Phenol	6.231	94	1432862	5174.81	ng/ml	98
7) Aniline	6.252	93	1316393	5318.37	ng/ml	95
8) Bis(2-chloroethyl) ether	6.316	93	1158478	4697.35	ng/ml	99
9) 2-Chlorophenol	6.370	128	1211719	6075.04	ng/ml	99
10) 1,3-Dichlorobenzene	6.520	146	1260484	5843.89	ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	1202300	5743.45	ng/ml	99
12) Benzyl alcohol	6.712	108	768204	6007.21	ng/ml	98
13) 1,2-Dichlorobenzene	6.739	146	1159865	5512.26	ng/ml	99
14) 2-Methylphenol	6.819	107	839569	5236.51	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	943818	2966.84	ng/ml	91
16) N-Nitrosodi-n-propylamine	6.985	70	644101	3986.31	ng/ml	94
17) 3+4-Methylphenol	6.974	107	997248	5046.94	ng/ml	99
18) Hexachloroethane	7.076	201	419784	7283.73	ng/ml	95
20) Nitrobenzene	7.145	77	977466	4371.02	ng/ml	92
22) Isophorone	7.386	82	2075603	5227.70	ng/ml	100
23) 2-Nitrophenol	7.461	139	659170	6267.15	ng/ml	93
24) 2,4-Dimethylphenol	7.504	122	932922	6162.23	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.589	93	1142883	5166.72	ng/ml	98
26) Benzoic acid	7.579	105	96795	1449.32	ng/ml	96
27) 2,4-Dichlorophenol	7.702	162	943067	7188.94	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.787	180	1041502	6557.84	ng/ml	100
29) Naphthalene	7.867	128	2711030	4824.07	ng/ml	95
30) 4-Chloroaniline	7.926	127	906180	6017.35	ng/ml	100
31) Hexachlorobutadiene	7.996	225	570722	6738.45	ng/ml	98
32) 4-Chloro-3-methylphenol	8.397	107	912303	5774.18	ng/ml	93
33) 2-Methylnaphthalene	8.563	142	2034929	5303.97	ng/ml	97
34) 1-Methylnaphthalene	8.664	142	1893325	5134.69	ng/ml	98
36) Hexachlorocyclopentadiene	8.729	237	601203	6404.52	ng/ml	95
37) 2,4,6-Trichlorophenol	8.846	196	713503	6449.67	ng/ml	99
38) 2,4,5-Trichlorophenol	8.884	198	699105	6931.12	ng/ml	99
39) 1,1'-Biphenyl	9.039	154	2268485	4602.89	ng/ml	95
41) 2-Chloronaphthalene	9.060	162	1860060	5142.02	ng/ml	98
42) 2-Nitroaniline	9.162	138	739914	6143.79	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.199	156	1742370	4722.69	ng/ml	98

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.290	168	365105	6493.74 ng/ml	88
45) Dimethyl phthalate	9.354	163	2223667	5240.92 ng/ml	97
46) 1,3-Dinitrobenzene	9.381	168	407082	6314.46 ng/ml	91
47) 2,6-Dinitrotoluene	9.408	165	575872	6310.58 ng/ml	96
48) 1,2-Dinitrobenzene	9.472	168	266233	6228.85 ng/ml	93
49) Acenaphthylene	9.483	152	2704211	4663.72 ng/ml	95
50) 3-Nitroaniline	9.579	138	180797	Below Cal	97
51) Acenaphthene	9.659	153	1803278	4797.51 ng/ml	99
52) 2,4-Dinitrophenol	9.681	184	272053	5508.37 ng/ml	97
53) 4-Nitrophenol	9.745	139	467183	5690.24 ng/ml	97
54) 2,4-Dinitrotoluene	9.820	165	734363	6253.07 ng/ml	93
55) Dibenzofuran	9.836	168	2531005	4938.04 ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	9.916	232	597064	6702.12 ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.959	232	603345	6692.46 ng/ml	96
58) Diethyl phthalate	10.066	149	1916805	4737.64 ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.050	170	1592300	4860.15 ng/ml	97
60) Fluorene	10.189	166	1824399	4519.48 ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.178	204	992417	5290.11 ng/ml	95
62) 4-Nitroaniline	10.205	138	385746	4719.73 ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.237	198	377769	5981.86 ng/ml	95
65) N-Nitrosodiphenylamine	10.301	169	1569352	4443.39 ng/ml	97
66) Azobenzene (1,2-DPH)	10.339	77	1601806	3418.86 ng/ml	88
68) 4-Bromophenyl phenyl e...	10.681	248	726568	6145.51 ng/ml	92
69) Hexachlorobenzene	10.756	284	795928	5851.17 ng/ml	98
70) Pentachlorophenol (PCP)	10.948	266	500914	6716.78 ng/ml	99
71) Phenanthrene	11.168	178	2932288	4669.35 ng/ml	96
72) Anthracene	11.221	178	2907155	4704.86 ng/ml	96
73) Carbazole	11.371	167	1156567	2267.12 ng/ml	99
74) Di-n-butyl phthalate	11.729	149	3301933	4611.59 ng/ml	97
75) Fluoranthene	12.441	202	3417993	5203.99 ng/ml	96
76) Benzidine	12.601	184	2204013	10575.22 ng/ml	99
77) Pyrene	12.735	202	3436590	5237.78 ng/ml	95
80) Butyl benzyl phthalate	13.756	149	1779167	5557.56 ng/ml	93
81) Bis(2-ethylhexyl) adipate	13.933	129	1497303	5217.89 ng/ml	99
82) 3,3-Dichlorobenzidine	~~14.890~~	~~252~~	~~494238~~	~~8919.45 ng/ml~~	97
83) Benz(a)anthracene	14.917	228	3394067	5662.58 ng/ml	99
84) Chrysene	15.013	228	3095456	5597.68 ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.093	149	2338505	5522.48 ng/ml	96
87) Di-n-octyl phthalate	16.773	149	4149203	4742.46 ng/ml	99
88) Benzo(b)fluoranthene	17.522	252	3768759	5828.72 ng/ml	99
89) Benzo(k)fluoranthene	17.602	252	3115398	5077.74 ng/ml	99
90) Benzo(b+k)fluoranthene	17.602	252	7129046	11096.00 ng/ml	99
91) Benzo(e)pyrene	18.185	252	3489142	5513.34 ng/ml	99
92) Benzo(a)pyrene	18.308	252	3235783	5562.53 ng/ml	100
93) Perylene	18.511	252	2908580	5274.09 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.854	276	3489319	6562.35 ng/ml	97
96) Dibenz(a,h)anthracene	20.913	278	3129173	6561.19 ng/ml	99
97) Benzo(g,h,i)perylene	21.389	276	3417702	6676.22 ng/ml	97

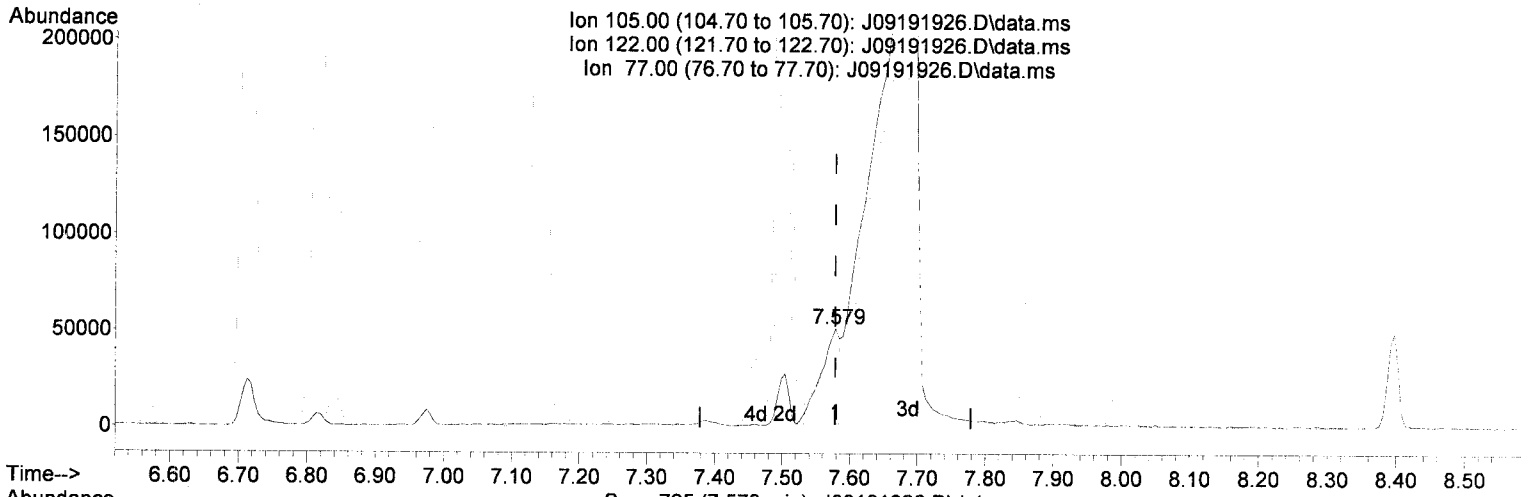
See MS

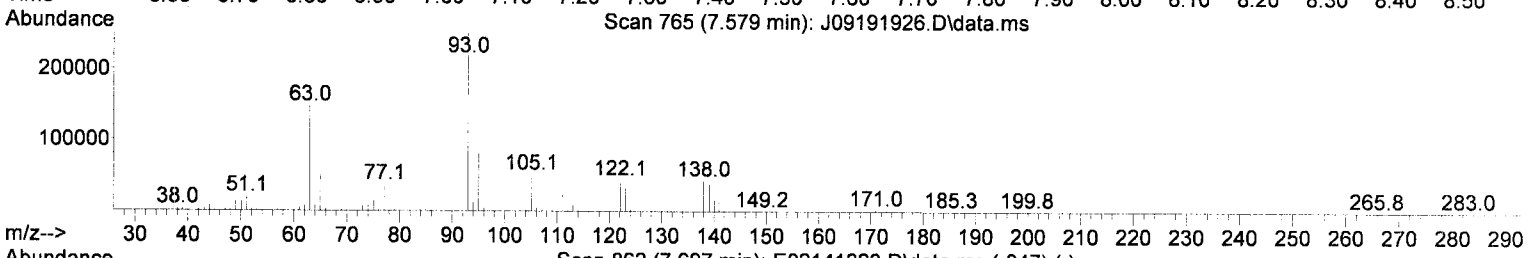
(#) = qualifier out of range (m) = manual integration (+) = signals summed

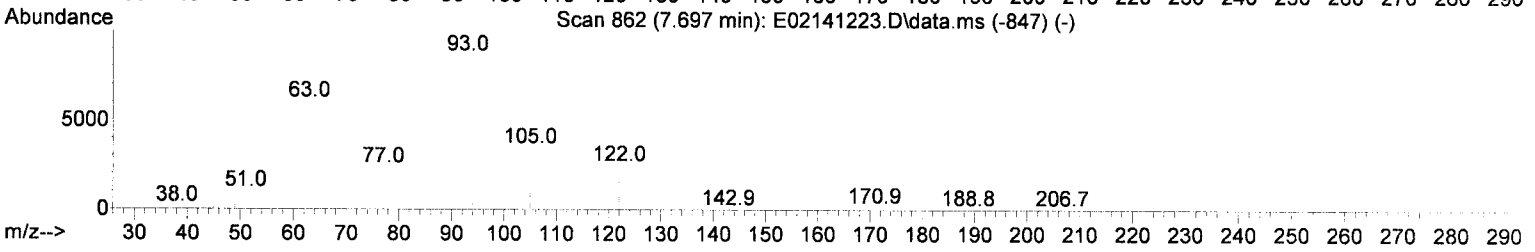
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191926.D\data.ms

(26) Benzoic acid (T)

7.579min (+ 0.000) 1449.32 ng/ml

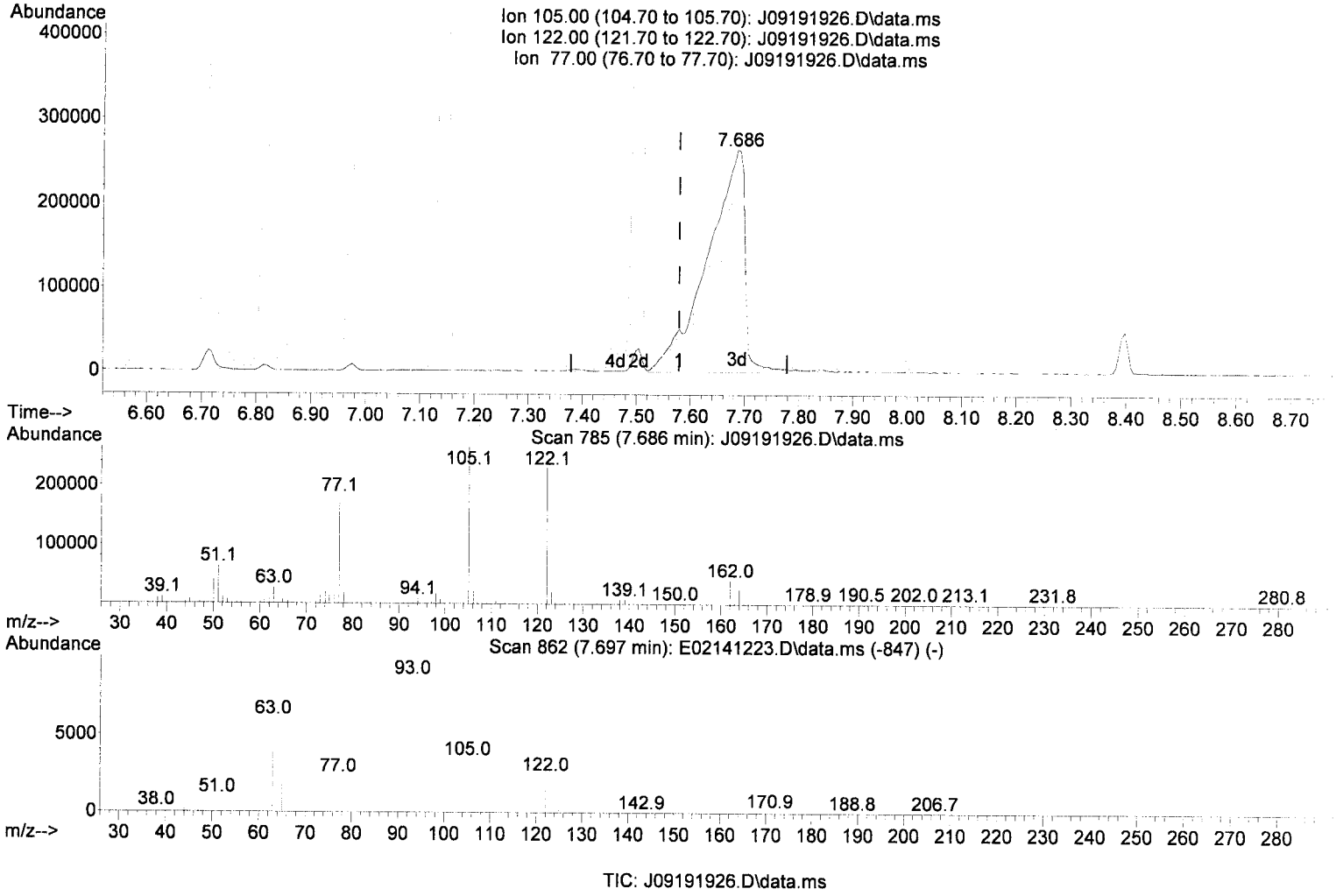
response 96795

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	84.66
77.00	72.00	72.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191926.D\data.ms

(26) Benzoic acid (T)

7.686min (+ 0.107) 10743.23 ng/ml m 9/20/19

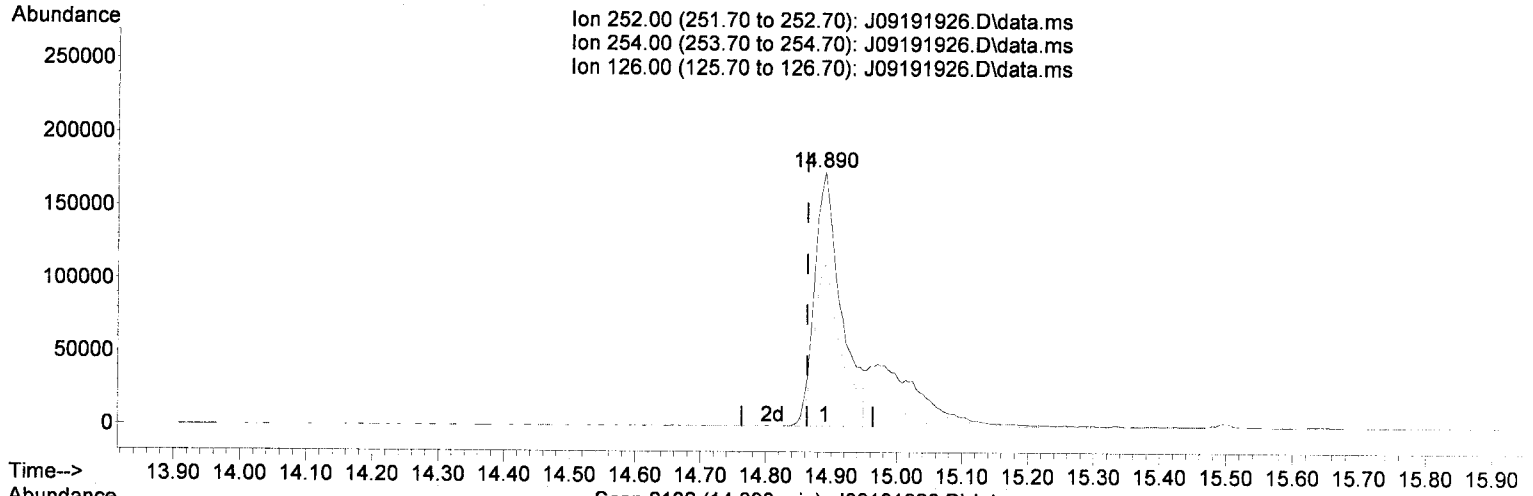
response 1277463

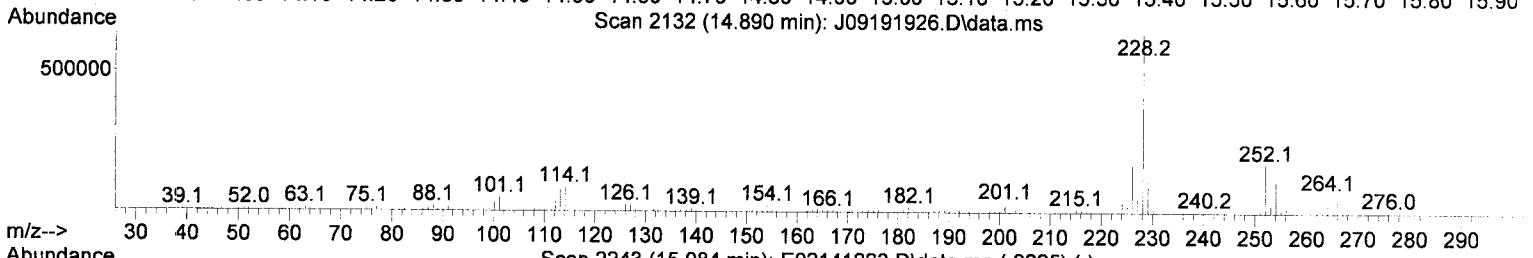
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	87.13
77.00	72.00	68.78
0.00	0.00	0.00

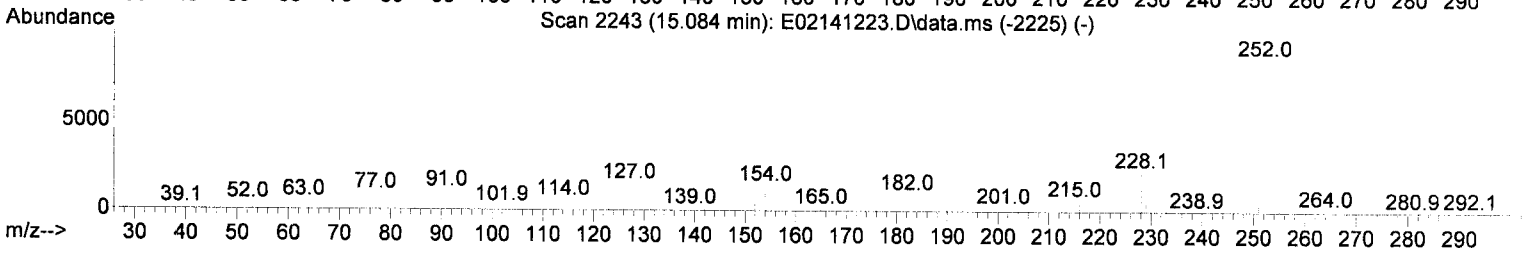
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191926.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.890min (+ 0.027) 8919.45 ng/ml

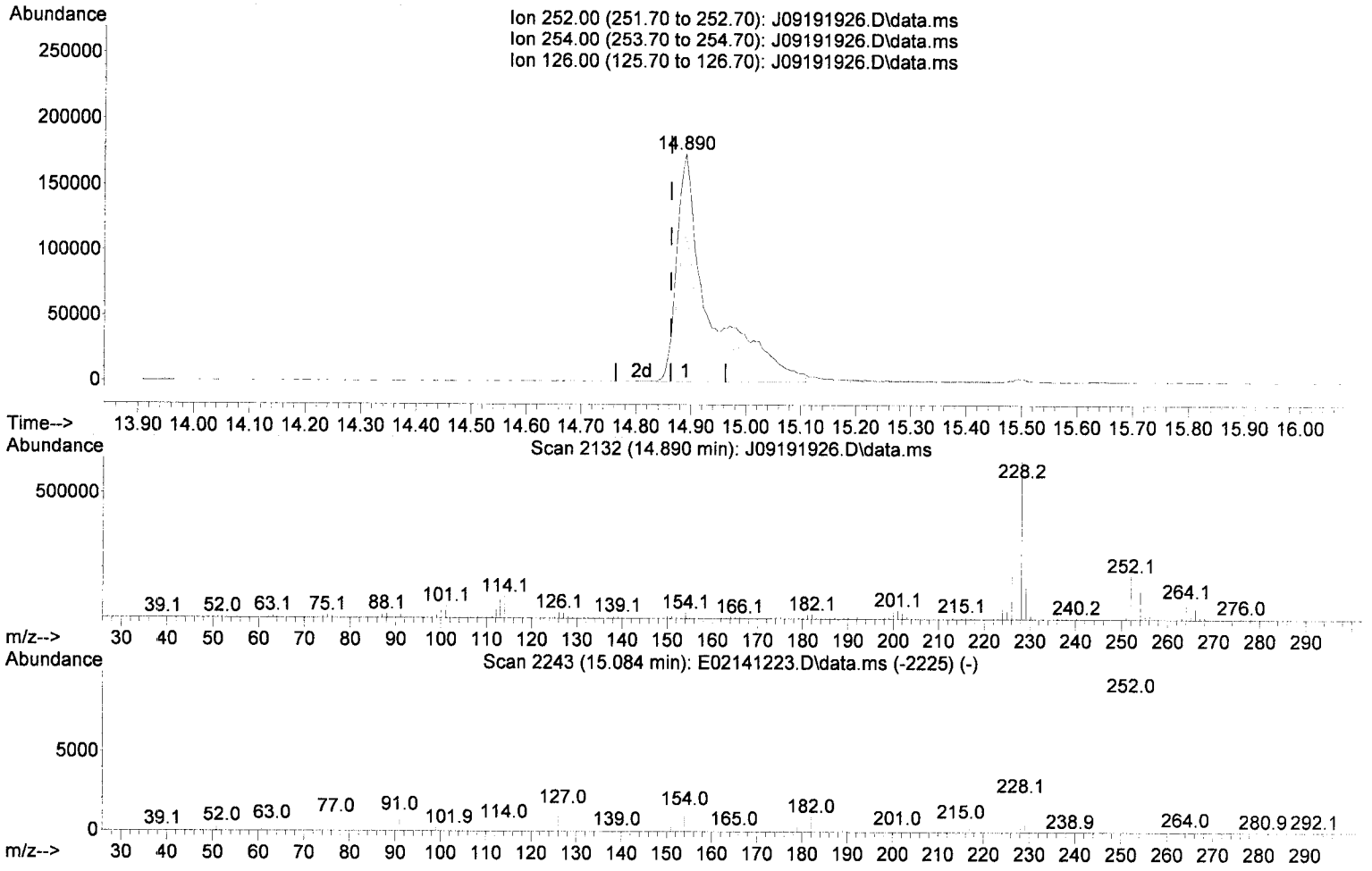
response 494238

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.96
126.00	12.00	13.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191926.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.890min (+ 0.027) 15215.95 ng/ml 9/20/19

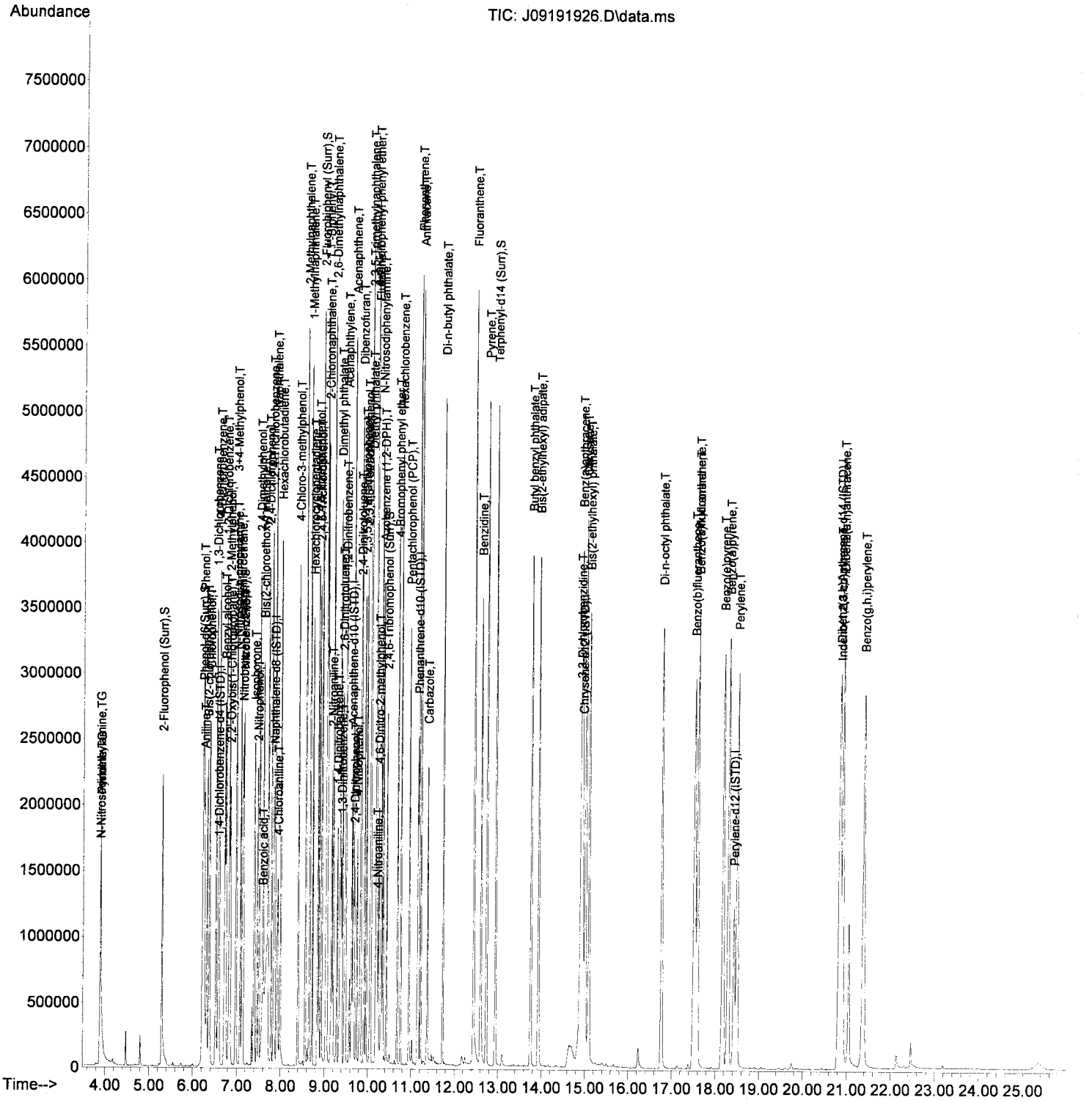
response 730056

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.96
126.00	12.00	13.33
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

GJL 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.578	152	269345	2000.00	ng/ml	0.01
21) Naphthalene-d8 (ISTD)	7.846	136	1074761	2000.00	ng/ml	0.01
35) Acenaphthene-d10 (ISTD)	9.627	162	593771	2000.00	ng/ml	0.01
64) Phenanthrene-d10 (ISTD)	11.135	188	1167219	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.933	240	1013392	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.409	264	1108960	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	20.822	292	982889	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	1458990	7986.41	ng/ml	0.03
5) Phenol-d6(Surr)	6.225	99	1721904	7338.12	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.129	82	1284804	5974.84	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	8.937	172	2595271	5952.22	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.435	330	524653	9580.55	ng/ml	0.02
79) Terphenyl-d14 (Surr)	12.932	244	3392009	6847.09	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.957	74	799031	6384.48	ng/ml	95
3) Pyridine	3.963	79	1480958m	6941.37	ng/ml#	
6) Phenol	6.247	94	1750392	6562.31	ng/ml	93
7) Aniline	6.263	93	1480736	6210.15	ng/ml	95
8) Bis(2-chloroethyl) ether	6.322	93	1435010	6040.20	ng/ml	98
9) 2-Chlorophenol	6.375	128	1496104	7786.46	ng/ml	98
10) 1,3-Dichlorobenzene	6.525	146	1570022	7556.17	ng/ml	99
11) 1,4-Dichlorobenzene	6.594	146	1504749	7462.00	ng/ml	99
12) Benzyl alcohol	6.723	108	932774	7571.89	ng/ml	99
13) 1,2-Dichlorobenzene	6.744	146	1419977	7005.43	ng/ml	100
14) 2-Methylphenol	6.824	107	1030806	6674.12	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.846	45	1103589	3601.18	ng/ml	87
16) N-Nitrosodi-n-propylamine	6.995	70	803148	5159.93	ng/ml	94
17) 3+4-Methylphenol	6.985	107	1205305	6332.18	ng/ml	99
18) Hexachloroethane	7.081	201	541884	9760.36	ng/ml	92
20) Nitrobenzene	7.151	77	1198679	5564.36	ng/ml	91
22) Isophorone	7.397	82	2693969	6907.11	ng/ml	99
23) 2-Nitrophenol	7.461	139	838038	8987.28	ng/ml	94
24) 2,4-Dimethylphenol	7.509	122	1099526	7393.25	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.595	93	1380842	6354.69	ng/ml	98
26) Benzoic acid	7.509	105	38011	776.83	ng/ml#	1
27) 2,4-Dichlorophenol	7.707	162	1167761	9061.78	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.787	180	1277566	8188.82	ng/ml	99
29) Naphthalene	7.867	128	3240737	5870.30	ng/ml	95
30) 4-Chloroaniline	7.931	127	1186251	7997.52	ng/ml	100
31) Hexachlorobutadiene	7.996	225	701350	8429.61	ng/ml	98
32) 4-Chloro-3-methylphenol	8.397	107	1141605	7355.36	ng/ml	93
33) 2-Methylnaphthalene	8.563	142	2448839	6497.55	ng/ml	98
34) 1-Methylnaphthalene	8.664	142	2286875	6313.48	ng/ml	98
36) Hexachlorocyclopentadiene	8.728	237	759063	8078.87	ng/ml	96
37) 2,4,6-Trichlorophenol	8.851	196	922776	8200.21	ng/ml	98
38) 2,4,5-Trichlorophenol	8.884	198	870124	8618.86	ng/ml	98
39) 1,1'-Biphenyl	9.039	154	2706900	5487.50	ng/ml	95
41) 2-Chloronaphthalene	9.060	162	2240055	6186.91	ng/ml	98
42) 2-Nitroaniline	9.167	138	944974	7839.40	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.199	156	2089018	5657.17	ng/ml	98

See NI

See NI

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.295	168	488295	8676.95	ng/ml	84
45) Dimethyl phthalate	9.360	163	2768841	6519.94	ng/ml	96
46) 1,3-Dinitrobenzene	9.386	168	525829	8149.05	ng/ml	91
47) 2,6-Dinitrotoluene	9.413	165	727325	7963.06	ng/ml	93
48) 1,2-Dinitrobenzene	9.477	168	322227	7532.10	ng/ml	94
49) Acenaphthylene	9.488	152	3146686	5421.92	ng/ml	95
50) 3-Nitroaniline	9.584	138	174843	Below Cal		96
51) Acenaphthene	9.664	153	2204696	5860.16	ng/ml	99
52) 2,4-Dinitrophenol	9.686	184	388560	7229.26	ng/ml	93
53) 4-Nitrophenol	9.755	139	610739	7150.14	ng/ml	97
54) 2,4-Dinitrotoluene	9.825	165	868405	7387.76	ng/ml	92
55) Dibenzofuran	9.836	168	3003141	5853.90	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	9.916	232	763806	8438.44	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.964	232	773723	8433.64	ng/ml	95
58) Diethyl phthalate	10.066	149	2319061	5726.69	ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.050	170	1931750	5890.92	ng/ml	99
60) Fluorene	10.189	166	2171368	5374.15	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.178	204	1192807	6352.55	ng/ml	94
62) 4-Nitroaniline	10.210	138	523369	6397.82	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.242	198	504056	7617.61	ng/ml	93
65) N-Nitrosodiphenylamine	10.306	169	1760214	4903.79	ng/ml	97
66) Azobenzene (1,2-DPH)	10.344	77	1950077	4095.39	ng/ml	78
68) 4-Bromophenyl phenyl e...	10.681	248	926306	7709.18	ng/ml	93
69) Hexachlorobenzene	10.756	284	1001688	7245.58	ng/ml	98
70) Pentachlorophenol (PCP)	10.948	266	646595	8238.97	ng/ml	98
71) Phenanthrene	11.167	178	3584429	5616.19	ng/ml	96
72) Anthracene	11.221	178	3477728	5537.91	ng/ml	95
73) Carbazole	11.371	167	1165062	2247.11	ng/ml	99
74) Di-n-butyl phthalate	11.724	149	4037361	5548.19	ng/ml	96
75) Fluoranthene	12.435	202	4158773	6230.20	ng/ml	95
76) Benzidine	12.595	184	3017555	13485.44	ng/ml	99
77) Pyrene	12.729	202	4271888	6406.36	ng/ml	95
80) Butyl benzyl phthalate	13.745	149	2308181	7272.91	ng/ml	91
81) Bis(2-ethylhexyl) adipate	13.917	129	1955106	6872.69	ng/ml	99
82) 3,3-Dichlorobenzidine	14.874	252	572542	10901.24	ng/ml	98
83) Benz(a)anthracene	14.906	228	4360504	7338.40	ng/ml	98
84) Chrysene	15.002	228	3992263	7282.39	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.083	149	2986931	7115.28	ng/ml	95
87) Di-n-octyl phthalate	16.751	149	5450180	5838.44	ng/ml	98
88) Benzo(b)fluoranthene	17.522	252	5003892	7450.31	ng/ml	98
89) Benzo(k)fluoranthene	17.591	252	3789489	5946.05	ng/ml	98
90) Benzo(b+k)fluoranthene	17.591	252	9407940	14096.81	ng/ml	98
91) Benzo(e)pyrene	18.174	252	4556103	6930.76	ng/ml	96
92) Benzo(a)pyrene	18.302	252	4292201	7103.37	ng/ml	100
93) Perylene	18.500	252	3844220	6710.68	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.838	276	4879339	8830.49	ng/ml	97
96) Dibenz(a,h)anthracene	20.902	278	4143300	8359.97	ng/ml	98
97) Benzo(g,h,i)perylene	21.383	276	4554601	8561.53	ng/ml	98

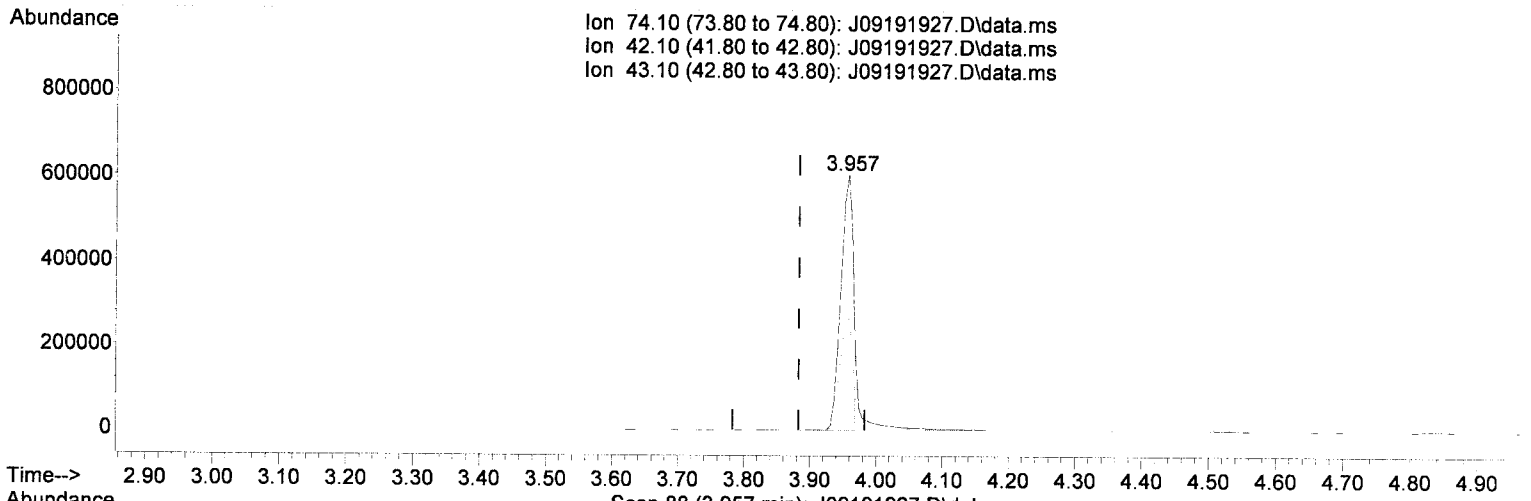
See MS

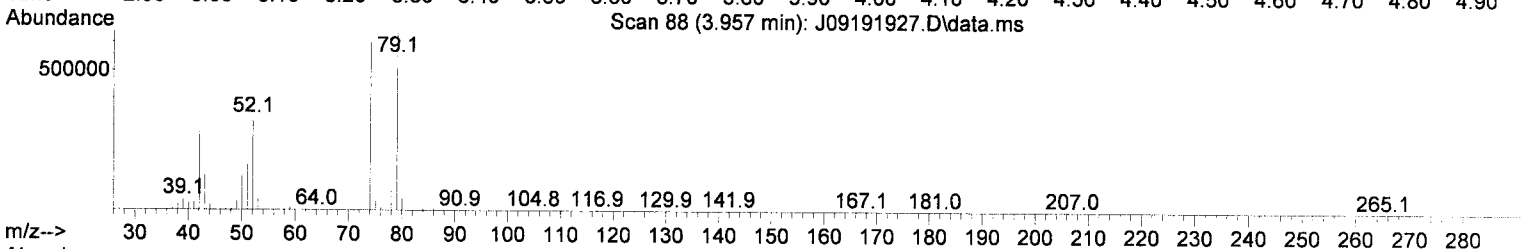
(#) = qualifier out of range (m) = manual integration (+) = signals summed

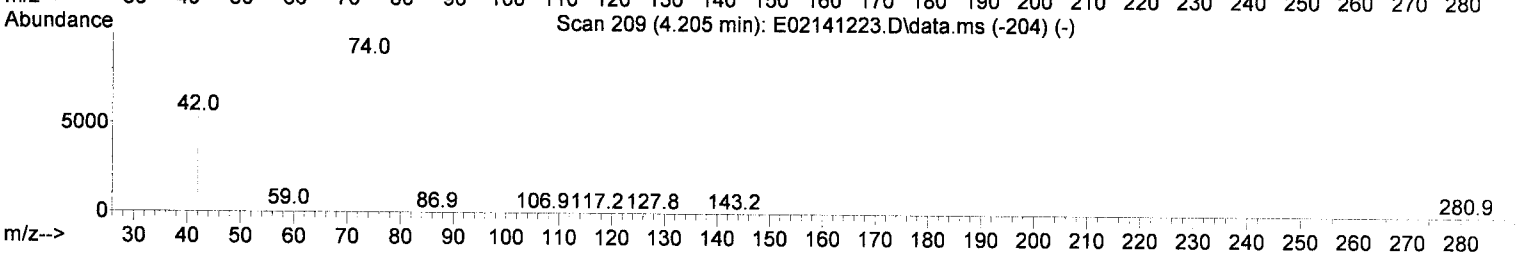
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191927.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.957min (+ 0.075) 6384.48 ng/ml

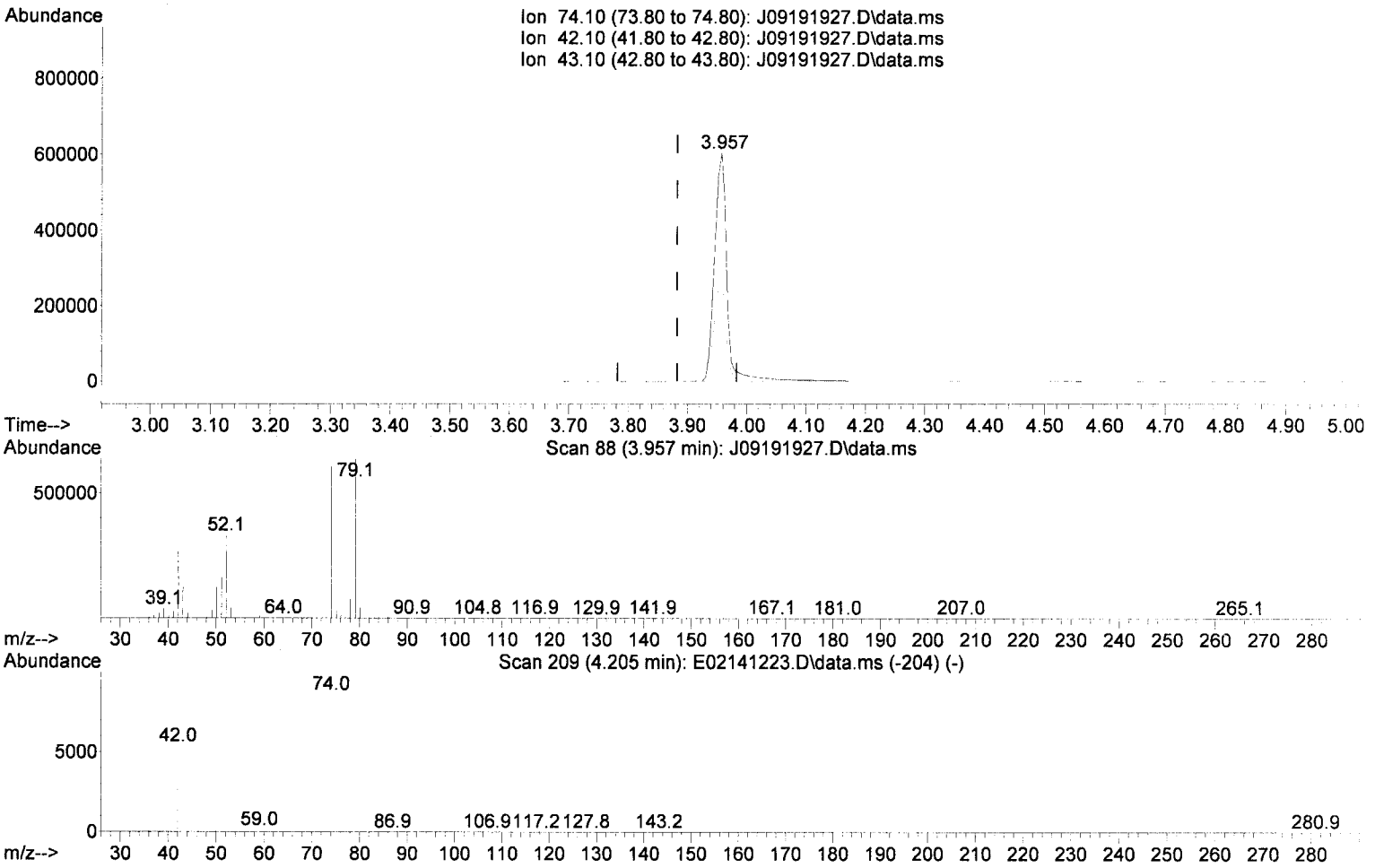
response 799081

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	45.78
43.10	22.20	20.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.957min (+ 0.075) 6923.78 ng/ml m 9/20/19

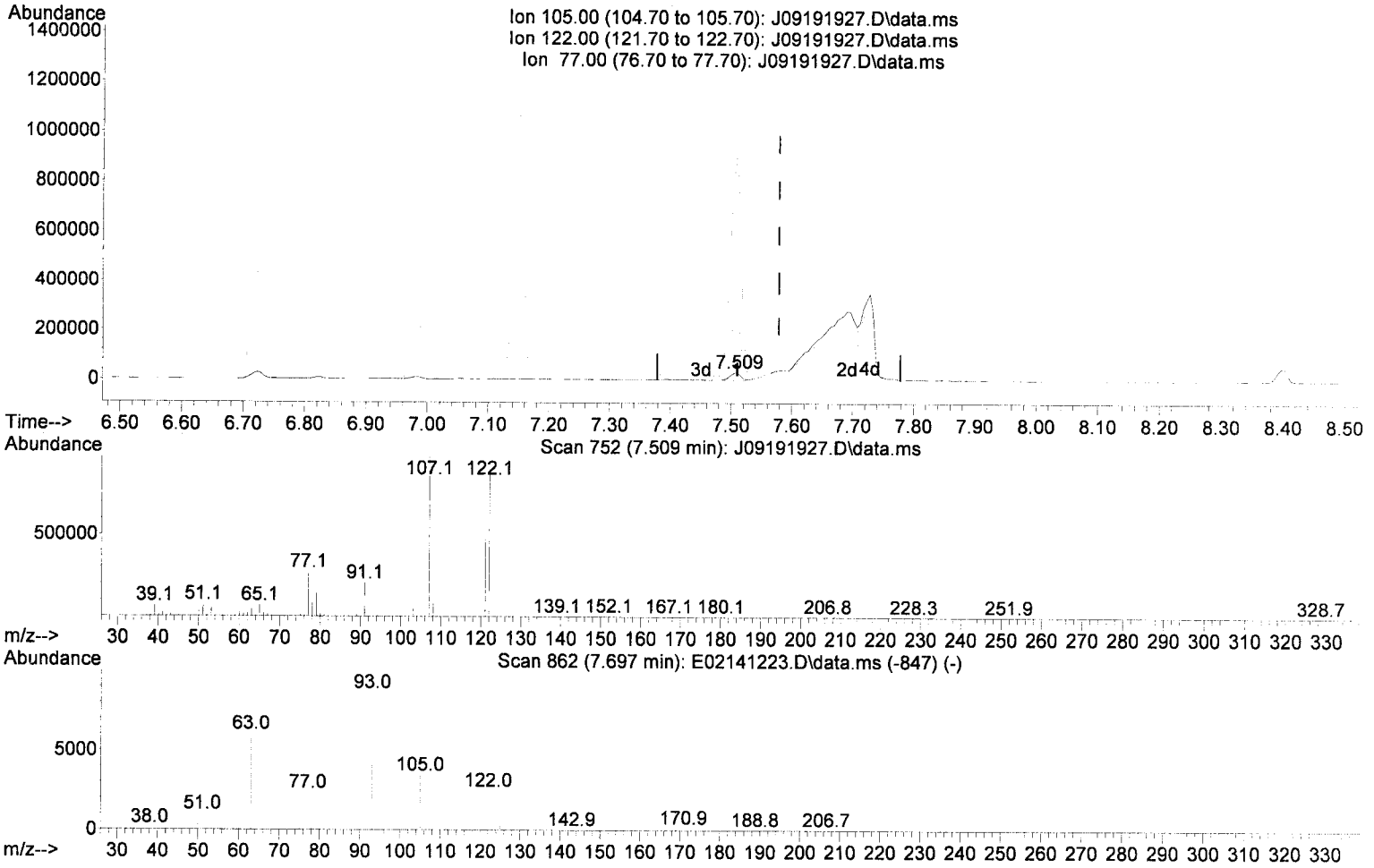
response 866525

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	45.78
43.10	22.20	20.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(26) Benzoic acid (T)

7.509min (-0.070) 776.83 ng/ml

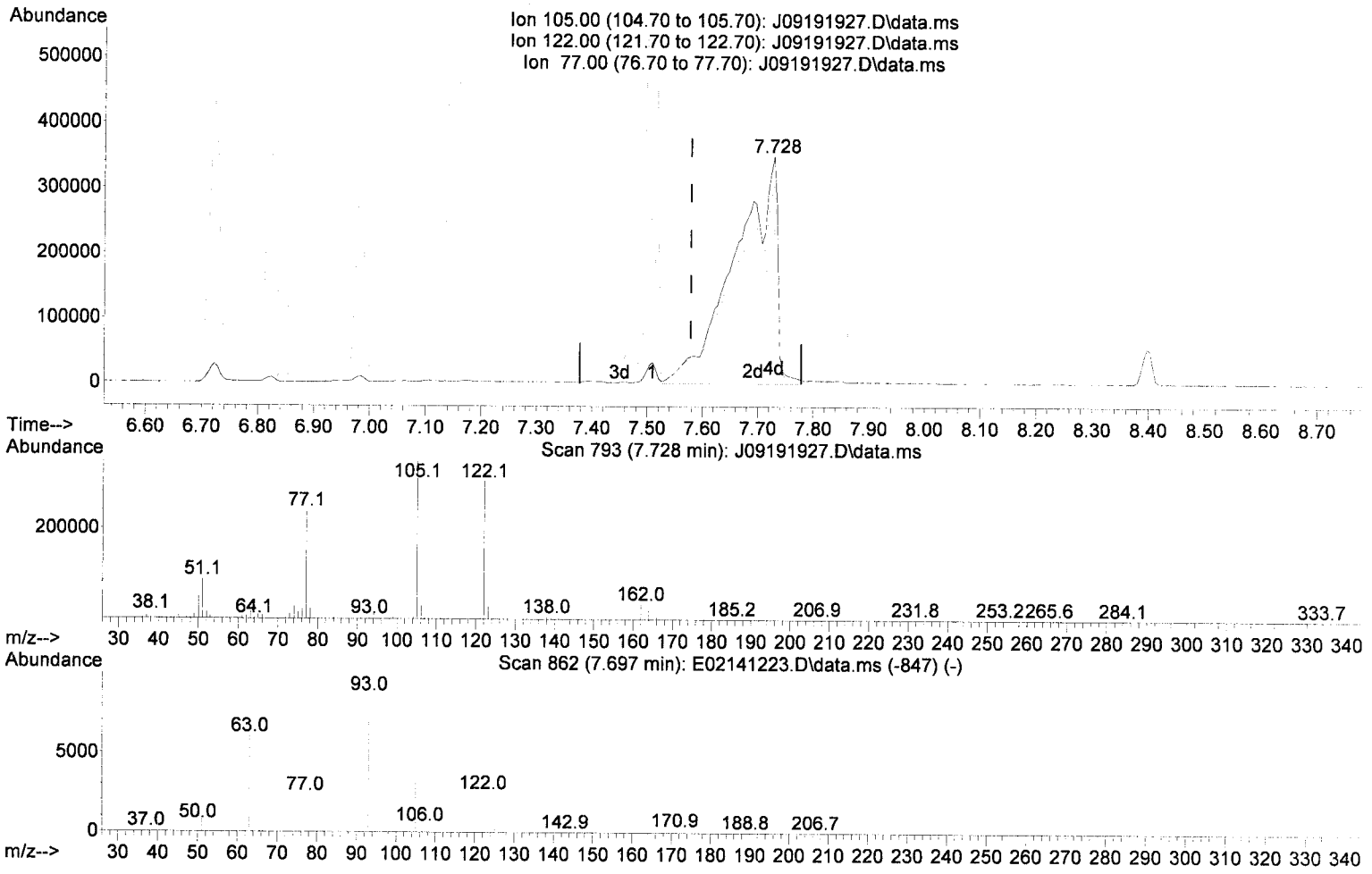
response 38011

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	2797.37#
77.00	72.00	828.09#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(26) Benzoic acid (T)

7.728min (+ 0.150) 14150.47 ng/ml m

9/20/19

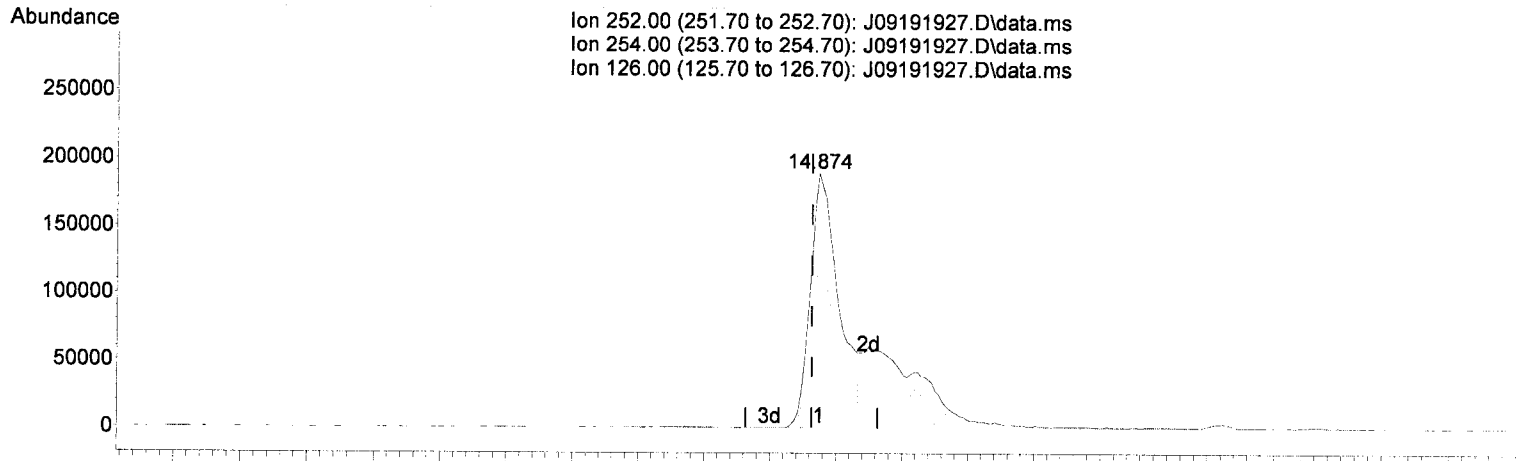
response 1853462

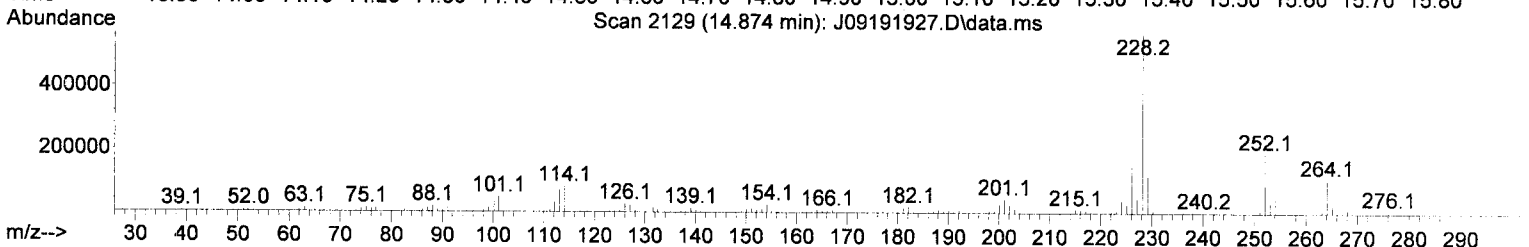
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	87.13
77.00	72.00	68.18
0.00	0.00	0.00

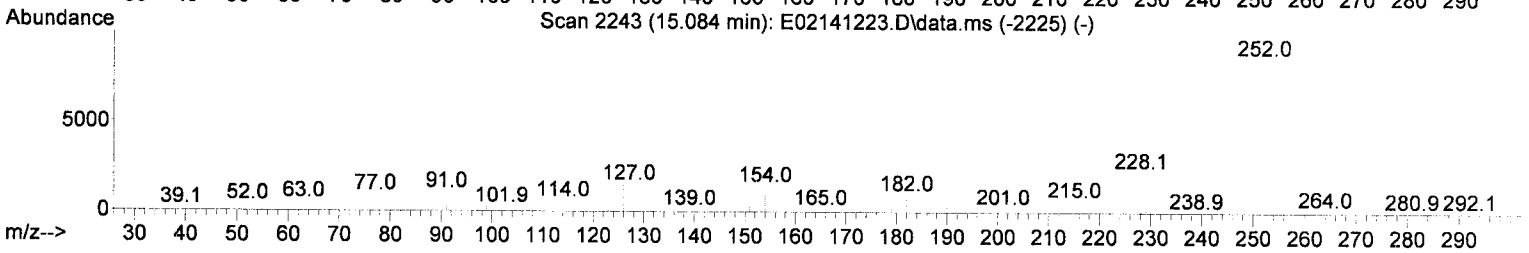
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.874min (+ 0.011) 10901.24 ng/ml

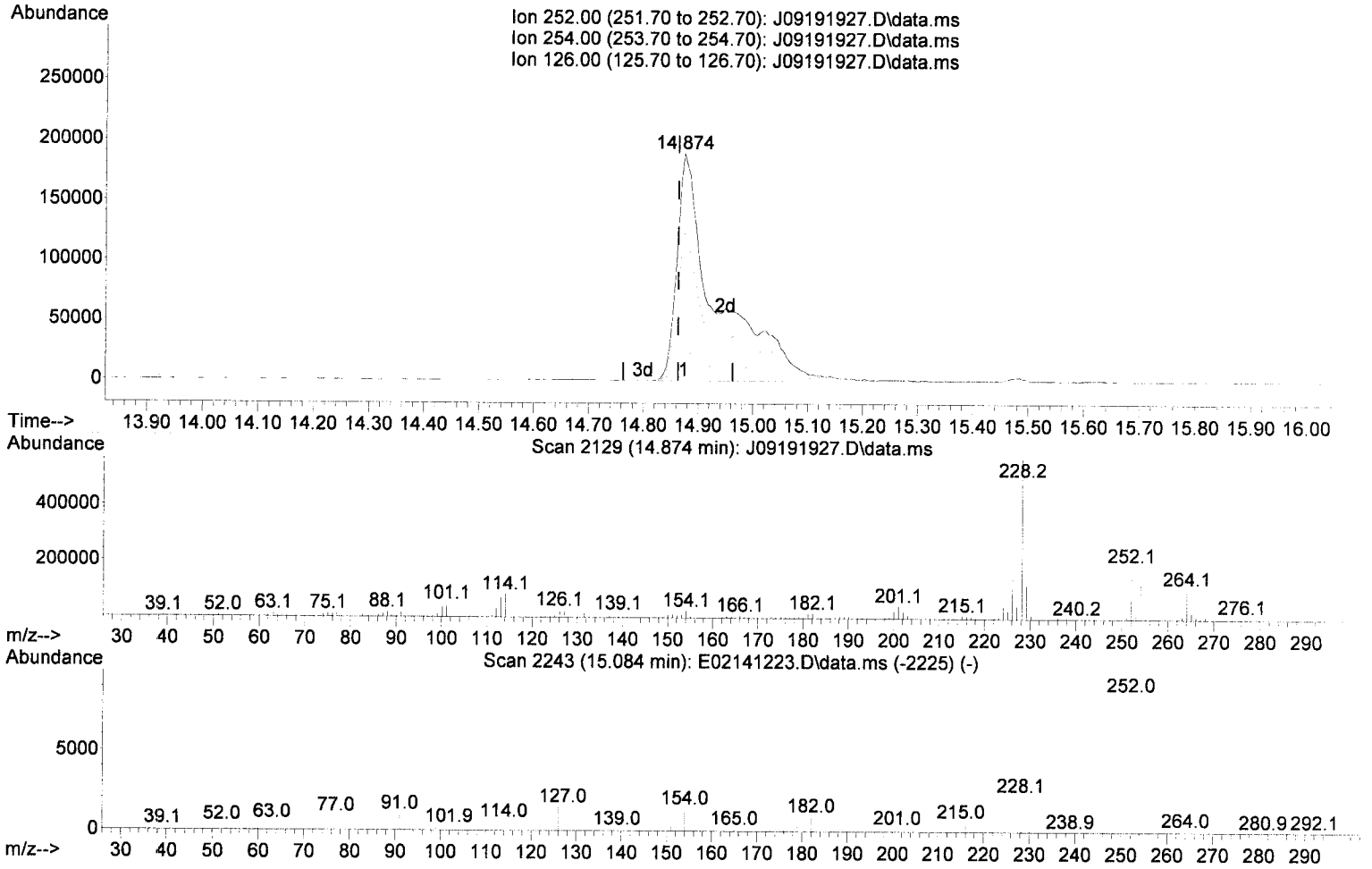
response 572542

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	64.83
126.00	12.00	13.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.874min (+ 0.011) -2000.00 ng/ml m

9/20/19

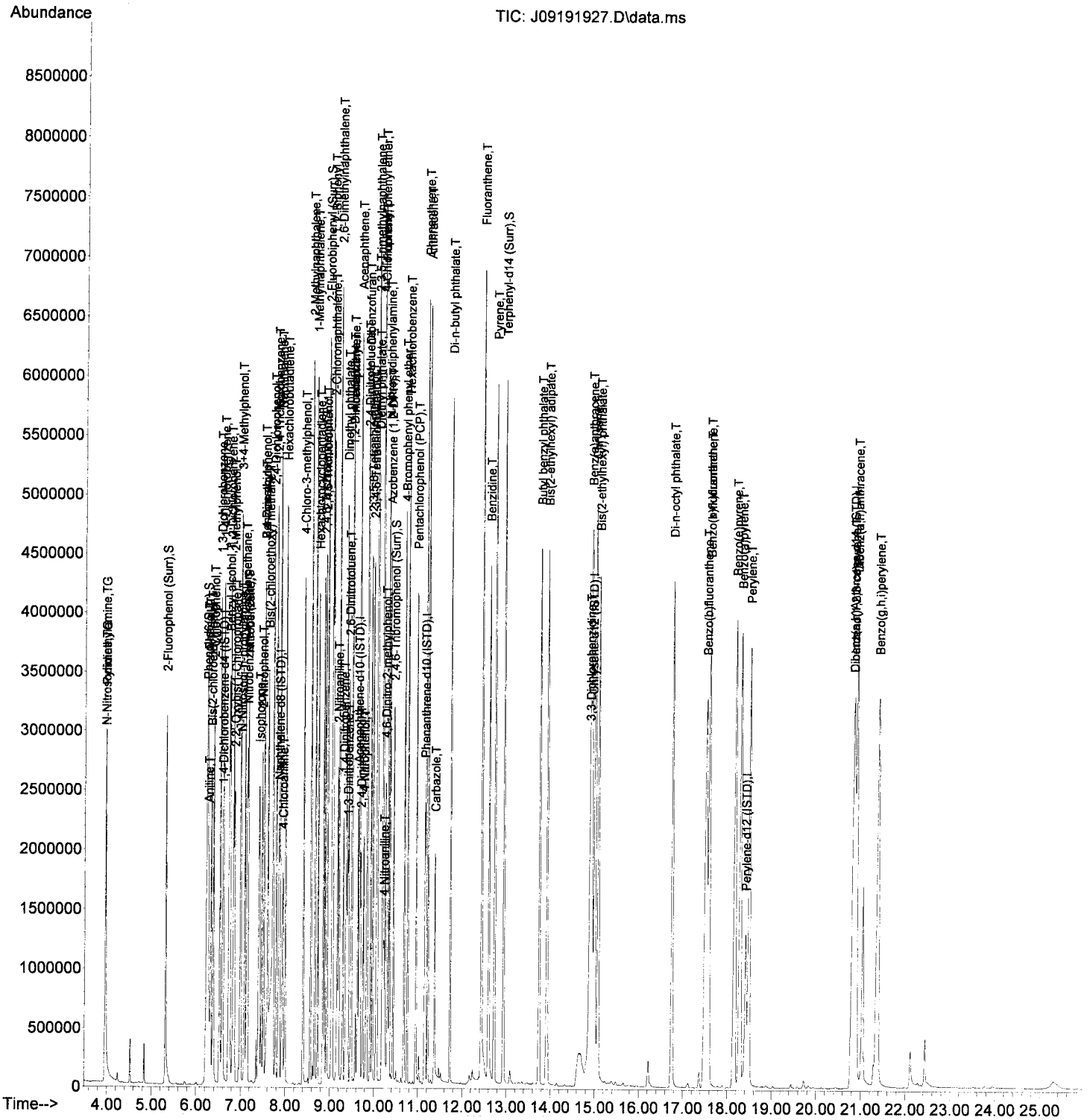
response 945543

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	64.83
126.00	12.00	13.82
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.573	152	299574	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1168153	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	615222	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1152828	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1141161	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.388	264	1161309	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.774	292	999067	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.316	112	178387	877.95 ng/ml	0.03
5) Phenol-d6(Surr)	6.209	99	236341	905.57 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	192375	804.35 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	511376	1131.94 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	72353	1337.71 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.917	244	557856	1000.00 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~0.000~~		0	N.D.	See MS
3) Pyridine	4.000	79	174343m	734.70 ng/ml#	
6) Phenol	6.225	94	253216	853.53 ng/ml	99
7) Aniline	6.258	93	184591	696.05 ng/ml	95
8) Bis(2-chloroethyl) ether	6.311	93	252838	956.85 ng/ml	98
9) 2-Chlorophenol	6.370	128	214007	1001.41 ng/ml	96
10) 1,3-Dichlorobenzene	6.520	146	240742	1041.72 ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	235033	1047.91 ng/ml	99
12) Benzyl alcohol	6.707	108	114114	832.86 ng/ml	97
13) 1,2-Dichlorobenzene	6.744	146	236669	1049.78 ng/ml	100
14) 2-Methylphenol	6.814	107	162406	945.42 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	197724	580.10 ng/ml	98
16) N-Nitrosodi-n-propylamine	6.969	70	139865	807.91 ng/ml	99
17) 3+4-Methylphenol	6.964	107	204231	964.68 ng/ml	99
18) Hexachloroethane	7.081	201	74950	1213.77 ng/ml	97
20) Nitrobenzene	7.135	77	193505	807.62 ng/ml	99
22) Isophorone	7.370	82	390447	921.04 ng/ml	96
23) 2-Nitrophenol	7.456	139	106480	818.33 ng/ml	95
24) 2,4-Dimethylphenol	7.488	122	151555	937.59 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.584	93	239341	1013.40 ng/ml	99
26) Benzoic acid	7.579	105	114401	1564.85 ng/ml	97
27) 2,4-Dichlorophenol	7.691	162	169468	1209.93 ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	204325	1204.96 ng/ml	98
29) Naphthalene	7.857	128	644117	1073.48 ng/ml	100
30) 4-Chloroaniline	7.910	127	180562	1136.69 ng/ml	98
31) Hexachlorobutadiene	7.991	225	114587	1267.13 ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	163749	970.69 ng/ml	98
33) 2-Methylnaphthalene	8.557	142	471069	1149.97 ng/ml	99
34) 1-Methylnaphthalene	8.659	142	446075	1133.04 ng/ml	100
36) Hexachlorocyclopentadiene	8.723	237	102004	1047.80 ng/ml	99
37) 2,4,6-Trichlorophenol	8.841	196	122991	1135.59 ng/ml	99
38) 2,4,5-Trichlorophenol	8.873	198	123145	1177.26 ng/ml	99
39) 1,1'-Biphenyl	9.028	154	545943	1068.16 ng/ml	99
41) 2-Chloronaphthalene	9.050	162	403493	1075.57 ng/ml	98
42) 2-Nitroaniline	9.146	138	126470	1012.60 ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	401191	1048.56 ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

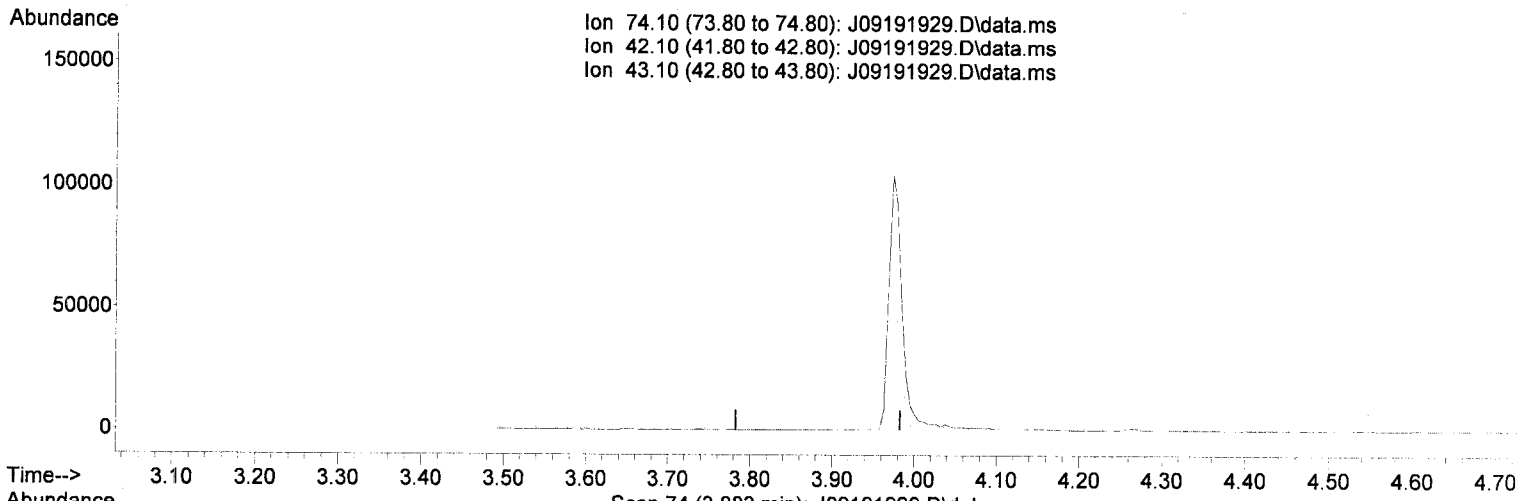
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	53357	915.09	ng/ml	94
45) Dimethyl phthalate	9.333	163	471576	1071.73	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	66203	990.21	ng/ml	96
47) 2,6-Dinitrotoluene	9.392	165	104413	1103.30	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	47869	1079.93	ng/ml	96
49) Acenaphthylene	9.472	152	662544	1101.80	ng/ml	98
50) 3-Nitroaniline	9.563	138	81403	882.15	ng/ml	95
51) Acenaphthene	9.649	153	411344	1055.24	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	21975	682.22	ng/ml	97
53) 4-Nitrophenol	9.723	139	67638	935.18	ng/ml	99
54) 2,4-Dinitrotoluene	9.798	165	130952	1075.20	ng/ml	96
55) Dibenzofuran	9.825	168	586441	1103.27	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	101694	1174.90	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	9.948	232	104694	1189.35	ng/ml	98
58) Diethyl phthalate	10.050	149	444740	1059.95	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	361627	1064.34	ng/ml	98
60) Fluorene	10.173	166	450597	1076.35	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	220862	1135.24	ng/ml	98
62) 4-Nitroaniline	10.183	138	71452	843.00	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.216	198	51879	975.85	ng/ml	99
65) N-Nitrosodiphenylamine	10.285	169	378338	1067.17	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	373113	793.36	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.665	248	134322	1131.85	ng/ml	95
69) Hexachlorobenzene	10.745	284	157623	1154.38	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	76022	1186.58	ng/ml	99
71) Phenanthrene	11.157	178	656765	1041.88	ng/ml	99
72) Anthracene	11.205	178	657889	1060.69	ng/ml	100
73) Carbazole	11.366	167	473433	924.53	ng/ml	100
74) Di-n-butyl phthalate	11.713	149	721001	1003.18	ng/ml	100
75) Fluoranthene	12.419	202	721487	1094.34	ng/ml	99
76) Benzidine	12.574	184	294532	1737.87	ng/ml	98
77) Pyrene	12.708	202	722196	1096.56	ng/ml	100
80) Butyl benzyl phthalate	13.724	149	293237	820.52	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.901	129	280177	874.62	ng/ml	98
82) 3,3-Dichlorobenzidine	14.853	252	184897	2473.10	ng/ml	97
83) Benz(a)anthracene	14.880	228	655689	979.93	ng/ml	98
84) Chrysene	14.965	228	602768	976.42	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.061	149	426572	902.38	ng/ml	98
87) Di-n-octyl phthalate	16.730	149	675629	808.44	ng/ml	100
88) Benzo(b)fluoranthene	17.463	252	645650	917.98	ng/ml	99
89) Benzo(k)fluoranthene	17.532	252	640735	960.05	ng/ml	99
90) Benzo(b+k)fluoranthene	17.532	252	1307403	1870.70	ng/ml	99
91) Benzo(e)pyrene	18.115	252	622430	904.16	ng/ml	100
92) Benzo(a)pyrene	18.238	252	564640	892.33	ng/ml	98
93) Perylene	18.442	252	636474	1060.98	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.774	276	575136	1024.01	ng/ml	100
96) Dibenz(a,h)anthracene	20.843	278	552893	1097.51	ng/ml	99
97) Benzo(g,h,i)perylene	21.309	276	598608	1107.02	ng/ml	98

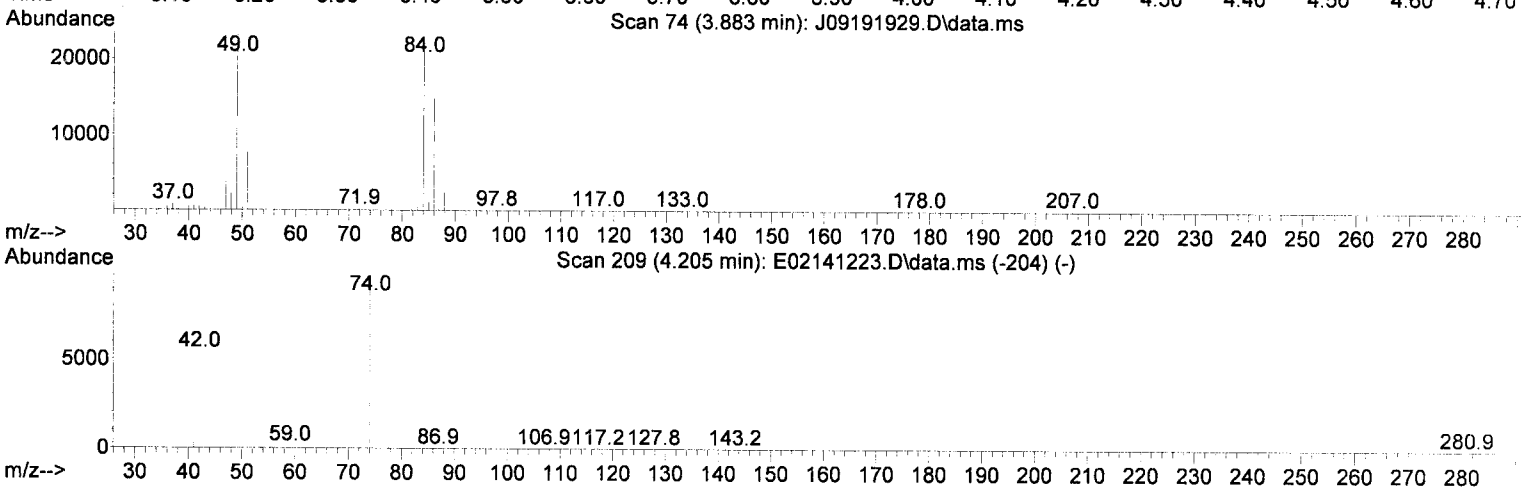
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191929.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.883min (-3.883) 0.00 ng/ml

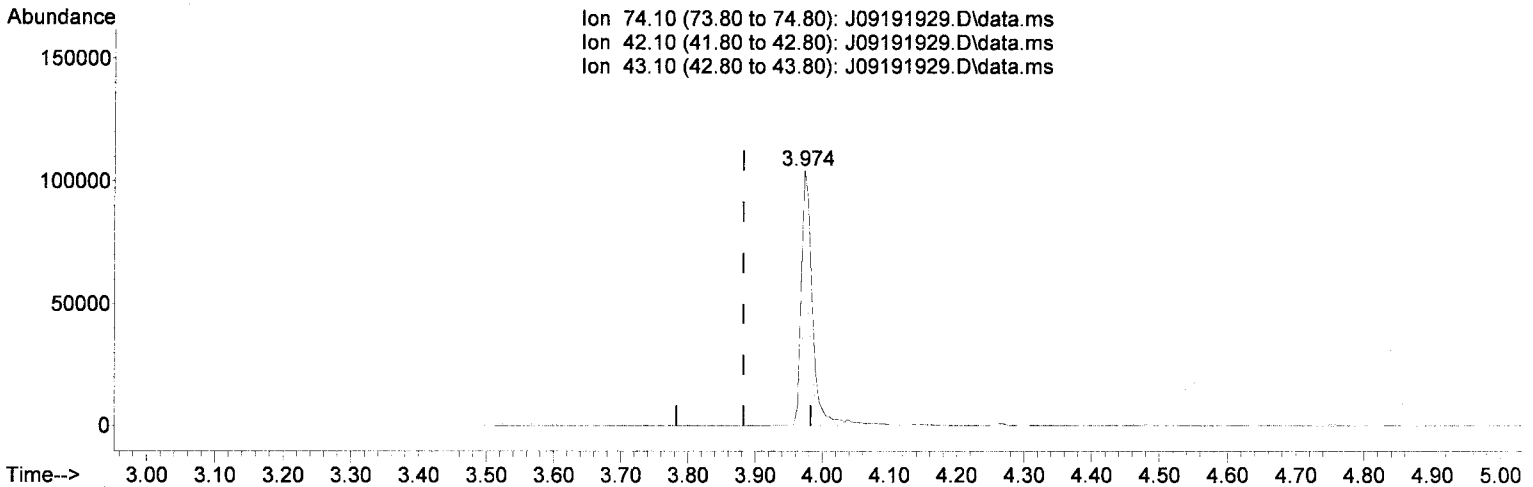
response 0

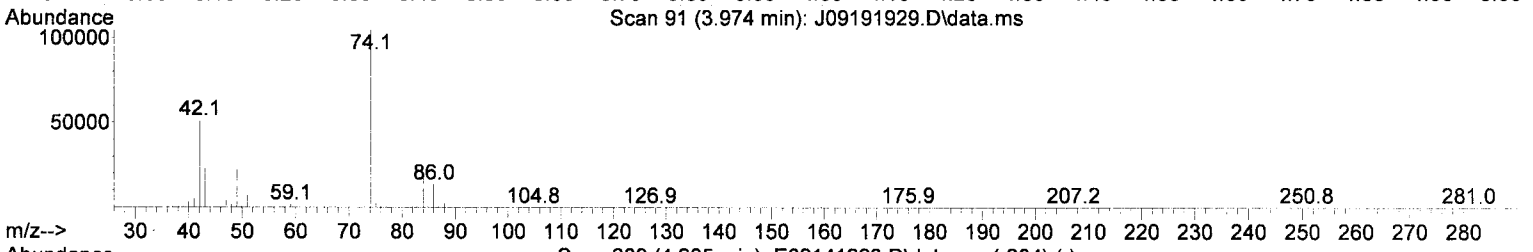
Ion	Exp%	Act%
74.10	100.00	0.00
42.10	49.40	0.00#
43.10	22.20	0.00
0.00	0.00	0.00

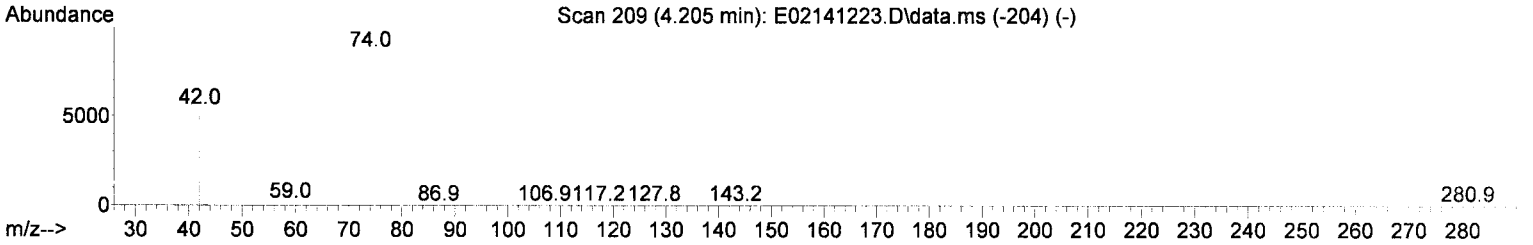
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191929.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.974min (+ 0.091) 856.94 ng/ml m JK 9/20/19

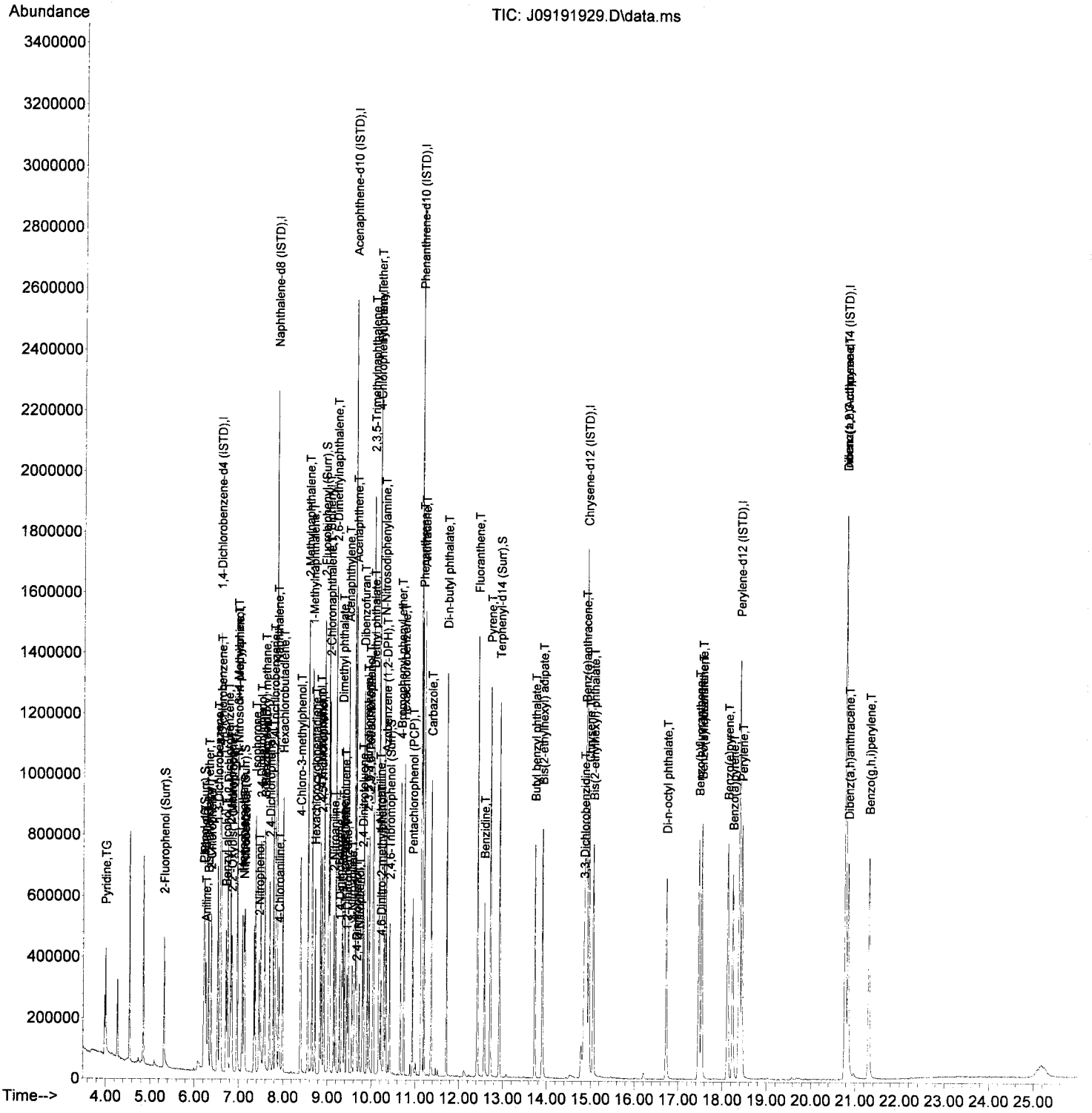
response 119285

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	49.08
43.10	22.20	22.06
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Reqmnt
9/23/19

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	299574	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1168153	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	615222	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1152828	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1141161	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.388	264	1161309	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.774	292	999067	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	178387	981.27	ng/ml	0.03
5) Phenol-d6(Surr)	6.209	99	236341	1015.69	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	192375	1065.68	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	511376	1062.10	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	72353	1040.67	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.917	244	557856	1060.78	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.974	74	119285m	1045.35	ng/ml	
3) Pyridine	4.000	79	174343m	896.19	ng/ml#	
6) Phenol	6.225	94	253216	989.66	ng/ml	99
7) Aniline	6.258	93	184591	836.20	ng/ml	95
8) Bis(2-chloroethyl) ether	6.311	93	252077	1091.65	ng/ml	98
9) 2-Chlorophenol	6.370	128	214007	1008.90	ng/ml	96
10) 1,3-Dichlorobenzene	6.520	146	240742	1009.72	ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	235033	1002.99	ng/ml	99
12) Benzyl alcohol	6.707	108	114114	910.79	ng/ml	97
13) 1,2-Dichlorobenzene	6.744	146	236669	1024.11	ng/ml	100
14) 2-Methylphenol	6.814	107	162406	1052.52	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	197724	970.28	ng/ml	98
16) N-Nitrosodi-n-propylamine	6.969	70	139865	1043.26	ng/ml	99
17) 3+4-Methylphenol	6.964	107	204231	1067.42	ng/ml	99
18) Hexachloroethane	7.081	201	74950	1040.96	ng/ml	97
20) Nitrobenzene	7.135	77	193505	1058.01	ng/ml	99
22) Isophorone	7.370	82	390447	1048.41	ng/ml	96
23) 2-Nitrophenol	7.456	139	106480	968.55	ng/ml	95
24) 2,4-Dimethylphenol	7.488	122	151555	967.66	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.584	93	239341	1057.13	ng/ml	99
26) Benzoic acid	7.579	105	114401	1974.82	ng/ml	97
27) 2,4-Dichlorophenol	7.691	162	169468	968.83	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	204325	999.39	ng/ml	98
29) Naphthalene	7.857	128	644117	1048.17	ng/ml	100
30) 4-Chloroaniline	7.910	127	180562	939.27	ng/ml	98
31) Hexachlorobutadiene	7.991	225	114587	1037.18	ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	163749	1056.42	ng/ml	98
33) 2-Methylnaphthalene	8.557	142	471069	1097.13	ng/ml	99
34) 1-Methylnaphthalene	8.659	142	446075	1073.20	ng/ml	100
36) Hexachlorocyclopentadiene	8.723	237	102004	1072.19	ng/ml	99
37) 2,4,6-Trichlorophenol	8.841	196	122991	1033.65	ng/ml	99
38) 2,4,5-Trichlorophenol	8.873	198	123145	1048.47	ng/ml	99
39) 1,1'-Biphenyl	9.028	154	545943	1032.43	ng/ml	99
41) 2-Chloronaphthalene	9.050	162	403493	1056.54	ng/ml	98
42) 2-Nitroaniline	9.146	138	126470	1106.58	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	401191	1034.19	ng/ml	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

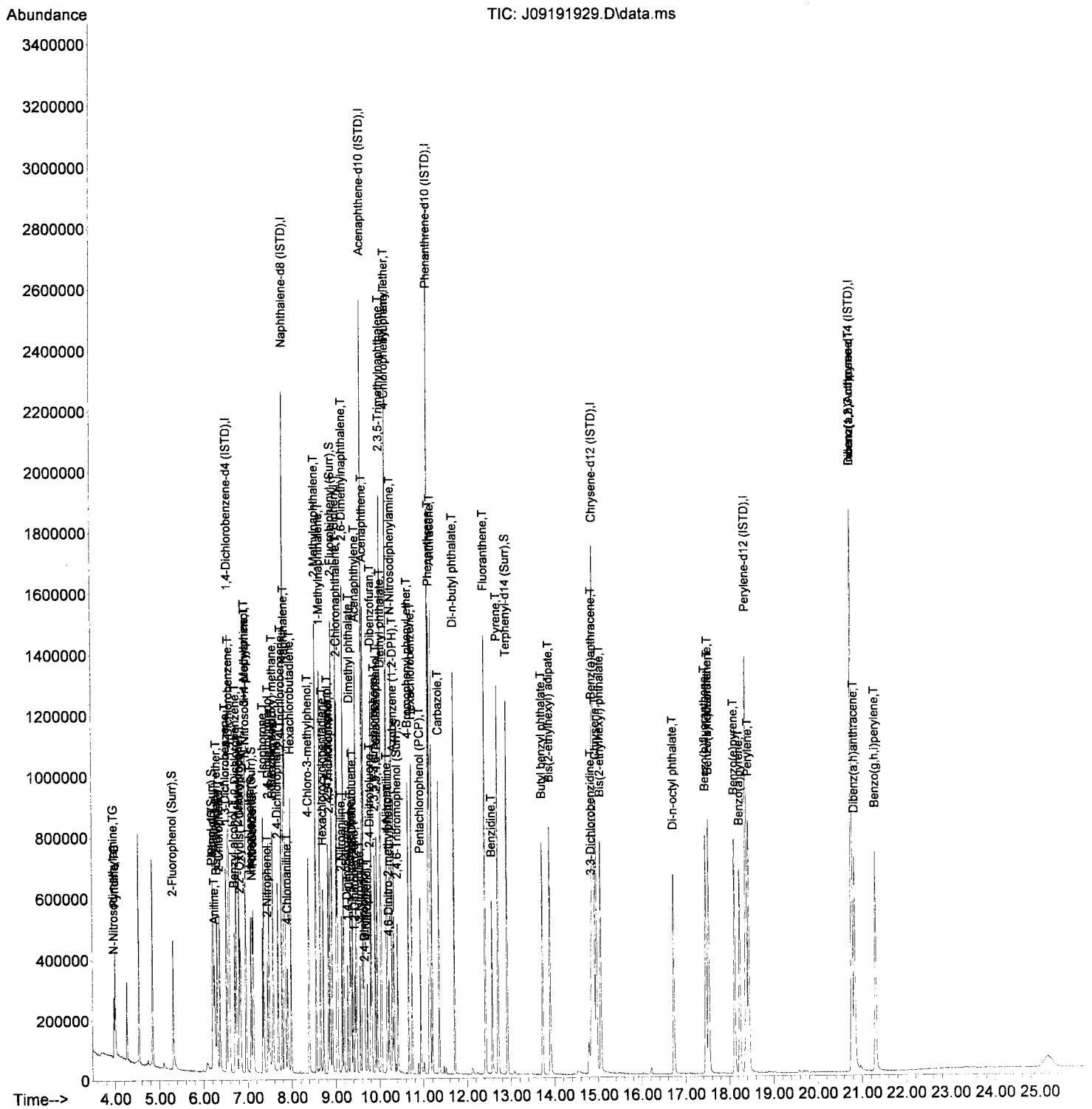
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	53357	1114.51	ng/ml	94
45) Dimethyl phthalate	9.333	163	471576	1061.40	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	66203	1081.70	ng/ml	96
47) 2,6-Dinitrotoluene	9.392	165	104413	1044.00	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	47869	1063.48	ng/ml	96
49) Acenaphthylene	9.472	152	662544	1059.38	ng/ml	98
50) 3-Nitroaniline	9.563	138	81403	1060.77	ng/ml	95
51) Acenaphthene	9.649	153	411344	1001.62	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	21975	972.00	ng/ml	97
53) 4-Nitrophenol	9.723	139	67638	1106.89	ng/ml	99
54) 2,4-Dinitrotoluene	9.798	165	130952	1048.40	ng/ml	96
55) Dibenzofuran	9.825	168	586441	1071.22	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	101694	1077.31	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	9.948	232	104694	1014.00	ng/ml	98
58) Diethyl phthalate	10.050	149	444740	1087.44	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	361627	1037.33	ng/ml	98
60) Fluorene	10.173	166	450597	1045.90	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	220862	1051.57	ng/ml	98
62) 4-Nitroaniline	10.183	138	71452	1080.74	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.216	198	51879	1157.72	ng/ml	99
65) N-Nitrosodiphenylamine	10.285	169	378338	1064.38	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	373113	1037.26	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.665	248	134322	1032.58	ng/ml	95
69) Hexachlorobenzene	10.745	284	157623	1010.04	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	76022	975.76	ng/ml	99
71) Phenanthrene	11.157	178	656765	1015.50	ng/ml	99
72) Anthracene	11.205	178	657889	1058.25	ng/ml	100
73) Carbazole	11.366	167	473433	964.91	ng/ml	100
74) Di-n-butyl phthalate	11.713	149	721001	1057.53	ng/ml	100
75) Fluoranthene	12.419	202	721487	1088.45	ng/ml	99
76) Benzidine	12.574	184	294175	1842.78	ng/ml	98
77) Pyrene	12.708	202	722196	1070.62	ng/ml	100
80) Butyl benzyl phthalate	13.724	149	293237	1004.00	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.901	129	280177	1058.58	ng/ml	98
82) 3,3-Dichlorobenzidine	14.853	252	184897	2062.77	ng/ml	97
83) Benz(a)anthracene	14.880	228	655689	1029.12	ng/ml	98
84) Chrysene	14.965	228	602768	1009.53	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.061	149	426572	1039.18	ng/ml	98
87) Di-n-octyl phthalate	16.730	149	675629	1013.80	ng/ml	100
88) Benzo(b)fluoranthene	17.463	252	645650	1008.51	ng/ml	99
89) Benzo(k)fluoranthene	17.532	252	640735	992.12	ng/ml	99
90) Benzo(b+k)fluoranthene	17.532	252	1307403	1987.64	ng/ml	99
91) Benzo(e)pyrene	18.115	252	622430	1042.80	ng/ml	100
92) Benzo(a)pyrene	18.238	252	564640	971.42	ng/ml	98
93) Perylene	18.442	252	636474	1215.26	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.774	276	575136	973.51	ng/ml	100
96) Dibenz(a,h)anthracene	20.843	278	552893	1019.31	ng/ml	99
97) Benzo(g,h,i)perylene	21.309	276	598608	1054.88	ng/ml	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



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

Semivolatile Organic Compounds by EPA 8270D
Calibration Data

Sequence 9J04044 (Cal ID A9J0804) SV-GCMS5

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J04044**	Instrument:	**SV-GCMS5**
Date:	**10/04/19 16:36**	Calibration:	**A9J0804**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J04044-TUN1	Soil	QC	QC			A19G233	A19J016
2	9J04044-ICB1	Soil	QC	QC			A19G233	
3	9J04044-CAL1	Soil	QC	QC			A19G233	A19G238
4	9J04044-CAL2	Soil	QC	QC			A19G233	A19G239
5	9J04044-CAL3	Soil	QC	QC			A19G233	A19G240
6	9J04044-CAL4	Soil	QC	QC			A19G233	A19G241
7	9J04044-CAL5	Soil	QC	QC			A19G233	A19G242
8	9J04044-CAL6	Soil	QC	QC			A19G233	A19G243
9	9J04044-CAL7	Soil	QC	QC			A19G233	A19G244
10	9J04044-CAL8	Soil	QC	QC			A19G233	A19G245
11	9J04044-CAL9	Soil	QC	QC			A19G233	A19G246
12	9J04044-CALA	Soil	QC	QC			A19G233	A19G247
13	9J04044-IBL1	Soil	QC	QC			A19G233	
14	9J04044-ICV1	Soil	QC	QC			A19G233	A19I254
15	9J04044-IBL2	Soil	QC	QC			A19G233	

Data Entered By: AMS 10/8/19

Data Reviewed By: MK 10/4/19

Comments:

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J04044

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed	
9J04044-TUN1	MS Tune	Water	A19J016	A19G233	10/4/2019	4:46:00PM
9J04044-ICB1	Initial Cal Blank	Water		A19G233	10/4/2019	5:14:00PM
9J04044-CAL1	Cal Standard	Water	A19G238	"	10/4/2019	5:49:00PM
9J04044-CAL2	Cal Standard	Water	A19G239	"	10/4/2019	6:25:00PM
9J04044-CAL3	Cal Standard	Water	A19G240	"	10/4/2019	7:01:00PM
9J04044-CAL4	Cal Standard	Water	A19G241	"	10/4/2019	7:36:00PM
9J04044-CAL5	Cal Standard	Water	A19G242	"	10/4/2019	8:12:00PM
9J04044-CAL6	Cal Standard	Water	A19G243	"	10/4/2019	8:47:00PM
9J04044-CAL7	Cal Standard	Water	A19G244	"	10/4/2019	9:23:00PM
9J04044-CAL8	Cal Standard	Water	A19G245	"	10/4/2019	9:58:00PM
9J04044-CAL9	Cal Standard	Water	A19G246	"	10/4/2019	10:34:00PM
9J04044-CALA	Cal Standard	Water	A19G247	"	10/4/2019	11:09:00PM
9J04044-ICV1	Initial Cal Check	Water	A19I254	"	10/5/2019	12:20:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J0804** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9J04044** Matrix: **Water**

9J04044-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-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: 9J04044

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: **A9J0804** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9J04044** Matrix: **Water**

9J04044-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: 9J04044

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9J04044-TUN1	MS Tune	Soil	A19J016	A19G233	10/4/2019 4:46:00PM
9J04044-ICB1	Initial Cal Blank	Soil		A19G233	10/4/2019 5:14:00PM
9J04044-CAL1	Cal Standard	Soil	A19G238	"	10/4/2019 5:49:00PM
9J04044-CAL2	Cal Standard	Soil	A19G239	"	10/4/2019 6:25:00PM
9J04044-CAL3	Cal Standard	Soil	A19G240	"	10/4/2019 7:01:00PM
9J04044-CAL4	Cal Standard	Soil	A19G241	"	10/4/2019 7:36:00PM
9J04044-CAL5	Cal Standard	Soil	A19G242	"	10/4/2019 8:12:00PM
9J04044-CAL6	Cal Standard	Soil	A19G243	"	10/4/2019 8:47:00PM
9J04044-CAL7	Cal Standard	Soil	A19G244	"	10/4/2019 9:23:00PM
9J04044-CAL8	Cal Standard	Soil	A19G245	"	10/4/2019 9:58:00PM
9J04044-CAL9	Cal Standard	Soil	A19G246	"	10/4/2019 10:34:00PM
9J04044-CALA	Cal Standard	Soil	A19G247	"	10/4/2019 11:09:00PM
9J04044-ICV1	Initial Cal Check	Soil	A19I254	"	10/5/2019 12:20:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J0804** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9J04044** Matrix: **Soil**

9J04044-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J04044-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: 9J04044

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: **A9J0804** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9J04044** Matrix: **Soil**

9J04044-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.

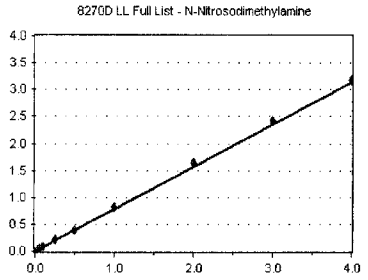
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

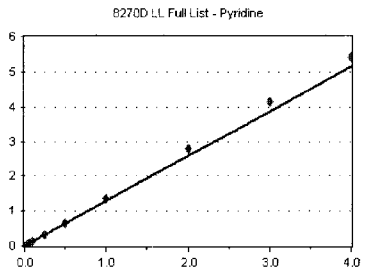


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3228	0.643	4.32
9J04044-CAL2	50	9166	0.742	4.32
9J04044-CAL3	100	20557	0.804	4.31
9J04044-CAL4	200	40134	0.790	4.31
9J04044-CAL5	500	108412	0.822	4.31
9J04044-CAL6	1000	202035	0.798	4.31
9J04044-CAL7	2000	420896	0.812	4.31
9J04044-CAL8	4000	927621	0.827	4.31
9J04044-CAL9	6000	1248946	0.808	4.32
9J04044-CALA	8000	1619392	0.793	4.32

AVE RF **0.784** RF RSD **6.98** AVE RT **4.31**

Pyridine

Curve Fit: **AVERAGE RF**

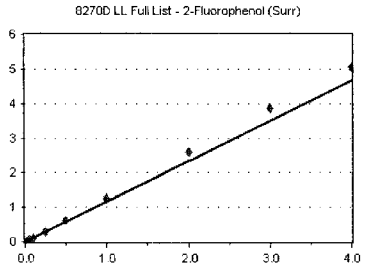


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~62~~	~~1.235~~	~~0.00~~
9J04044-CAL2	50	12754	1.032	4.35
9J04044-CAL3	100	30832	1.206	4.34
9J04044-CAL4	200	62267	1.226	4.34
9J04044-CAL5	500	172844	1.310	4.34
9J04044-CAL6	1000	329582	1.301	4.33
9J04044-CAL7	2000	706761	1.364	4.34
9J04044-CAL8	4000	1559654	1.390	4.33
9J04044-CAL9	6000	2136715	1.382	4.34
9J04044-CALA	8000	2770930	1.357	4.34

AVE RF **1.285** RF RSD **8.98** AVE RT **4.34**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

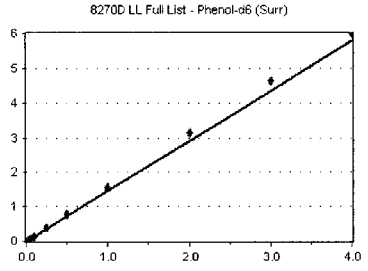


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4573	0.911	5.56
9J04044-CAL2	50	12531	1.014	5.56
9J04044-CAL3	100	28046	1.097	5.56
9J04044-CAL4	200	57278	1.128	5.56
9J04044-CAL5	500	160123	1.214	5.56
9J04044-CAL6	1000	307497	1.214	5.56
9J04044-CAL7	2000	657142	1.268	5.56
9J04044-CAL8	4000	1451261	1.294	5.56
9J04044-CAL9	6000	1992416	1.288	5.56
9J04044-CALA	8000	2584089	1.266	5.56

AVE RF **1.169** RF RSD **11.06** AVE RT **5.56**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5678	1.131	6.41
9J04044-CAL2	50	15671	1.268	6.41
9J04044-CAL3	100	35495	1.388	6.41
9J04044-CAL4	200	73567	1.449	6.41
9J04044-CAL5	500	204774	1.552	6.41
9J04044-CAL6	1000	388281	1.533	6.41
9J04044-CAL7	2000	814521	1.572	6.41
9J04044-CAL8	4000	1764056	1.572	6.42
9J04044-CAL9	6000	2387986	1.544	6.42
9J04044-CALA	8000	3058317	1.498	6.43

AVE RF **1.451** RF RSD **10.20** AVE RT **6.41**

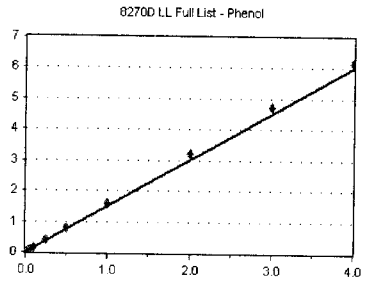
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Phenol

Curve Fit: **AVERAGE RF**

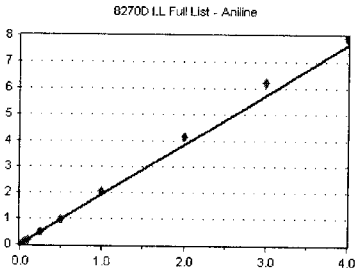


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5992	1.194	6.42
9J04044-CAL2	50	16493	1.334	6.42
9J04044-CAL3	100	37238	1.456	6.42
9J04044-CAL4	200	78450	1.545	6.42
9J04044-CAL5	500	213183	1.616	6.42
9J04044-CAL6	1000	405185	1.599	6.42
9J04044-CAL7	2000	826348	1.595	6.43
9J04044-CAL8	4000	1807482	1.611	6.43
9J04044-CAL9	6000	2436154	1.575	6.44
9J04044-CALA	8000	3151523	1.544	6.45

AVE RF **1.507** RF RSD **9.30** AVE RT **6.43**

Aniline

Curve Fit: **AVERAGE RF**

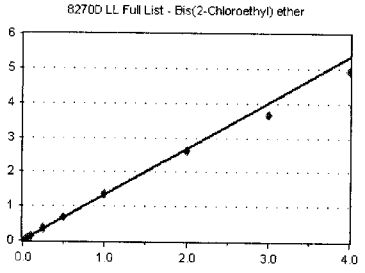


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3294~~	~~0.656~~	~~6.46~~
9J04044-CAL2	50	20125	1.628	6.46
9J04044-CAL3	100	45946	1.797	6.46
9J04044-CAL4	200	91522	1.802	6.46
9J04044-CAL5	500	255241	1.935	6.46
9J04044-CAL6	1000	488538	1.928	6.46
9J04044-CAL7	2000	1062311	2.050	6.47
9J04044-CAL8	4000	2329235	2.076	6.47
9J04044-CAL9	6000	3211659	2.077	6.47
9J04044-CALA	8000	4028188	1.973	6.47

AVE RF **1.919** RF RSD **7.89** AVE RT **6.46**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

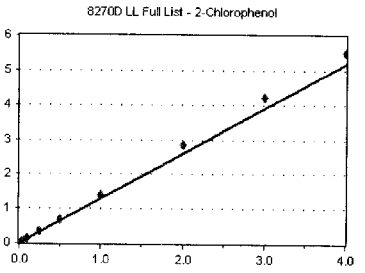


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	6412	1.278	6.51
9J04044-CAL2	50	16981	1.374	6.51
9J04044-CAL3	100	35827	1.401	6.51
9J04044-CAL4	200	72477	1.427	6.51
9J04044-CAL5	500	186531	1.414	6.51
9J04044-CAL6	1000	345648	1.364	6.51
9J04044-CAL7	2000	699689	1.350	6.51
9J04044-CAL8	4000	1480188	1.319	6.52
9J04044-CAL9	6000	1897268	1.227	6.53
9J04044-CALA	8000	2517297	1.233	6.53

AVE RF **1.339** RF RSD **5.41** AVE RT **6.52**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5037	1.004	6.58
9J04044-CAL2	50	13569	1.098	6.58
9J04044-CAL3	100	31578	1.235	6.58
9J04044-CAL4	200	65081	1.282	6.58
9J04044-CAL5	500	183289	1.389	6.58
9J04044-CAL6	1000	346787	1.369	6.58
9J04044-CAL7	2000	721205	1.392	6.58
9J04044-CAL8	4000	1594926	1.422	6.58
9J04044-CAL9	6000	2165580	1.400	6.58
9J04044-CALA	8000	2815985	1.379	6.59

AVE RF **1.297** RF RSD **11.07** AVE RT **6.58**

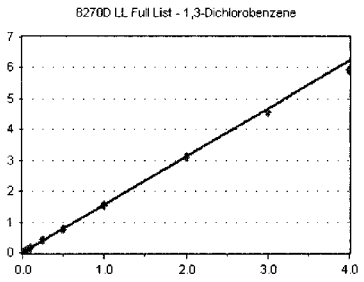
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

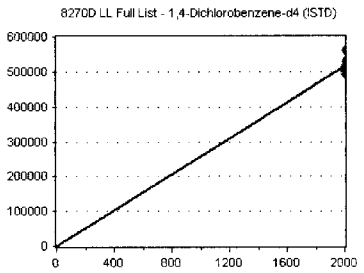


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7719	1.538	6.73
9J04044-CAL2	50	19165	1.550	6.73
9J04044-CAL3	100	41378	1.618	6.73
9J04044-CAL4	200	81926	1.613	6.73
9J04044-CAL5	500	213975	1.622	6.73
9J04044-CAL6	1000	392859	1.551	6.73
9J04044-CAL7	2000	809136	1.562	6.73
9J04044-CAL8	4000	1748864	1.559	6.73
9J04044-CAL9	6000	2360155	1.526	6.73
9J04044-CALA	8000	3027099	1.483	6.73

AVE RF **1.562** RF RSD **2.84** AVE RT **6.73**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

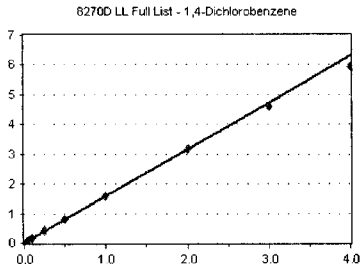


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	501898	250.949	6.78
9J04044-CAL2	2000	494451	247.225	6.78
9J04044-CAL3	2000	511444	255.722	6.78
9J04044-CAL4	2000	507831	253.915	6.78
9J04044-CAL5	2000	527723	263.862	6.78
9J04044-CAL6	2000	506660	253.330	6.78
9J04044-CAL7	2000	518143	259.072	6.78
9J04044-CAL8	2000	560948	280.474	6.78
9J04044-CAL9	2000	515459	257.730	6.78
9J04044-CALA	2000	510365	255.183	6.78

AVE RF **257.746** RF RSD **3.56** AVE RT **6.78**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

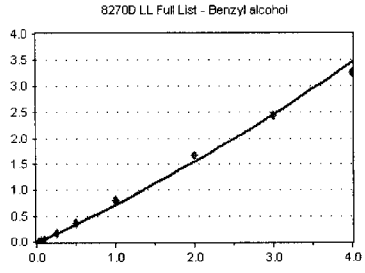


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7740	1.542	6.79
9J04044-CAL2	50	19639	1.589	6.79
9J04044-CAL3	100	41829	1.636	6.79
9J04044-CAL4	200	82460	1.624	6.79
9J04044-CAL5	500	215257	1.632	6.79
9J04044-CAL6	1000	399413	1.577	6.79
9J04044-CAL7	2000	824470	1.591	6.79
9J04044-CAL8	4000	1774145	1.581	6.80
9J04044-CAL9	6000	2385066	1.542	6.80
9J04044-CALA	8000	3034583	1.486	6.80

AVE RF **1.580** RF RSD **2.95** AVE RT **6.79**

Benzyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~2745~~	~~0.547~~	~~6.90~~
9J04044-CAL2	50	3567	0.289	6.90
9J04044-CAL3	100	8434	0.330	6.90
9J04044-CAL4	200	23718	0.467	6.90
9J04044-CAL5	500	86813	0.658	6.89
9J04044-CAL6	1000	184747	0.729	6.90
9J04044-CAL7	2000	413335	0.798	6.90
9J04044-CAL8	4000	937894	0.836	6.91
9J04044-CAL9	6000	1255964	0.812	6.91
9J04044-CALA	8000	1669239	0.818	6.92

AVE RF **0.637** RF RSD **34.30** AVE RT **6.90**

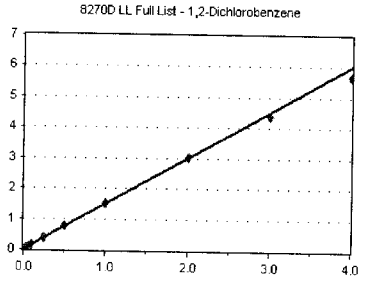
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

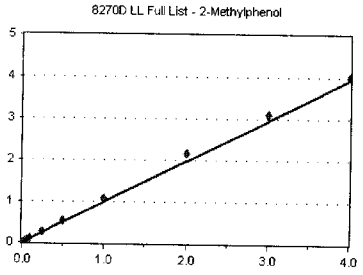


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	6999	1.395	6.94
9J04044-CAL2	50	18970	1.535	6.94
9J04044-CAL3	100	40421	1.581	6.94
9J04044-CAL4	200	79466	1.565	6.94
9J04044-CAL5	500	205542	1.558	6.94
9J04044-CAL6	1000	379862	1.499	6.94
9J04044-CAL7	2000	787423	1.520	6.95
9J04044-CAL8	4000	1689391	1.506	6.95
9J04044-CAL9	6000	2258928	1.461	6.95
9J04044-CALA	8000	2896971	1.419	6.95

AVE RF **1.504** RF RSD **4.13** AVE RT **6.94**

2-Methylphenol

Curve Fit: **AVERAGE RF**

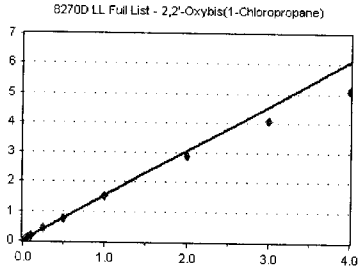


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4057	0.808	7.00
9J04044-CAL2	50	10413	0.842	7.00
9J04044-CAL3	100	23055	0.902	7.00
9J04044-CAL4	200	50332	0.991	7.00
9J04044-CAL5	500	139535	1.058	7.00
9J04044-CAL6	1000	267181	1.055	7.00
9J04044-CAL7	2000	556507	1.074	7.00
9J04044-CAL8	4000	1212038	1.080	7.01
9J04044-CAL9	6000	1606957	1.039	7.01
9J04044-CALA	8000	2044828	1.002	7.01

AVE RF **0.985** RF RSD **10.09** AVE RT **7.00**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

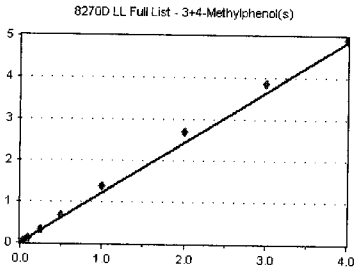


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7822	1.558	7.03
9J04044-CAL2	50	19732	1.596	7.03
9J04044-CAL3	100	43026	1.683	7.03
9J04044-CAL4	200	83852	1.651	7.03
9J04044-CAL5	500	212748	1.613	7.03
9J04044-CAL6	1000	391014	1.543	7.03
9J04044-CAL7	2000	785609	1.516	7.03
9J04044-CAL8	4000	1614902	1.439	7.03
9J04044-CAL9	6000	2103226	1.360	7.03
9J04044-CALA	8000	2606906	1.277	7.03

AVE RF **1.524** RF RSD **8.50** AVE RT **7.03**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4662	0.929	7.15
9J04044-CAL2	50	12218	0.988	7.15
9J04044-CAL3	100	27949	1.093	7.15
9J04044-CAL4	200	61100	1.203	7.15
9J04044-CAL5	500	176944	1.341	7.15
9J04044-CAL6	1000	343545	1.356	7.15
9J04044-CAL7	2000	711182	1.373	7.15
9J04044-CAL8	4000	1511738	1.347	7.16
9J04044-CAL9	6000	1988333	1.286	7.16
9J04044-CALA	8000	2516549	1.233	7.17

AVE RF **1.215** RF RSD **13.21** AVE RT **7.15**

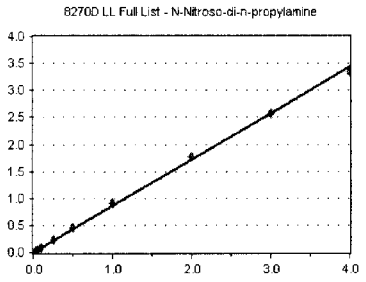
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

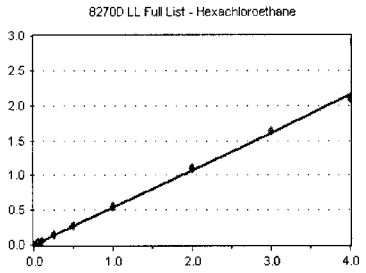


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3426	0.683	7.16
9J04044-CAL2	50	9766	0.790	7.15
9J04044-CAL3	100	21912	0.857	7.15
9J04044-CAL4	200	44762	0.881	7.15
9J04044-CAL5	500	124566	0.944	7.15
9J04044-CAL6	1000	234779	0.927	7.15
9J04044-CAL7	2000	474593	0.916	7.16
9J04044-CAL8	4000	996850	0.889	7.17
9J04044-CAL9	6000	1325077	0.857	7.17
9J04044-CALA	8000	1706045	0.836	7.18

AVE RF **0.858** RF RSD **8.93** AVE RT **7.16**

Hexachloroethane

Curve Fit: **AVERAGE RF**

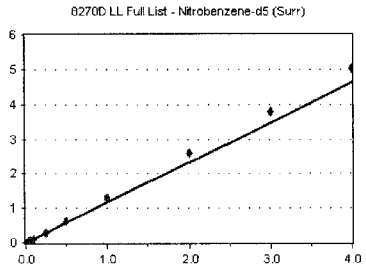


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2518	0.502	7.27
9J04044-CAL2	50	6360	0.515	7.27
9J04044-CAL3	100	13649	0.534	7.27
9J04044-CAL4	200	27779	0.547	7.27
9J04044-CAL5	500	72991	0.553	7.27
9J04044-CAL6	1000	137591	0.543	7.27
9J04044-CAL7	2000	288591	0.557	7.27
9J04044-CAL8	4000	622545	0.555	7.27
9J04044-CAL9	6000	842435	0.545	7.28
9J04044-CALA	8000	1078333	0.528	7.27

AVE RF **0.538** RF RSD **3.40** AVE RT **7.27**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

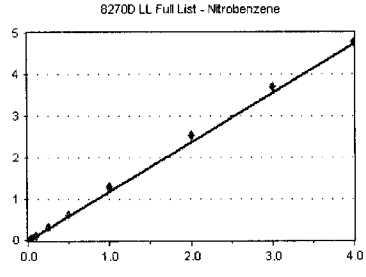


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4429	0.882	7.31
9J04044-CAL2	50	11673	0.944	7.31
9J04044-CAL3	100	26887	1.051	7.31
9J04044-CAL4	200	56736	1.117	7.31
9J04044-CAL5	500	162122	1.229	7.31
9J04044-CAL6	1000	311795	1.231	7.31
9J04044-CAL7	2000	664083	1.282	7.31
9J04044-CAL8	4000	1458731	1.300	7.32
9J04044-CAL9	6000	1960759	1.268	7.32
9J04044-CALA	8000	2566255	1.257	7.32

AVE RF **1.156** RF RSD **12.97** AVE RT **7.31**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4857	0.968	7.33
9J04044-CAL2	50	12939	1.047	7.33
9J04044-CAL3	100	28798	1.126	7.32
9J04044-CAL4	200	60655	1.194	7.33
9J04044-CAL5	500	167805	1.272	7.33
9J04044-CAL6	1000	319057	1.259	7.33
9J04044-CAL7	2000	667008	1.287	7.33
9J04044-CAL8	4000	1420051	1.266	7.33
9J04044-CAL9	6000	1907412	1.233	7.34
9J04044-CALA	8000	2439685	1.195	7.34

AVE RF **1.185** RF RSD **9.00** AVE RT **7.33**

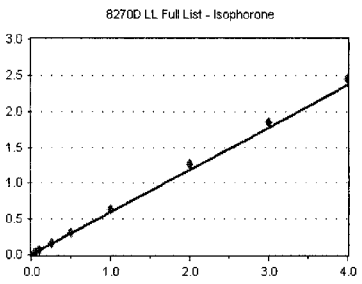
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Isophorone

Curve Fit: **AVERAGE RF**

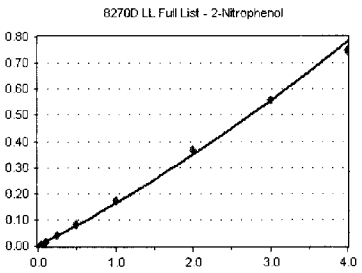


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9174	0.469	7.56
9J04044-CAL2	50	25333	0.524	7.55
9J04044-CAL3	100	57116	0.566	7.55
9J04044-CAL4	200	120026	0.604	7.55
9J04044-CAL5	500	324343	0.635	7.55
9J04044-CAL6	1000	621683	0.632	7.56
9J04044-CAL7	2000	1271667	0.632	7.56
9J04044-CAL8	4000	2770059	0.629	7.57
9J04044-CAL9	6000	3752692	0.619	7.57
9J04044-CALA	8000	4917383	0.614	7.58

AVE RF **0.593** RF RSD **9.44** AVE RT **7.56**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

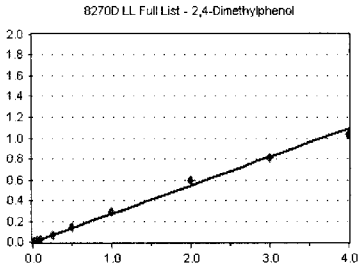


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1264~~	~~6.468~~	~~7.64~~
9J04044-CAL2	50	3866	7.993	7.64
9J04044-CAL3	100	9941	9.857	7.64
9J04044-CAL4	200	22940	0.115	7.64
9J04044-CAL5	500	75675	0.148	7.64
9J04044-CAL6	1000	162997	0.166	7.64
9J04044-CAL7	2000	346048	0.172	7.64
9J04044-CAL8	4000	809872	0.184	7.65
9J04044-CAL9	6000	1126957	0.186	7.65
9J04044-CALA	8000	1499349	0.187	7.65

AVE RF **0.149** RF RSD **27.43** AVE RT **7.64**

2,4-Dimethylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

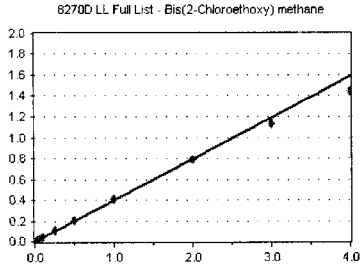


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2975	0.152	7.67
9J04044-CAL2	50	8310	0.172	7.67
9J04044-CAL3	100	22605	0.224	7.67
9J04044-CAL4	200	50095	0.252	7.67
9J04044-CAL5	500	138525	0.271	7.67
9J04044-CAL6	1000	280775	0.285	7.67
9J04044-CAL7	2000	589089	0.293	7.68
9J04044-CAL8	4000	1298270	0.295	7.68
9J04044-CAL9	6000	1632461	0.269	7.69
9J04044-CALA	8000	2072577	0.259	7.69

AVE RF **0.247** RF RSD **20.13** AVE RT **7.67**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7132	0.365	7.76
9J04044-CAL2	50	19669	0.407	7.76
9J04044-CAL3	100	41515	0.412	7.76
9J04044-CAL4	200	83010	0.418	7.76
9J04044-CAL5	500	215124	0.421	7.76
9J04044-CAL6	1000	402923	0.410	7.76
9J04044-CAL7	2000	816477	0.406	7.77
9J04044-CAL8	4000	1730982	0.393	7.77
9J04044-CAL9	6000	2295556	0.378	7.77
9J04044-CALA	8000	2907157	0.363	7.78

AVE RF **0.397** RF RSD **5.38** AVE RT **7.76**

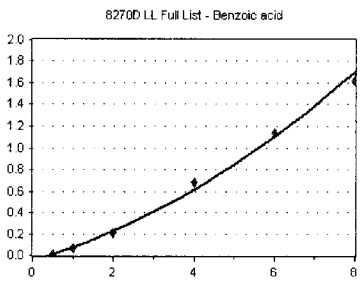
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

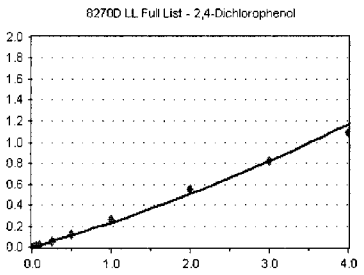


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~40~~	~~65~~	~~1.663~~	~~7.83~~
~~9J04044-CAL2~~	~~100~~	~~99~~	~~1.023~~	~~7.74~~
~~9J04044-CAL3~~	~~200~~	~~152~~	~~7.536~~	~~7.73~~
~~9J04044-CAL4~~	~~400~~	~~549~~	~~1.382~~	~~7.72~~
9J04044-CAL5	1000	26893	2.633	7.73
9J04044-CAL6	2000	136359	6.932	7.76
9J04044-CAL7	4000	418226	0.104	7.78
9J04044-CAL8	8000	1496140	0.170	7.84
9J04044-CAL9	12000	2296852	0.189	7.87
9J04044-CALA	16000	3255088	0.203	7.90

AVE RF **0.127** RF RSD **56.25** AVE RT **7.81**

2,4-Dichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

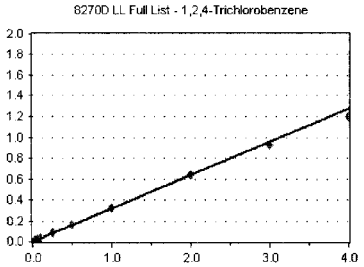


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2874	0.147	7.87
9J04044-CAL2	50	8546	0.177	7.88
9J04044-CAL3	100	16620	0.165	7.87
9J04044-CAL4	200	36691	0.185	7.88
9J04044-CAL5	500	111455	0.218	7.88
9J04044-CAL6	1000	233887	0.238	7.88
9J04044-CAL7	2000	520983	0.259	7.88
9J04044-CAL8	4000	1211553	0.275	7.89
9J04044-CAL9	6000	1665684	0.275	7.89
9J04044-CALA	8000	2176527	0.272	7.89

AVE RF **0.221** RF RSD **22.39** AVE RT **7.88**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

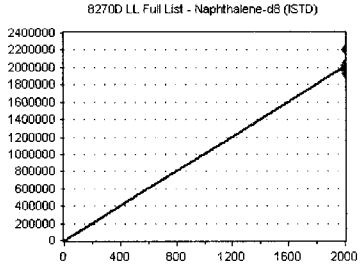


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5608	0.287	7.96
9J04044-CAL2	50	15837	0.327	7.96
9J04044-CAL3	100	33988	0.337	7.96
9J04044-CAL4	200	65463	0.330	7.96
9J04044-CAL5	500	171276	0.335	7.96
9J04044-CAL6	1000	318153	0.323	7.97
9J04044-CAL7	2000	653096	0.325	7.97
9J04044-CAL8	4000	1403311	0.319	7.97
9J04044-CAL9	6000	1887758	0.311	7.97
9J04044-CALA	8000	2408441	0.301	7.97

AVE RF **0.320** RF RSD **4.94** AVE RT **7.97**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1954223	977.111	8.02
9J04044-CAL2	2000	1934771	967.386	8.02
9J04044-CAL3	2000	2017063	1008.531	8.02
9J04044-CAL4	2000	1986664	993.332	8.02
9J04044-CAL5	2000	2042969	1021.484	8.02
9J04044-CAL6	2000	1967039	983.519	8.03
9J04044-CAL7	2000	2010994	1005.497	8.03
9J04044-CAL8	2000	2200532	1100.266	8.03
9J04044-CAL9	2000	2022063	1011.031	8.03
9J04044-CALA	2000	2002472	1001.236	8.03

AVE RF **1006.939** RF RSD **3.65** AVE RT **8.03**

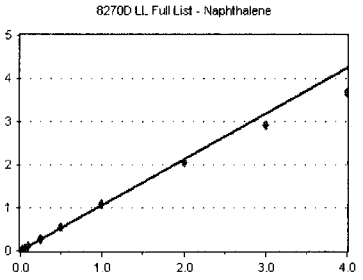
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Naphthalene

Curve Fit: **AVERAGE RF**

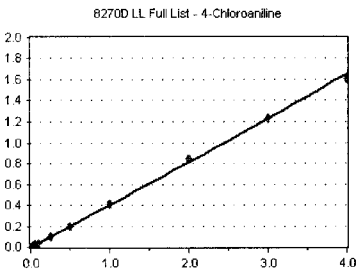


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	21175	1.084	8.04
9J04044-CAL2	50	53705	1.110	8.04
9J04044-CAL3	100	113965	1.130	8.04
9J04044-CAL4	200	222558	1.120	8.04
9J04044-CAL5	500	572938	1.122	8.04
9J04044-CAL6	1000	1059258	1.077	8.04
9J04044-CAL7	2000	2160367	1.074	8.05
9J04044-CAL8	4000	4507073	1.024	8.05
9J04044-CAL9	6000	5893885	0.972	8.06
9J04044-CALA	8000	7374669	0.921	8.06

AVE RF **1.063** RF RSD **6.60** AVE RT **8.05**

4-Chloroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

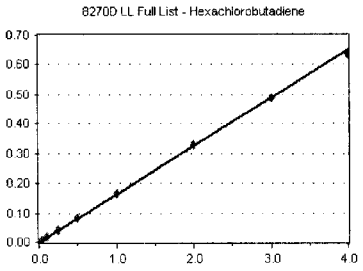


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3531	0.181	8.09
9J04044-CAL2	50	16115	0.333	8.09
9J04044-CAL3	100	35162	0.349	8.09
9J04044-CAL4	200	72252	0.364	8.09
9J04044-CAL5	500	197823	0.387	8.09
9J04044-CAL6	1000	378701	0.385	8.09
9J04044-CAL7	2000	832115	0.414	8.09
9J04044-CAL8	4000	1861865	0.423	8.10
9J04044-CAL9	6000	2487773	0.410	8.10
9J04044-CALA	8000	3233056	0.404	8.10

AVE RF **0.365** RF RSD **19.47** AVE RT **8.09**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

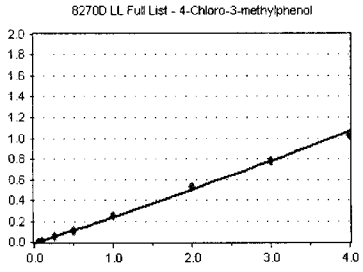


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2770	0.142	8.17
9J04044-CAL2	50	8020	0.166	8.17
9J04044-CAL3	100	17073	0.169	8.17
9J04044-CAL4	200	33835	0.170	8.17
9J04044-CAL5	500	85940	0.168	8.17
9J04044-CAL6	1000	161397	0.164	8.17
9J04044-CAL7	2000	332394	0.165	8.17
9J04044-CAL8	4000	724343	0.165	8.18
9J04044-CAL9	6000	988880	0.163	8.18
9J04044-CALA	8000	1276100	0.159	8.18

AVE RF **0.163** RF RSD **5.01** AVE RT **8.17**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~825~~	~~4.222~~	~~8.57~~
~~9J04044-CAL2~~	~~50~~	~~2865~~	~~5.923~~	~~8.57~~
9J04044-CAL3	100	9462	9.382	8.56
9J04044-CAL4	200	29264	0.147	8.56
9J04044-CAL5	500	104626	0.205	8.56
9J04044-CAL6	1000	223278	0.227	8.57
9J04044-CAL7	2000	504006	0.251	8.57
9J04044-CAL8	4000	1165524	0.265	8.57
9J04044-CAL9	6000	1576804	0.260	8.57
9J04044-CALA	8000	2060771	0.257	8.57

AVE RF **0.213** RF RSD **29.16** AVE RT **8.57**

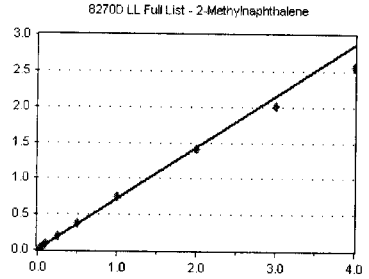
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

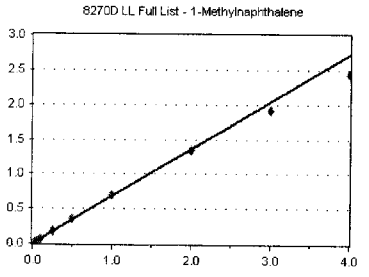


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	13253	0.678	8.74
9J04044-CAL2	50	35116	0.726	8.74
9J04044-CAL3	100	74750	0.741	8.74
9J04044-CAL4	200	149509	0.753	8.74
9J04044-CAL5	500	387564	0.759	8.74
9J04044-CAL6	1000	735677	0.748	8.74
9J04044-CAL7	2000	1488788	0.740	8.74
9J04044-CAL8	4000	3109447	0.707	8.75
9J04044-CAL9	6000	4079274	0.672	8.75
9J04044-CALA	8000	5141613	0.642	8.75

AVE RF **0.717** RF RSD **5.59** AVE RT **8.74**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

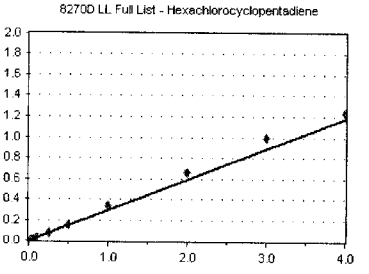


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12582	0.644	8.84
9J04044-CAL2	50	33386	0.690	8.84
9J04044-CAL3	100	71626	0.710	8.84
9J04044-CAL4	200	140701	0.708	8.84
9J04044-CAL5	500	369273	0.723	8.84
9J04044-CAL6	1000	691132	0.703	8.84
9J04044-CAL7	2000	1413991	0.703	8.84
9J04044-CAL8	4000	2960501	0.673	8.85
9J04044-CAL9	6000	3865478	0.637	8.85
9J04044-CALA	8000	4883333	0.610	8.85

AVE RF **0.680** RF RSD **5.56** AVE RT **8.84**

Hexachlorocyclopentadiene

Curve Fit: **AVERAGE RF**

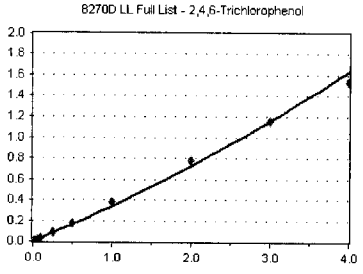


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~2011~~	~~0.205~~	~~8.91~~
9J04044-CAL2	50	5522	0.226	8.91
9J04044-CAL3	100	12791	0.250	8.91
9J04044-CAL4	200	27324	0.274	8.91
9J04044-CAL5	500	78041	0.301	8.91
9J04044-CAL6	1000	155746	0.307	8.91
9J04044-CAL7	2000	341473	0.334	8.91
9J04044-CAL8	4000	754777	0.332	8.91
9J04044-CAL9	6000	1031740	0.331	8.91
9J04044-CALA	8000	1297946	0.308	8.91

AVE RF **0.296** RF RSD **12.98** AVE RT **8.91**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	1576	0.161	9.02
9J04044-CAL2	50	5054	0.206	9.02
9J04044-CAL3	100	12211	0.239	9.02
9J04044-CAL4	200	28269	0.284	9.02
9J04044-CAL5	500	86866	0.335	9.02
9J04044-CAL6	1000	177033	0.349	9.02
9J04044-CAL7	2000	382753	0.375	9.02
9J04044-CAL8	4000	890869	0.392	9.03
9J04044-CAL9	6000	1201411	0.385	9.03
9J04044-CALA	8000	1621559	0.385	9.03

AVE RF **0.311** RF RSD **26.92** AVE RT **9.02**

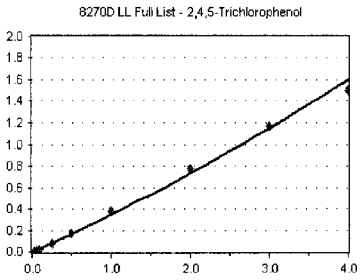
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

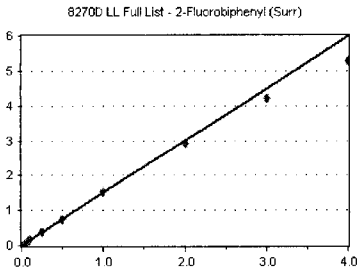


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1472~~	~~0.150~~	~~9.06~~
9J04044-CAL2	50	4145	0.169	9.06
9J04044-CAL3	100	10362	0.202	9.06
9J04044-CAL4	200	24777	0.249	9.06
9J04044-CAL5	500	82320	0.317	9.06
9J04044-CAL6	1000	174463	0.344	9.06
9J04044-CAL7	2000	388199	0.380	9.06
9J04044-CAL8	4000	890092	0.391	9.06
9J04044-CAL9	6000	1218504	0.390	9.07
9J04044-CALA	8000	1578821	0.375	9.07

AVE RF **0.313** RF RSD **27.29** AVE RT **9.06**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

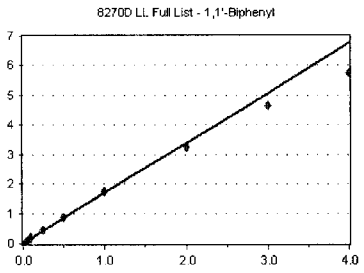


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	14167	1.443	9.10
9J04044-CAL2	50	37314	1.524	9.10
9J04044-CAL3	100	81066	1.584	9.10
9J04044-CAL4	200	159069	1.596	9.10
9J04044-CAL5	500	410324	1.581	9.10
9J04044-CAL6	1000	773027	1.524	9.10
9J04044-CAL7	2000	1571214	1.537	9.11
9J04044-CAL8	4000	3327954	1.463	9.11
9J04044-CAL9	6000	4402576	1.410	9.11
9J04044-CALA	8000	5558681	1.319	9.11

AVE RF **1.498** RF RSD **5.91** AVE RT **9.11**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

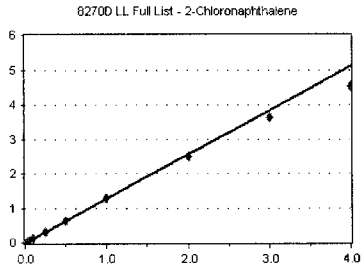


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16246	1.655	9.21
9J04044-CAL2	50	43676	1.784	9.21
9J04044-CAL3	100	91733	1.792	9.21
9J04044-CAL4	200	179867	1.805	9.20
9J04044-CAL5	500	470721	1.813	9.20
9J04044-CAL6	1000	883007	1.741	9.21
9J04044-CAL7	2000	1781512	1.743	9.21
9J04044-CAL8	4000	3690641	1.623	9.22
9J04044-CAL9	6000	4841602	1.551	9.22
9J04044-CALA	8000	6043027	1.434	9.22

AVE RF **1.694** RF RSD **7.45** AVE RT **9.21**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12304	1.253	9.23
9J04044-CAL2	50	31794	1.299	9.23
9J04044-CAL3	100	68309	1.335	9.23
9J04044-CAL4	200	135490	1.359	9.23
9J04044-CAL5	500	347723	1.339	9.23
9J04044-CAL6	1000	656883	1.295	9.23
9J04044-CAL7	2000	1337046	1.308	9.24
9J04044-CAL8	4000	2841238	1.249	9.24
9J04044-CAL9	6000	3773961	1.209	9.24
9J04044-CALA	8000	4772658	1.133	9.24

AVE RF **1.278** RF RSD **5.38** AVE RT **9.23**

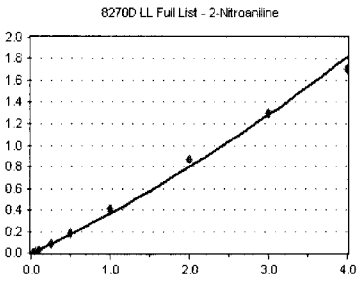
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

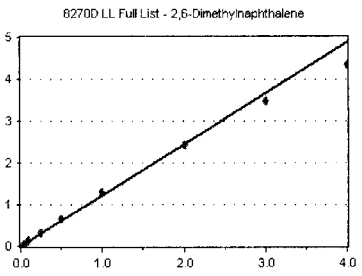


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1432~~	~~0.146~~	~~9.32~~
9J04044-CAL2	50	4227	0.173	9.32
9J04044-CAL3	100	10341	0.202	9.32
9J04044-CAL4	200	24260	0.243	9.33
9J04044-CAL5	500	87140	0.336	9.32
9J04044-CAL6	1000	185496	0.366	9.33
9J04044-CAL7	2000	417290	0.408	9.33
9J04044-CAL8	4000	979056	0.431	9.34
9J04044-CAL9	6000	1344772	0.431	9.34
9J04044-CALA	8000	1794599	0.426	9.34

AVE RF **0.335** RF RSD **30.82** AVE RT **9.33**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

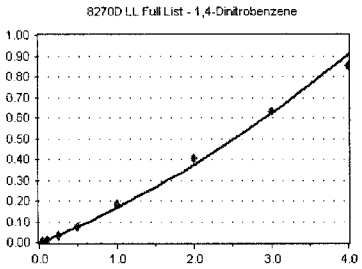


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	10754	1.096	9.37
9J04044-CAL2	50	29943	1.223	9.37
9J04044-CAL3	100	64761	1.265	9.37
9J04044-CAL4	200	129936	1.304	9.37
9J04044-CAL5	500	345848	1.332	9.37
9J04044-CAL6	1000	651717	1.285	9.37
9J04044-CAL7	2000	1313186	1.285	9.37
9J04044-CAL8	4000	2752650	1.210	9.38
9J04044-CAL9	6000	3628050	1.162	9.38
9J04044-CALA	8000	4586869	1.088	9.38

AVE RF **1.225** RF RSD **6.99** AVE RT **9.37**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

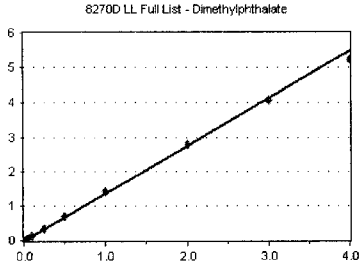


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~488~~	~~0.050~~	~~9.45~~
~~9J04044-CAL2~~	~~50~~	~~1321~~	~~0.054~~	~~9.45~~
9J04044-CAL3	100	3408	6.659	9.45
9J04044-CAL4	200	8401	0.084	9.45
9J04044-CAL5	500	32734	0.126	9.45
9J04044-CAL6	1000	75456	0.149	9.46
9J04044-CAL7	2000	185665	0.182	9.46
9J04044-CAL8	4000	460062	0.202	9.47
9J04044-CAL9	6000	659408	0.211	9.47
9J04044-CALA	8000	901550	0.214	9.47

AVE RF **0.154** RF RSD **37.36** AVE RT **9.46**

Dimethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11559	1.178	9.50
9J04044-CAL2	50	32085	1.311	9.50
9J04044-CAL3	100	71145	1.390	9.50
9J04044-CAL4	200	143218	1.437	9.50
9J04044-CAL5	500	380642	1.466	9.50
9J04044-CAL6	1000	721638	1.422	9.51
9J04044-CAL7	2000	1472377	1.441	9.51
9J04044-CAL8	4000	3162539	1.391	9.53
9J04044-CAL9	6000	4213811	1.350	9.53
9J04044-CALA	8000	5499423	1.305	9.54

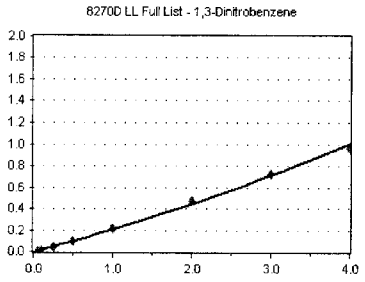
AVE RF **1.369** RF RSD **6.33** AVE RT **9.51**

Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

1,3-Dinitrobenzene

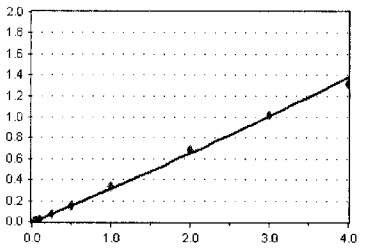


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~515~~	~~5.246~~	~~9.54~~
~~9J04044-CAL2~~	~~50~~	~~1725~~	~~7.046~~	~~9.53~~
9J04044-CAL3	100	4662	9.109	9.53
9J04044-CAL4	200	12358	0.124	9.53
9J04044-CAL5	500	43939	0.169	9.53
9J04044-CAL6	1000	98229	0.194	9.54
9J04044-CAL7	2000	224382	0.220	9.54
9J04044-CAL8	4000	535847	0.236	9.55
9J04044-CAL9	6000	752865	0.241	9.56
9J04044-CALA	8000	1015449	0.241	9.56

AVE RF **0.189** RF RSD **30.10** AVE RT **9.54**

2,6-Dinitrotoluene

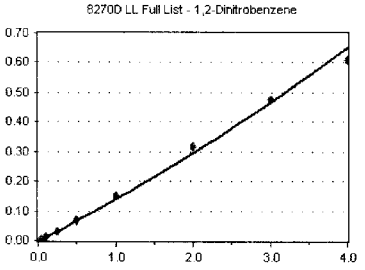


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1050~~	~~0.107~~	~~9.56~~
9J04044-CAL2	50	3393	0.139	9.56
9J04044-CAL3	100	9221	0.180	9.56
9J04044-CAL4	200	23552	0.236	9.56
9J04044-CAL5	500	75915	0.292	9.56
9J04044-CAL6	1000	155373	0.306	9.57
9J04044-CAL7	2000	337376	0.330	9.57
9J04044-CAL8	4000	771915	0.339	9.58
9J04044-CAL9	6000	1059908	0.340	9.58
9J04044-CALA	8000	1394857	0.331	9.59

AVE RF **0.277** RF RSD **27.02** AVE RT **9.57**

1,2-Dinitrobenzene

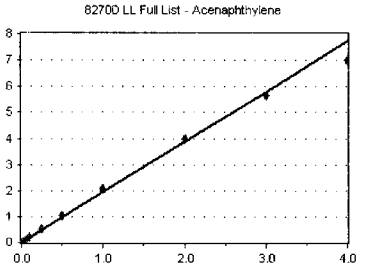


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~402~~	~~4.095~~	~~9.62~~
9J04044-CAL2	50	1367	5.584	9.62
9J04044-CAL3	100	3909	7.638	9.62
9J04044-CAL4	200	9733	9.766	9.62
9J04044-CAL5	500	33137	0.128	9.62
9J04044-CAL6	1000	68481	0.135	9.63
9J04044-CAL7	2000	153669	0.150	9.63
9J04044-CAL8	4000	359718	0.158	9.64
9J04044-CAL9	6000	495426	0.159	9.65
9J04044-CALA	8000	639989	0.152	9.66

AVE RF **0.124** RF RSD **30.81** AVE RT **9.63**

Acenaphthylene



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	15828	1.612	9.65
9J04044-CAL2	50	45072	1.841	9.65
9J04044-CAL3	100	101020	1.974	9.65
9J04044-CAL4	200	203065	2.037	9.65
9J04044-CAL5	500	547668	2.110	9.65
9J04044-CAL6	1000	1041417	2.053	9.65
9J04044-CAL7	2000	2118554	2.073	9.66
9J04044-CAL8	4000	4515302	1.986	9.67
9J04044-CAL9	6000	5901815	1.891	9.66
9J04044-CALA	8000	7402742	1.757	9.67

AVE RF **1.933** RF RSD **8.17** AVE RT **9.66**

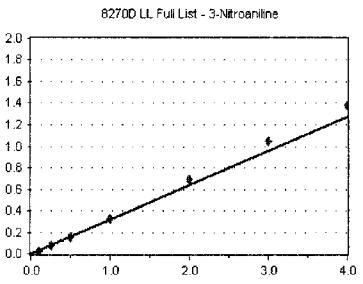
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

3-Nitroaniline

Curve Fit: **AVERAGE RF**

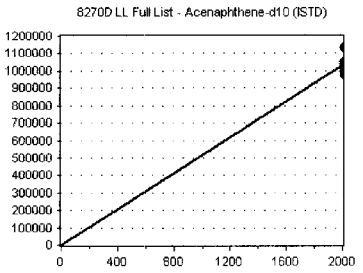


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1265~~	~~0.129~~	~~9.74~~
~~9J04044-CAL2~~	~~50~~	~~4069~~	~~0.166~~	~~9.74~~
~~9J04044-CAL3~~	~~100~~	~~10432~~	~~0.204~~	~~9.74~~
9J04044-CAL4	200	25298	0.254	9.74
9J04044-CAL5	500	78931	0.304	9.74
9J04044-CAL6	1000	154242	0.304	9.74
9J04044-CAL7	2000	329679	0.323	9.75
9J04044-CAL8	4000	790431	0.348	9.76
9J04044-CAL9	6000	1092459	0.350	9.76
9J04044-CALA	8000	1461403	0.347	9.77

AVE RF **0.318** RF RSD **10.92** AVE RT **9.75**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

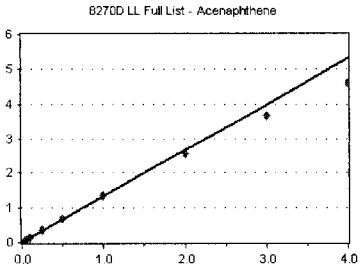


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	981607	490.803	9.80
9J04044-CAL2	2000	979273	489.637	9.80
9J04044-CAL3	2000	1023584	511.792	9.80
9J04044-CAL4	2000	996658	498.329	9.80
9J04044-CAL5	2000	1038444	519.222	9.80
9J04044-CAL6	2000	1014623	507.312	9.80
9J04044-CAL7	2000	1021934	510.967	9.80
9J04044-CAL8	2000	1137032	568.516	9.80
9J04044-CAL9	2000	1040520	520.260	9.81
9J04044-CALA	2000	1053563	526.782	9.81

AVE RF **514.362** RF RSD **4.41** AVE RT **9.80**

Acenaphthene

Curve Fit: **AVERAGE RF**

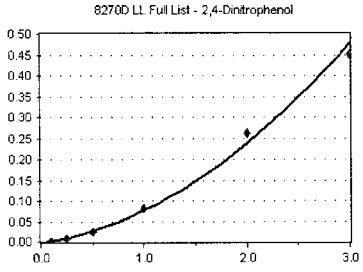


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12853	1.309	9.83
9J04044-CAL2	50	34473	1.408	9.83
9J04044-CAL3	100	71175	1.391	9.83
9J04044-CAL4	200	140818	1.413	9.83
9J04044-CAL5	500	365966	1.410	9.83
9J04044-CAL6	1000	685015	1.350	9.84
9J04044-CAL7	2000	1387214	1.357	9.84
9J04044-CAL8	4000	2913966	1.281	9.84
9J04044-CAL9	6000	3821450	1.224	9.85
9J04044-CALA	8000	4856643	1.152	9.85

AVE RF **1.330** RF RSD **6.62** AVE RT **9.84**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J04044-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9J04044-CAL3~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
9J04044-CAL4	200	899	9.020	9.85
9J04044-CAL5	500	7326	2.822	9.84
9J04044-CAL6	1000	24899	0.049	9.85
9J04044-CAL7	2000	83718	8.192	9.85
9J04044-CAL8	4000	299306	0.132	9.86
9J04044-CAL9	6000	470587	0.151	9.86
~~9J04044-CALA~~	~~8000~~	~~695772~~	~~0.165~~	~~9.87~~

AVE RF **7.510** RF RSD **75.80** AVE RT **9.85**

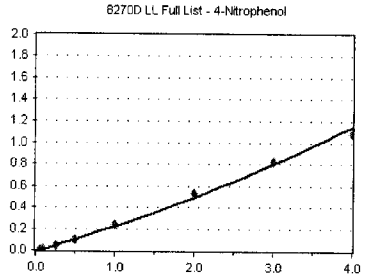
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

4-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

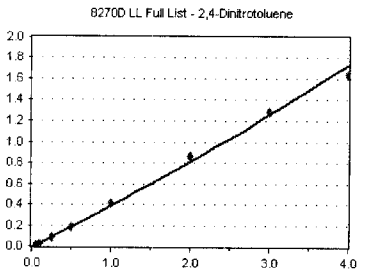


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~187~~	~~1.905~~	~~9.91~~
~~9J04044-CAL2~~	~~50~~	~~1043~~	~~4.260~~	~~9.90~~
9J04044-CAL3	100	2667	5.211	9.90
9J04044-CAL4	200	9294	9.325	9.89
9J04044-CAL5	500	43213	0.166	9.89
9J04044-CAL6	1000	101476	0.200	9.90
9J04044-CAL7	2000	247731	0.242	9.91
9J04044-CAL8	4000	608117	0.267	9.92
9J04044-CAL9	6000	849774	0.272	9.92
9J04044-CALA	8000	1134724	0.269	9.93

AVE RF **0.195** RF RSD **43.50** AVE RT **9.91**

2,4-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

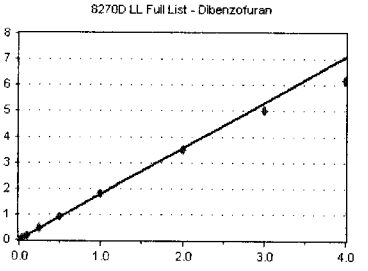


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1067~~	~~0.109~~	~~9.98~~
~~9J04044-CAL2~~	~~50~~	~~3448~~	~~0.141~~	~~9.98~~
9J04044-CAL3	100	8758	0.171	9.98
9J04044-CAL4	200	23349	0.234	9.98
9J04044-CAL5	500	85712	0.330	9.98
9J04044-CAL6	1000	183568	0.362	9.98
9J04044-CAL7	2000	418981	0.410	9.98
9J04044-CAL8	4000	980391	0.431	10.00
9J04044-CAL9	6000	1341937	0.430	10.00
9J04044-CALA	8000	1727496	0.410	10.01

AVE RF **0.347** RF RSD **27.96** AVE RT **9.99**

Dibenzofuran

Curve Fit: **AVERAGE RF**

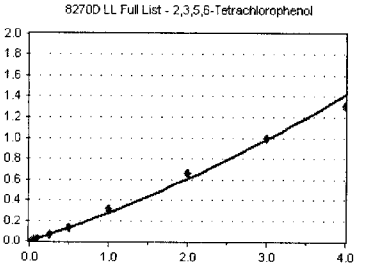


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16807	1.712	10.00
9J04044-CAL2	50	45469	1.857	10.00
9J04044-CAL3	100	94278	1.842	10.00
9J04044-CAL4	200	186970	1.876	10.01
9J04044-CAL5	500	489166	1.884	10.01
9J04044-CAL6	1000	910158	1.794	10.01
9J04044-CAL7	2000	1864498	1.824	10.01
9J04044-CAL8	4000	3964445	1.743	10.01
9J04044-CAL9	6000	5216202	1.671	10.02
9J04044-CALA	8000	6527980	1.549	10.02

AVE RF **1.775** RF RSD **6.03** AVE RT **10.01**

2,3,5,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~530~~	~~5.399~~	~~10.09~~
9J04044-CAL2	50	2043	8.345	10.09
9J04044-CAL3	100	5917	0.116	10.09
9J04044-CAL4	200	16706	0.168	10.09
9J04044-CAL5	500	63643	0.245	10.09
9J04044-CAL6	1000	135406	0.267	10.09
9J04044-CAL7	2000	315081	0.308	10.09
9J04044-CAL8	4000	746394	0.328	10.09
9J04044-CAL9	6000	1036485	0.332	10.10
9J04044-CALA	8000	1382272	0.328	10.10

AVE RF **0.242** RF RSD **39.95** AVE RT **10.09**

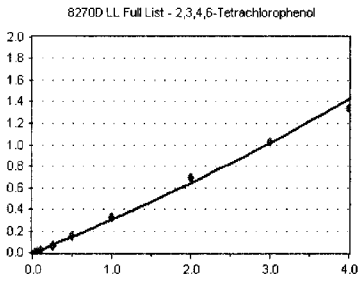
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

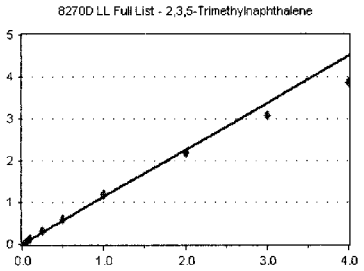


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1127~~	~~0.115~~	~~10.13~~
9J04044-CAL2	50	3800	0.155	10.13
9J04044-CAL3	100	8268	0.162	10.13
9J04044-CAL4	200	22228	0.223	10.13
9J04044-CAL5	500	72617	0.280	10.13
9J04044-CAL6	1000	153454	0.302	10.13
9J04044-CAL7	2000	331265	0.324	10.14
9J04044-CAL8	4000	788151	0.347	10.14
9J04044-CAL9	6000	1067964	0.342	10.14
9J04044-CALA	8000	1413440	0.335	10.15

AVE RF **0.274** RF RSD **27.74** AVE RT **10.13**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

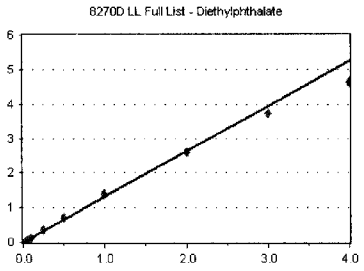


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9938	1.012	10.22
9J04044-CAL2	50	27785	1.135	10.22
9J04044-CAL3	100	60949	1.191	10.22
9J04044-CAL4	200	122364	1.228	10.22
9J04044-CAL5	500	323191	1.245	10.22
9J04044-CAL6	1000	602745	1.188	10.22
9J04044-CAL7	2000	1225454	1.199	10.22
9J04044-CAL8	4000	2479787	1.090	10.23
9J04044-CAL9	6000	3206391	1.027	10.23
9J04044-CALA	8000	4058731	0.963	10.23

AVE RF **1.128** RF RSD **8.79** AVE RT **10.22**

Diethylphthalate

Curve Fit: **AVERAGE RF**

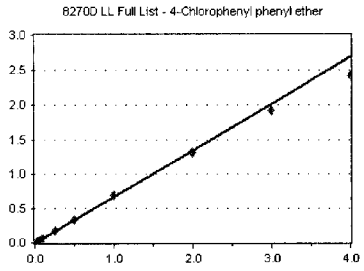


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11322	1.153	10.22
9J04044-CAL2	50	30343	1.239	10.22
9J04044-CAL3	100	69029	1.349	10.22
9J04044-CAL4	200	142210	1.427	10.22
9J04044-CAL5	500	382550	1.474	10.22
9J04044-CAL6	1000	713712	1.407	10.22
9J04044-CAL7	2000	1439136	1.408	10.23
9J04044-CAL8	4000	2958940	1.301	10.23
9J04044-CAL9	6000	3872184	1.240	10.24
9J04044-CALA	8000	4903098	1.163	10.24

AVE RF **1.316** RF RSD **8.64** AVE RT **10.22**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	6469	0.659	10.34
9J04044-CAL2	50	16626	0.679	10.34
9J04044-CAL3	100	34811	0.680	10.34
9J04044-CAL4	200	70469	0.707	10.34
9J04044-CAL5	500	185269	0.714	10.34
9J04044-CAL6	1000	345601	0.681	10.35
9J04044-CAL7	2000	708720	0.694	10.35
9J04044-CAL8	4000	1499613	0.659	10.36
9J04044-CAL9	6000	1993228	0.639	10.35
9J04044-CALA	8000	2540985	0.603	10.36

AVE RF **0.671** RF RSD **4.92** AVE RT **10.35**

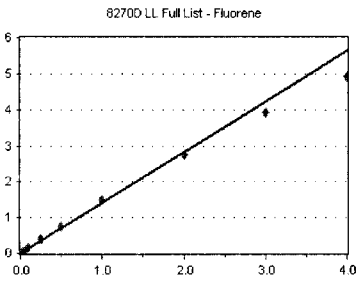
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Fluorene

Curve Fit: **AVERAGE RF**

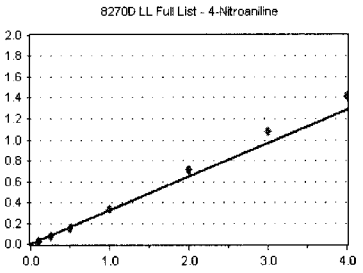


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12708	1.295	10.36
9J04044-CAL2	50	34375	1.404	10.36
9J04044-CAL3	100	74915	1.464	10.36
9J04044-CAL4	200	151801	1.523	10.35
9J04044-CAL5	500	400731	1.544	10.35
9J04044-CAL6	1000	747764	1.474	10.35
9J04044-CAL7	2000	1513373	1.481	10.36
9J04044-CAL8	4000	3137669	1.380	10.37
9J04044-CAL9	6000	4092225	1.311	10.37
9J04044-CALA	8000	5179594	1.229	10.37

AVE RF **1.410** RF RSD **7.45** AVE RT **10.36**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

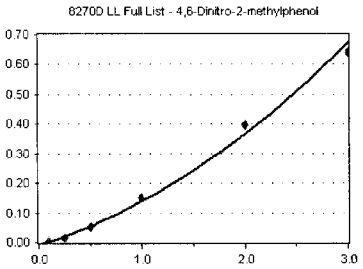


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1342~~	~~0.137~~	~~10.36~~
~~9J04044-CAL2~~	~~50~~	~~3879~~	~~0.158~~	~~10.36~~
~~9J04044-CAL3~~	~~100~~	~~9948~~	~~0.194~~	~~10.36~~
9J04044-CAL4	200	24143	0.242	10.35
9J04044-CAL5	500	80498	0.310	10.36
9J04044-CAL6	1000	153635	0.303	10.37
9J04044-CAL7	2000	342465	0.335	10.37
9J04044-CAL8	4000	810154	0.356	10.39
9J04044-CAL9	6000	1122461	0.360	10.39
9J04044-CALA	8000	1493586	0.354	10.40

AVE RF **0.323** RF RSD **13.06** AVE RT **10.38**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

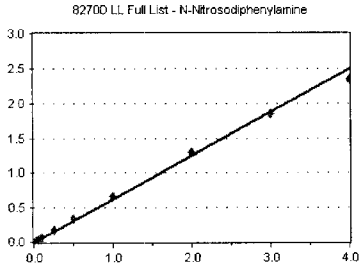


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J04044-CAL2~~	~~50~~	~~89~~	~~3.635~~	~~10.41~~
~~9J04044-CAL3~~	~~100~~	~~789~~	~~1.542~~	~~10.40~~
9J04044-CAL4	200	2993	3.003	10.39
9J04044-CAL5	500	17343	6.680	10.39
9J04044-CAL6	1000	52986	0.104	10.40
9J04044-CAL7	2000	153756	0.150	10.40
9J04044-CAL8	4000	450040	0.198	10.41
9J04044-CAL9	6000	664883	0.213	10.42
~~9J04044-CALA~~	~~8000~~	~~921019~~	~~0.219~~	~~10.43~~

AVE RF **0.127** RF RSD **57.28** AVE RT **10.40**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9310	0.519	10.46
9J04044-CAL2	50	25325	0.572	10.46
9J04044-CAL3	100	57306	0.629	10.46
9J04044-CAL4	200	121105	0.664	10.46
9J04044-CAL5	500	329585	0.683	10.46
9J04044-CAL6	1000	612070	0.666	10.47
9J04044-CAL7	2000	1263750	0.668	10.47
9J04044-CAL8	4000	2712874	0.647	10.48
9J04044-CAL9	6000	3599585	0.618	10.48
9J04044-CALA	8000	4615884	0.588	10.48

AVE RF **0.625** RF RSD **8.33** AVE RT **10.47**

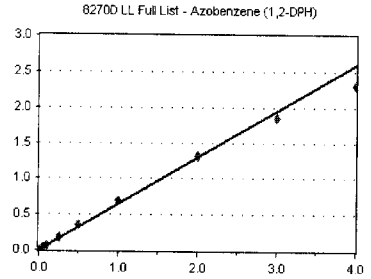
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

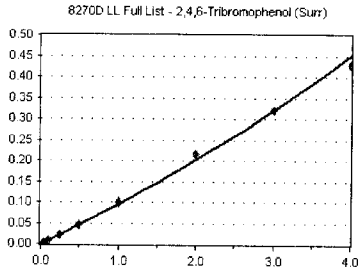


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9652	0.538	10.50
9J04044-CAL2	50	26865	0.607	10.50
9J04044-CAL3	100	61372	0.674	10.50
9J04044-CAL4	200	130219	0.714	10.50
9J04044-CAL5	500	350688	0.727	10.50
9J04044-CAL6	1000	647486	0.705	10.51
9J04044-CAL7	2000	1314353	0.695	10.51
9J04044-CAL8	4000	2753910	0.657	10.52
9J04044-CAL9	6000	3582406	0.615	10.52
9J04044-CALA	8000	4517921	0.575	10.52

AVE RF **0.651** RF RSD **9.83** AVE RT **10.51**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

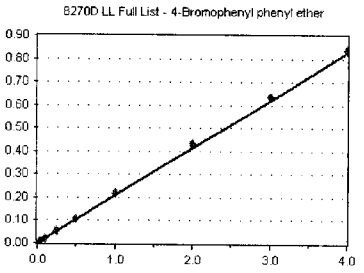


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~583~~	~~3.248~~	~~10.61~~
9J04044-CAL2	50	1964	4.438	10.60
9J04044-CAL3	100	5164	5.669	10.60
9J04044-CAL4	200	12498	0.068	10.60
9J04044-CAL5	500	41284	8.553	10.60
9J04044-CAL6	1000	85478	9.304	10.60
9J04044-CAL7	2000	190604	0.101	10.61
9J04044-CAL8	4000	451281	0.108	10.61
9J04044-CAL9	6000	626471	0.107	10.61
9J04044-CALA	8000	842257	0.107	10.62

AVE RF **0.086** RF RSD **27.83** AVE RT **10.61**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**

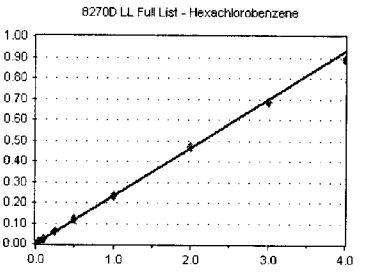


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3151	0.176	10.85
9J04044-CAL2	50	8668	0.196	10.85
9J04044-CAL3	100	18461	0.203	10.84
9J04044-CAL4	200	38061	0.209	10.85
9J04044-CAL5	500	103922	0.215	10.85
9J04044-CAL6	1000	193354	0.210	10.85
9J04044-CAL7	2000	410206	0.217	10.85
9J04044-CAL8	4000	908392	0.217	10.85
9J04044-CAL9	6000	1234455	0.212	10.85
9J04044-CALA	8000	1644227	0.209	10.86

AVE RF **0.206** RF RSD **6.12** AVE RT **10.85**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3927	0.219	10.93
9J04044-CAL2	50	10404	0.235	10.92
9J04044-CAL3	100	22041	0.242	10.92
9J04044-CAL4	200	42868	0.235	10.93
9J04044-CAL5	500	112908	0.234	10.93
9J04044-CAL6	1000	215409	0.234	10.93
9J04044-CAL7	2000	444455	0.235	10.93
9J04044-CAL8	4000	984819	0.235	10.94
9J04044-CAL9	6000	1332481	0.229	10.94
9J04044-CALA	8000	1754016	0.223	10.94

AVE RF **0.232** RF RSD **2.89** AVE RT **10.93**

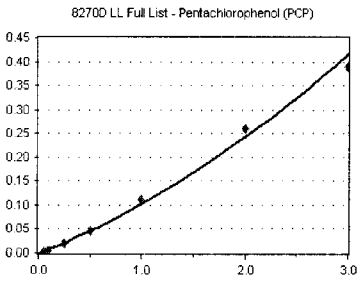
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

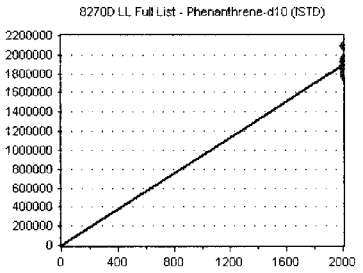


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1514~~	~~8.435~~	~~11.12~~
~~9J04044-CAL2~~	~~50~~	~~1860~~	~~0.042~~	~~11.12~~
9J04044-CAL3	100	3837	0.042	11.12
9J04044-CAL4	200	9274	5.082	11.12
9J04044-CAL5	500	36572	7.577	11.12
9J04044-CAL6	1000	86348	9.399	11.12
9J04044-CAL7	2000	213263	0.113	11.12
9J04044-CAL8	4000	542808	0.130	11.13
9J04044-CAL9	6000	757280	0.130	11.13
~~9J04044-CALA~~	~~8000~~	~~1010163~~	~~0.129~~	~~11.13~~

AVE RF **9.071** RF RSD **39.54** AVE RT **11.12**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

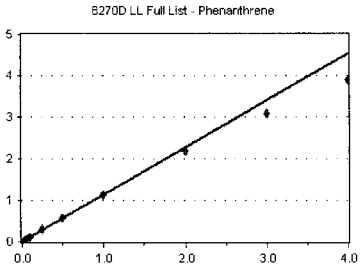


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1794978	897.489	11.31
9J04044-CAL2	2000	1770046	885.023	11.31
9J04044-CAL3	2000	1821812	910.906	11.31
9J04044-CAL4	2000	1825037	912.519	11.31
9J04044-CAL5	2000	1930632	965.316	11.31
9J04044-CAL6	2000	1837465	918.733	11.31
9J04044-CAL7	2000	1890550	945.275	11.32
9J04044-CAL8	2000	2095223	1047.611	11.32
9J04044-CAL9	2000	1942776	971.388	11.32
9J04044-CALA	2000	1962865	981.433	11.32

AVE RF **943.569** RF RSD **5.20** AVE RT **11.31**

Phenanthrene

Curve Fit: **AVERAGE RF**

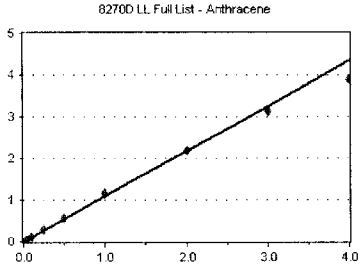


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	20603	1.148	11.33
9J04044-CAL2	50	53303	1.205	11.33
9J04044-CAL3	100	109865	1.206	11.33
9J04044-CAL4	200	220411	1.208	11.33
9J04044-CAL5	500	584015	1.210	11.33
9J04044-CAL6	1000	1066036	1.160	11.34
9J04044-CAL7	2000	2170899	1.148	11.34
9J04044-CAL8	4000	4579293	1.093	11.34
9J04044-CAL9	6000	6004728	1.030	11.35
9J04044-CALA	8000	7613187	0.970	11.35

AVE RF **1.138** RF RSD **7.28** AVE RT **11.34**

Anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	17466	0.973	11.39
9J04044-CAL2	50	46226	1.045	11.39
9J04044-CAL3	100	99684	1.094	11.39
9J04044-CAL4	200	208541	1.143	11.39
9J04044-CAL5	500	573617	1.188	11.39
9J04044-CAL6	1000	1057095	1.151	11.39
9J04044-CAL7	2000	2189904	1.158	11.39
9J04044-CAL8	4000	4588417	1.095	11.40
9J04044-CAL9	6000	6111558	1.049	11.40
9J04044-CALA	8000	7665662	0.976	11.40

AVE RF **1.087** RF RSD **6.93** AVE RT **11.39**

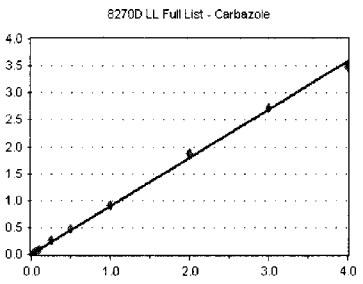
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Carbazole

Curve Fit: **AVERAGE RF**

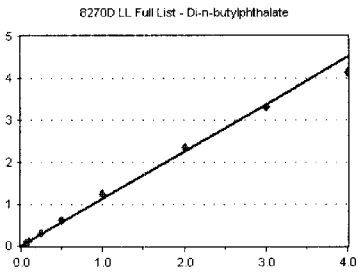


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12904	0.719	11.54
9J04044-CAL2	50	35904	0.811	11.54
9J04044-CAL3	100	80889	0.888	11.54
9J04044-CAL4	200	172186	0.943	11.54
9J04044-CAL5	500	489778	1.015	11.54
9J04044-CAL6	1000	875757	0.953	11.55
9J04044-CAL7	2000	1730389	0.915	11.55
9J04044-CAL8	4000	3941923	0.941	11.55
9J04044-CAL9	6000	5301851	0.910	11.55
9J04044-CALA	8000	6832440	0.870	11.56

AVE RF **0.897** RF RSD **9.22** AVE RT **11.55**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

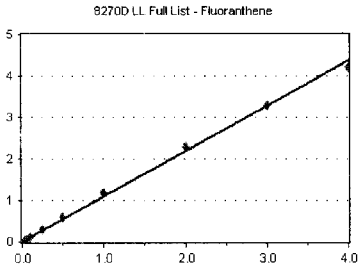


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~13938~~	~~0.776~~	~~11.88~~
~~9J04044-CAL2~~	~~50~~	~~36535~~	~~0.826~~	~~11.88~~
9J04044-CAL3	100	86172	0.946	11.88
9J04044-CAL4	200	195518	1.071	11.88
9J04044-CAL5	500	583123	1.208	11.88
9J04044-CAL6	1000	1122901	1.222	11.88
9J04044-CAL7	2000	2351449	1.244	11.88
9J04044-CAL8	4000	4944803	1.180	11.89
9J04044-CAL9	6000	6445897	1.106	11.90
9J04044-CALA	8000	8093368	1.031	11.90

AVE RF **1.126** RF RSD **9.35** AVE RT **11.89**

Fluoranthene

Curve Fit: **AVERAGE RF**

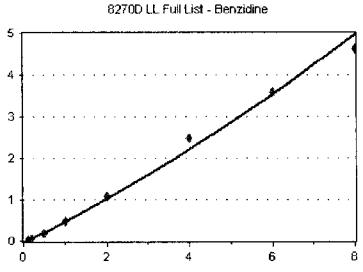


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16250	0.905	12.63
9J04044-CAL2	50	44081	0.996	12.63
9J04044-CAL3	100	95757	1.051	12.63
9J04044-CAL4	200	202844	1.111	12.63
9J04044-CAL5	500	583303	1.209	12.63
9J04044-CAL6	1000	1075278	1.170	12.64
9J04044-CAL7	2000	2238787	1.184	12.64
9J04044-CAL8	4000	4841071	1.155	12.65
9J04044-CAL9	6000	6381366	1.095	12.65
9J04044-CALA	8000	8264003	1.053	12.65

AVE RF **1.093** RF RSD **8.62** AVE RT **12.64**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~40~~	~~9217~~	~~0.257~~	~~12.79~~
~~9J04044-CAL2~~	~~100~~	~~9983~~	~~0.113~~	~~12.79~~
9J04044-CAL3	200	28892	0.159	12.79
9J04044-CAL4	400	86407	0.237	12.79
9J04044-CAL5	1000	391330	0.405	12.79
9J04044-CAL6	2000	869800	0.473	12.80
9J04044-CAL7	4000	2039254	0.539	12.80
9J04044-CAL8	8000	5203522	0.621	12.82
9J04044-CAL9	12000	6970684	0.598	12.82
9J04044-CALA	16000	9056858	0.577	12.83

AVE RF **0.451** RF RSD **38.22** AVE RT **12.80**

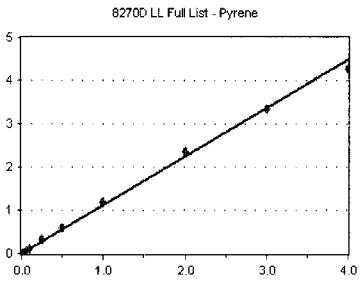
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Pyrene

Curve Fit: **AVERAGE RF**

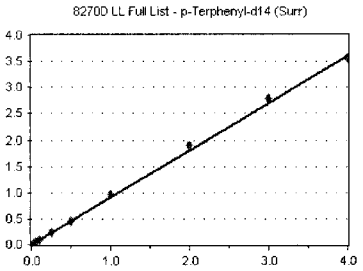


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16894	0.941	12.94
9J04044-CAL2	50	46022	1.040	12.94
9J04044-CAL3	100	99921	1.097	12.94
9J04044-CAL4	200	213905	1.172	12.94
9J04044-CAL5	500	601284	1.246	12.94
9J04044-CAL6	1000	1098375	1.196	12.95
9J04044-CAL7	2000	2264877	1.198	12.95
9J04044-CAL8	4000	4920310	1.174	12.96
9J04044-CAL9	6000	6491682	1.114	12.97
9J04044-CALA	8000	8395755	1.069	12.97

AVE RF **1.125** RF RSD **8.09** AVE RT **12.95**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

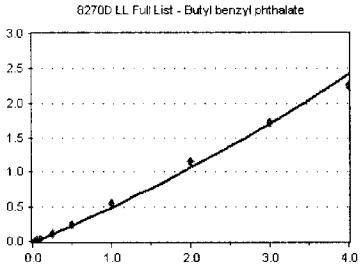


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11670	0.761	13.15
9J04044-CAL2	50	31469	0.841	13.15
9J04044-CAL3	100	71091	0.900	13.15
9J04044-CAL4	200	142922	0.916	13.15
9J04044-CAL5	500	404342	0.952	13.15
9J04044-CAL6	1000	764312	0.920	13.16
9J04044-CAL7	2000	1603082	0.964	13.16
9J04044-CAL8	4000	3589937	0.953	13.17
9J04044-CAL9	6000	4717662	0.929	13.17
9J04044-CALA	8000	6178755	0.890	13.17

AVE RF **0.903** RF RSD **6.81** AVE RT **13.16**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

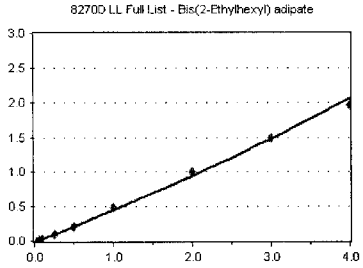


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~2870~~	~~0.187~~	~~14.01~~
9J04044-CAL2	50	7702	0.206	14.00
9J04044-CAL3	100	20406	0.258	14.01
9J04044-CAL4	200	50677	0.325	14.01
9J04044-CAL5	500	189612	0.446	14.01
9J04044-CAL6	1000	400707	0.482	14.01
9J04044-CAL7	2000	916105	0.551	14.01
9J04044-CAL8	4000	2157635	0.573	14.03
9J04044-CAL9	6000	2910270	0.573	14.03
9J04044-CALA	8000	3917824	0.565	14.03

AVE RF **0.442** RF RSD **32.59** AVE RT **14.02**

Bis(2-Ethylhexyl) adipate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~4248~~	~~0.277~~	~~14.18~~
~~9J04044-CAL2~~	~~50~~	~~7820~~	~~0.209~~	~~14.19~~
9J04044-CAL3	100	17948	0.227	14.19
9J04044-CAL4	200	44367	0.284	14.19
9J04044-CAL5	500	164582	0.387	14.19
9J04044-CAL6	1000	341312	0.411	14.20
9J04044-CAL7	2000	797052	0.480	14.20
9J04044-CAL8	4000	1882383	0.500	14.21
9J04044-CAL9	6000	2534925	0.499	14.21
9J04044-CALA	8000	3409359	0.491	14.21

AVE RF **0.410** RF RSD **25.61** AVE RT **14.20**

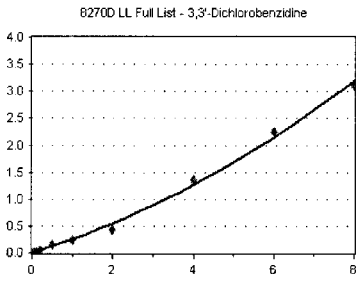
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

3,3'-Dichlorobenzidine

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

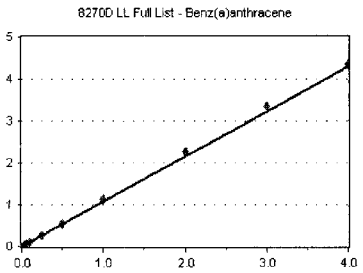


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	40	3305	0.108	15.17
9J04044-CAL2	100	10982	0.147	15.17
9J04044-CAL3	200	29882	0.189	15.17
9J04044-CAL4	400	74543	0.239	15.18
9J04044-CAL5	1000	254873	0.300	15.18
9J04044-CAL6	2000	391978	0.236	15.18
9J04044-CAL7	4000	711403	0.214	15.19
9J04044-CAL8	8000	2582773	0.343	15.22
9J04044-CAL9	12000	3791453	0.373	15.23
9J04044-CALA	16000	5395725	0.389	15.24

AVE RF **0.254** RF RSD **37.54** AVE RT **15.19**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

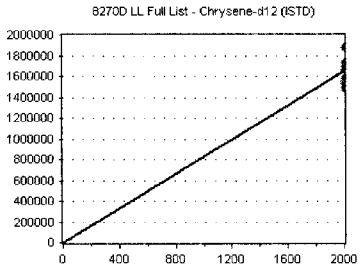


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	15725	1.025	15.22
9J04044-CAL2	50	36791	0.983	15.22
9J04044-CAL3	100	78626	0.996	15.22
9J04044-CAL4	200	164883	1.057	15.22
9J04044-CAL5	500	478454	1.126	15.22
9J04044-CAL6	1000	913488	1.099	15.22
9J04044-CAL7	2000	1882167	1.132	15.23
9J04044-CAL8	4000	4272477	1.135	15.25
9J04044-CAL9	6000	5663935	1.115	15.25
9J04044-CALA	8000	7562364	1.090	15.27

AVE RF **1.076** RF RSD **5.31** AVE RT **15.23**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

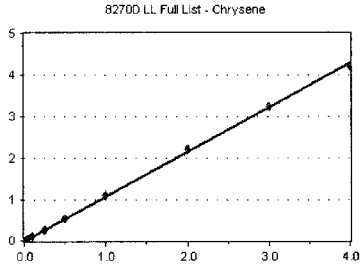


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1533726	766.863	15.24
9J04044-CAL2	2000	1496661	748.331	15.24
9J04044-CAL3	2000	1579497	789.749	15.24
9J04044-CAL4	2000	1560035	780.018	15.24
9J04044-CAL5	2000	1699410	849.705	15.24
9J04044-CAL6	2000	1661969	830.984	15.25
9J04044-CAL7	2000	1662177	831.089	15.25
9J04044-CAL8	2000	1882758	941.379	15.27
9J04044-CAL9	2000	1692898	846.449	15.28
9J04044-CALA	2000	1734754	867.377	15.28

AVE RF **825.194** RF RSD **6.88** AVE RT **15.25**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	15391	1.004	15.29
9J04044-CAL2	50	39759	1.063	15.30
9J04044-CAL3	100	83415	1.056	15.29
9J04044-CAL4	200	167475	1.074	15.30
9J04044-CAL5	500	469901	1.106	15.30
9J04044-CAL6	1000	903520	1.087	15.31
9J04044-CAL7	2000	1854667	1.116	15.31
9J04044-CAL8	4000	4165761	1.106	15.33
9J04044-CAL9	6000	5501649	1.083	15.34
9J04044-CALA	8000	7293341	1.051	15.35

AVE RF **1.075** RF RSD **3.10** AVE RT **15.31**

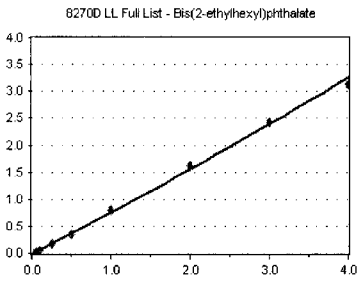
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Bis(2-ethylhexyl)phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

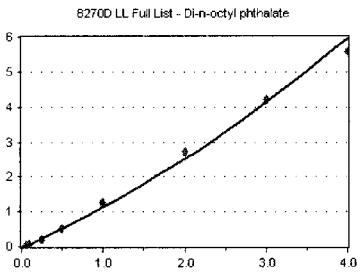


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3234~~	~~0.211~~	~~15.38~~
~~9J04044-CAL2~~	~~50~~	~~9886~~	~~0.264~~	~~15.38~~
9J04044-CAL3	100	27310	0.346	15.38
9J04044-CAL4	200	74532	0.478	15.38
9J04044-CAL5	500	277740	0.654	15.38
9J04044-CAL6	1000	587540	0.707	15.39
9J04044-CAL7	2000	1327182	0.798	15.39
9J04044-CAL8	4000	3055779	0.812	15.40
9J04044-CAL9	6000	4103652	0.808	15.40
9J04044-CALA	8000	5441799	0.784	15.40

AVE RF **0.673** RF RSD **25.86** AVE RT **15.39**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

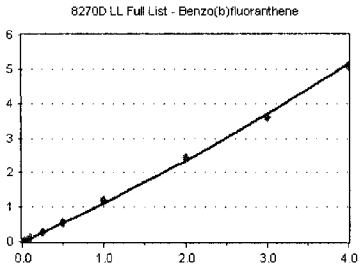


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3685~~	~~0.264~~	~~17.05~~
~~9J04044-CAL2~~	~~50~~	~~9292~~	~~0.271~~	~~17.05~~
9J04044-CAL3	100	25712	0.358	17.06
9J04044-CAL4	200	76592	0.535	17.06
9J04044-CAL5	500	317229	0.806	17.06
9J04044-CAL6	1000	783965	1.018	17.06
9J04044-CAL7	2000	1939882	1.267	17.06
9J04044-CAL8	4000	4791540	1.368	17.08
9J04044-CAL9	6000	6640912	1.408	17.08
9J04044-CALA	8000	8962679	1.394	17.09

AVE RF **1.019** RF RSD **40.51** AVE RT **17.07**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

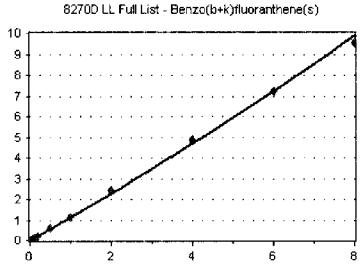


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	8200	0.588	17.82
9J04044-CAL2	50	25289	0.737	17.82
9J04044-CAL3	100	60853	0.846	17.82
9J04044-CAL4	200	143516	1.002	17.82
9J04044-CAL5	500	431745	1.097	17.83
9J04044-CAL6	1000	869229	1.128	17.84
9J04044-CAL7	2000	1820276	1.189	17.84
9J04044-CAL8	4000	4246184	1.212	17.87
9J04044-CAL9	6000	5649527	1.198	17.88
9J04044-CALA	8000	8162888	1.270	17.89

AVE RF **1.027** RF RSD **22.36** AVE RT **17.84**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	40	17859	0.640	17.89
9J04044-CAL2	100	54676	0.797	17.89
9J04044-CAL3	200	132577	0.922	17.89
9J04044-CAL4	400	301065	1.051	17.89
9J04044-CAL5	1000	897169	1.139	17.83
9J04044-CAL6	2000	1788418	1.161	17.90
9J04044-CAL7	4000	3705765	1.211	17.91
9J04044-CAL8	8000	8511793	1.215	17.94
9J04044-CAL9	12000	1.134533E+07	1.203	17.94
9J04044-CALA	16000	1.534171E+07	1.193	17.96

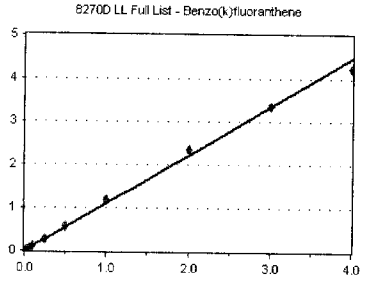
AVE RF **1.053** RF RSD **19.14** AVE RT **17.90**

Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Benzo(k)fluoranthene

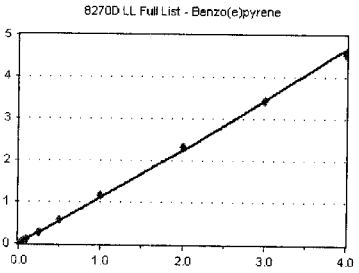


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	8001	0.573	17.89
9J04044-CAL2	50	25769	0.751	17.89
9J04044-CAL3	100	64412	0.896	17.89
9J04044-CAL4	200	145408	1.015	17.89
9J04044-CAL5	500	437349	1.111	17.89
9J04044-CAL6	1000	872767	1.133	17.90
9J04044-CAL7	2000	1801819	1.177	17.91
9J04044-CAL8	4000	4100039	1.171	17.94
9J04044-CAL9	6000	5285053	1.121	17.94
9J04044-CALA	8000	6834378	1.063	17.96

AVE RF **1.001** RF RSD **20.09** AVE RT **17.91**

Benzo(e)pyrene

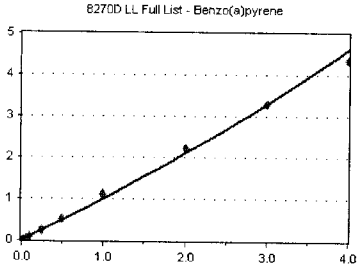


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9472	0.679	18.48
9J04044-CAL2	50	27256	0.795	18.48
9J04044-CAL3	100	66626	0.927	18.48
9J04044-CAL4	200	145534	1.016	18.48
9J04044-CAL5	500	432984	1.100	18.48
9J04044-CAL6	1000	859150	1.115	18.49
9J04044-CAL7	2000	1776810	1.161	18.50
9J04044-CAL8	4000	4073261	1.163	18.53
9J04044-CAL9	6000	5398892	1.145	18.54
9J04044-CALA	8000	7287149	1.134	18.55

AVE RF **1.023** RF RSD **16.61** AVE RT **18.50**

Benzo(a)pyrene

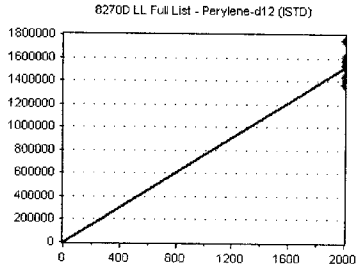


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5755	0.412	18.59
9J04044-CAL2	50	18335	0.534	18.60
9J04044-CAL3	100	50160	0.698	18.60
9J04044-CAL4	200	120762	0.843	18.60
9J04044-CAL5	500	392632	0.997	18.61
9J04044-CAL6	1000	803083	1.043	18.61
9J04044-CAL7	2000	1692741	1.106	18.62
9J04044-CAL8	4000	3867800	1.104	18.65
9J04044-CAL9	6000	5190262	1.101	18.66
9J04044-CALA	8000	6971686	1.085	18.68

AVE RF **0.892** RF RSD **29.01** AVE RT **18.62**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1395539	697.769	18.75
9J04044-CAL2	2000	1372143	686.071	18.75
9J04044-CAL3	2000	1438219	719.109	18.75
9J04044-CAL4	2000	1432505	716.253	18.75
9J04044-CAL5	2000	1574860	787.430	18.76
9J04044-CAL6	2000	1540594	770.297	18.76
9J04044-CAL7	2000	1530598	765.299	18.76
9J04044-CAL8	2000	1751292	875.646	18.78
9J04044-CAL9	2000	1571994	785.997	18.78
9J04044-CALA	2000	1607082	803.541	18.78

AVE RF **760.741** RF RSD **7.56** AVE RT **18.76**

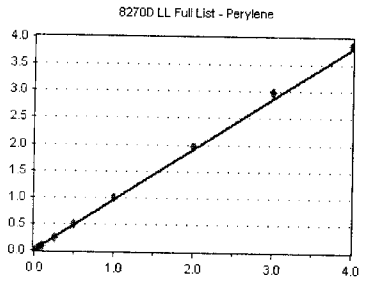
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Perylene

Curve Fit: **AVERAGE RF**

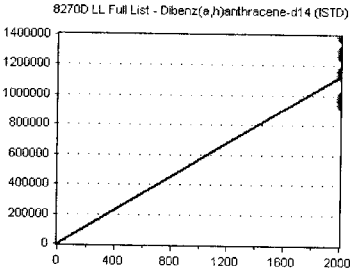


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11719	0.840	18.80
9J04044-CAL2	50	30740	0.896	18.80
9J04044-CAL3	100	67790	0.943	18.80
9J04044-CAL4	200	136499	0.953	18.81
9J04044-CAL5	500	381970	0.970	18.81
9J04044-CAL6	1000	763348	0.991	18.81
9J04044-CAL7	2000	1526620	0.997	18.82
9J04044-CAL8	4000	3461731	0.988	18.85
9J04044-CAL9	6000	4675383	0.991	18.86
9J04044-CALA	8000	6206644	0.966	18.87

AVE RF **0.954** RF RSD **5.27** AVE RT **18.82**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

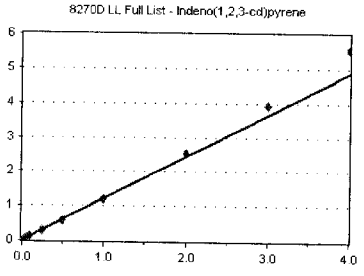


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	965193	482.597	21.14
9J04044-CAL2	2000	939849	469.924	21.14
9J04044-CAL3	2000	1002236	501.118	21.14
9J04044-CAL4	2000	986187	493.093	21.14
9J04044-CAL5	2000	1136524	568.262	21.15
9J04044-CAL6	2000	1155569	577.784	21.15
9J04044-CAL7	2000	1166509	583.254	21.16
9J04044-CAL8	2000	1392390	696.195	21.18
9J04044-CAL9	2000	1261895	630.948	21.19
9J04044-CALA	2000	1298840	649.420	21.20

AVE RF **565.260** RF RSD **13.74** AVE RT **21.16**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

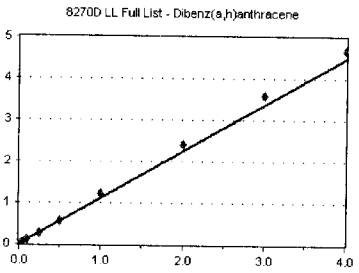


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11018	1.142	21.13
9J04044-CAL2	50	26678	1.135	21.14
9J04044-CAL3	100	57510	1.148	21.13
9J04044-CAL4	200	117055	1.187	21.14
9J04044-CAL5	500	341703	1.203	21.15
9J04044-CAL6	1000	688131	1.191	21.15
9J04044-CAL7	2000	1413571	1.212	21.16
9J04044-CAL8	4000	3507297	1.259	21.20
9J04044-CAL9	6000	4942026	1.305	21.21
9J04044-CALA	8000	7211343	1.388	21.22

AVE RF **1.217** RF RSD **6.59** AVE RT **21.16**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9459	0.980	21.20
9J04044-CAL2	50	23771	1.012	21.20
9J04044-CAL3	100	53934	1.076	21.20
9J04044-CAL4	200	106912	1.084	21.20
9J04044-CAL5	500	321382	1.131	21.21
9J04044-CAL6	1000	652826	1.130	21.21
9J04044-CAL7	2000	1423177	1.220	21.22
9J04044-CAL8	4000	3367743	1.209	21.26
9J04044-CAL9	6000	4524104	1.195	21.27
9J04044-CALA	8000	6086241	1.171	21.28

AVE RF **1.121** RF RSD **7.35** AVE RT **21.22**

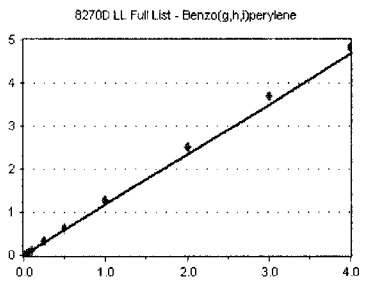
Element Calibration Review Sheet

Calibration ID: **A9J0804** Instrument: **SV-GCMS5** Calibration Date: **10/08/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J0804**

Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	8611	0.892	21.67
9J04044-CAL2	50	23434	0.997	21.67
9J04044-CAL3	100	55271	1.103	21.67
9J04044-CAL4	200	118110	1.198	21.67
9J04044-CAL5	500	362385	1.275	21.68
9J04044-CAL6	1000	719140	1.245	21.69
9J04044-CAL7	2000	1489460	1.277	21.70
9J04044-CAL8	4000	3501663	1.257	21.74
9J04044-CAL9	6000	4683978	1.237	21.75
9J04044-CALA	8000	6275107	1.208	21.76

AVE RF **1.169** RF RSD **11.19** AVE RT **21.70**

Calibration Status Report SV-GCMS5

Method Path : Z:\METHODS\
Method File : SV5_100419.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Oct 07 13:03:04 2019
Response Via : Initial Calibration

10/7/19

#	ID	Conc	ISTD Conc	Path\File
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2	50	50	2000	Z:\DATA\2019-10\9J04044\E10041909.D
3	100	100	2000	Z:\DATA\2019-10\9J04044\E10041910.D
4	200	200	2000	Z:\DATA\2019-10\9J04044\E10041911.D
5	500	500	2000	Z:\DATA\2019-10\9J04044\E10041912.D
6	1000	1000	2000	Z:\DATA\2019-10\9J04044\E10041913.D
7	2000	2000	2000	Z:\DATA\2019-10\9J04044\E10041914.D
8	4000	4000	2000	Z:\DATA\2019-10\9J04044\E10041915.D
9	6000	6000	2000	Z:\DATA\2019-10\9J04044\E10041916.D
10	8000	8000	2000	Z:\DATA\2019-10\9J04044\E10041917.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Oct 07 13:02 2019	Oct 07 12:21 2019	4 Oct 2019 5:49 pm
2	50	Oct 07 13:02 2019	Oct 07 12:41 2019	4 Oct 2019 6:25 pm
3	100	Oct 07 13:02 2019	Oct 07 11:57 2019	4 Oct 2019 7:01 pm
4	200	Oct 07 13:02 2019	Oct 07 11:57 2019	4 Oct 2019 7:36 pm
5	500	Oct 07 13:02 2019	Oct 07 11:57 2019	4 Oct 2019 8:12 pm
6	1000	Oct 07 13:02 2019	Oct 07 11:57 2019	4 Oct 2019 8:47 pm
7	2000	Oct 07 13:02 2019	Oct 07 11:57 2019	4 Oct 2019 9:23 pm
8	4000	Oct 07 13:02 2019	Oct 07 12:51 2019	4 Oct 2019 9:58 pm
9	6000	Oct 07 13:02 2019	Oct 07 12:54 2019	4 Oct 2019 10:34 pm
10	8000	Oct 07 13:03 2019	Oct 07 12:55 2019	4 Oct 2019 11:09 pm

SV5_100419.M Mon Oct 07 16:48:03 2019

Compound List Report SV-GCMS5

Method Path : Z:\METHODS\
Method File : SV5_100419.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Oct 07 13:03:04 2019
Response Via : Initial Calibration

Total Cpnds : 97

10/7/19

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.776	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	4.305	0.635	A	2	A	R
3	T	Pyridine	79	4.331	0.639	A	2	A	R
4	S	2-Fluorophenol (Surr)	112	5.557	0.820	A	1	A	R
5	S	Phenol-d6(Surr)	99	6.407	0.946	A	2	A	R
6	T	Phenol	94	6.423	0.948	A	2	A	R
7	T	Aniline	93	6.460	0.953	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.514	0.961	A	2	A	R
9	T	2-Chlorophenol	128	6.578	0.971	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.728	0.993	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.792	1.002	A	2	A	R
12	T	Benzyl alcohol	108	6.899	1.018	Q 2	2	A	R
13	T	1,2-Dichlorobenzene	146	6.942	1.024	A	2	A	R
14	T	2-Methylphenol	107	7.001	1.033	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	7.028	1.037	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.151	1.055	A	2	A	R
17	T	3+4-Methylphenol	107	7.145	1.054	A	3	A	R
18	T	Hexachloroethane	117	7.274	1.073	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.306	1.078	A	2	A	R
20	T	Nitrobenzene	77	7.327	1.081	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	8.028	1.000	A	1	A	R
22	T	Isophorone	82	7.557	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.642	0.952	Q 2	2	A	R
24	T	2,4-Dimethylphenol	122	7.669	0.955	Q 2	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.760	0.967	A	2	A	R
26	T	Benzoic acid	105	7.755	0.966	Q 2	2	A	R
27	T	2,4-Dichlorophenol	162	7.878	0.981	Q 2	2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.969	0.993	A	2	A	R
29	T	Naphthalene	128	8.044	1.002	A	1	A	R
30	T	4-Chloroaniline	127	8.092	1.008	Q 2	2	A	R
31	T	Hexachlorobutadiene	225	8.172	1.018	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.568	1.067	Q 2	2	A	R
33	T	2-Methylnaphthalene	142	8.739	1.089	A	2	A	R
34	T	1-Methylnaphthalene	142	8.841	1.101	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.804	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.904	0.908	A	2	A	R
37	T	2,4,6-Trichlorophenol	196	9.023	0.920	Q 2	2	A	R
38	T	2,4,5-Trichlorophenol	196	9.054	0.924	Q 2	2	A	R
39	T	1,1'-Biphenyl	154	9.210	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	9.103	0.929	A	2	A	R
41	T	2-Chloronaphthalene	162	9.231	0.942	A	2	A	R
42	T	2-Nitroaniline	138	9.327	0.951	Q 2	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.370	0.956	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.455	0.964	Q 2	2	A	R
45	T	Dimethyl phthalate	163	9.509	0.970	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.536	0.973	Q 2	2	A	R
47	T	2,6-Dinitrotoluene	165	9.568	0.976	Q 2	2	A	R
48	T	1,2-Dinitrobenzene	168	9.627	0.982	Q 2	2	A	R
49	T	Acenaphthylene	152	9.654	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.739	0.993	A	2	A	R
51	T	Acenaphthene	153	9.836	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.846	1.004	Q 2	2	A	R
53	T	4-Nitrophenol	139	9.899	1.010	Q 2	2	A	R
54	T	2,4-Dinitrotoluene	165	9.980	1.018	Q 2	2	A	R

55	T	Dibenzofuran	168	10.007	1.021	A	2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	10.087	1.029	Q	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.129	1.033	Q	2	A	R
58	T	Diethyl phthalate	149	10.221	1.043	A	2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.215	1.042	A	2	A	R
60	T	Fluorene	166	10.354	1.056	A	2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.349	1.056	A	2	A	R
62	T	4-Nitroaniline	138	10.365	1.057	A	2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.397	1.061	Q	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.312	1.000	A	2	A	R
65	T	N-Nitrosodiphenylamine	169	10.467	0.925	A	2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.510	0.929	A	2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.600	0.937	Q	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.847	0.959	A	2	A	R
69	T	Hexachlorobenzene	284	10.927	0.966	A	2	A	R
70	T	Pentachlorophenol (PCP)	266	11.119	0.983	Q	2	A	R
71	T	Phenanthrene	178	11.339	1.002	A	2	A	R
72	T	Anthracene	178	11.387	1.007	A	2	A	R
73	T	Carbazole	167	11.547	1.021	A	2	A	R
74	T	Di-n-butyl phthalate	149	11.884	1.051	A	2	A	R
75	T	Fluoranthene	202	12.638	1.117	A	2	A	R
76	T	Benzidine	184	12.798	1.131	Q	2	A	R
77	T	Pyrene	202	12.949	1.145	A	2	A	R
78	I	Chrysene-d12 (ISTD)	240	15.248	1.000	A	2	A	R
79	S	Terphenyl-d14 (Surr)	244	13.157	0.863	A	2	A	R
80	T	Butyl benzyl phthalate	149	14.012	0.919	Q	2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	14.194	0.931	Q	2	A	R
82	T	3,3-Dichlorobenzidine	252	15.184	0.996	Q	2	A	R
83	T	Benz(a)anthracene	228	15.222	0.998	A	2	A	R
84	T	Chrysene	228	15.307	1.004	A	2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.387	1.009	Q	2	A	R
86	I	Perylene-d12 (ISTD)	264	18.757	1.000	A	2	A	R
87	T	Di-n-octyl phthalate	149	17.061	0.910	Q	2	A	R
88	T	Benzo(b)fluoranthene	252	17.837	0.951	Q	2	A	R
89	T	Benzo(k)fluoranthene	252	17.901	0.954	Q	2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.901	0.954	Q	2	A	R
91	T	Benzo(e)pyrene	252	18.489	0.986	Q	2	A	R
92	T	Benzo(a)pyrene	252	18.612	0.992	Q	2	A	R
93	T	Perylene	252	18.811	1.003	A	2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	21.148	1.000	A	1	A	R
95	T	Indeno(1,2,3-cd)pyrene	276	21.148	1.000	A	1	A	R
96	T	Dibenz(a,h)anthracene	278	21.212	1.003	A	2	A	R
97	T	Benzo(g,h,i)perylene	276	21.688	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

SV5_100419.M Mon Oct 07 13:50:37 2019

Method Path : Z:\METHODS\
Method File : SV5_100419.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Oct 07 13:03:04 2019
Response Via : Initial Calibration

JK 10/7/19

Calibration Files
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4000=E10041915.D 6000=E10041916.D 8000=E10041917.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	ISTD											3.56
2)	T	N-Nitrosodimet...	0.643	0.742	0.804	0.790	0.822	0.798	0.812	0.827	0.808	0.793	0.784	6.98
3)	T	Pyridine		1.032	1.206	1.226	1.310	1.301	1.364	1.390	1.382	1.357	1.285	8.98
4)	S	2-Fluorophenol...	0.911	1.014	1.097	1.128	1.214	1.214	1.268	1.294	1.288	1.266	1.169	11.06
5)	S	Phenol-d6(Surr)	1.131	1.268	1.388	1.449	1.552	1.533	1.572	1.572	1.544	1.498	1.451	10.20
6)	T	Phenol	1.194	1.334	1.456	1.545	1.616	1.599	1.595	1.611	1.575	1.544	1.507	9.30
7)	T	Aniline		1.628	1.797	1.802	1.935	1.928	2.050	2.076	2.077	1.973	1.919	7.89
8)	T	Bis(2-chloroet...	1.278	1.374	1.401	1.427	1.414	1.364	1.350	1.319	1.227	1.233	1.339	5.41
9)	T	2-Chlorophenol	1.004	1.098	1.235	1.282	1.389	1.369	1.392	1.422	1.400	1.379	1.297	11.07
10)	T	1,3-Dichlorobe...	1.538	1.550	1.618	1.613	1.622	1.551	1.562	1.559	1.526	1.483	1.562	2.84
11)	T	1,4-Dichlorobe...	1.542	1.589	1.636	1.624	1.632	1.577	1.591	1.581	1.542	1.486	1.580	2.95
12)	T	Benzyl alcohol		0.289	0.330	0.467	0.658	0.729	0.798	0.836	0.812	0.818	0.637	34.30
13)	T	1,2-Dichlorobe...	1.395	1.535	1.581	1.565	1.558	1.499	1.520	1.506	1.461	1.419	1.504	4.13
14)	T	2-Methylphenol	0.808	0.842	0.902	0.991	1.058	1.055	1.074	1.080	1.039	1.002	0.985	10.09
15)	T	2,2'-Oxybis(1-...	1.558	1.596	1.683	1.651	1.613	1.543	1.516	1.439	1.360	1.277	1.524	8.50
16)	T	N-Nitrosodi-n-...	0.683	0.790	0.857	0.881	0.944	0.927	0.916	0.889	0.857	0.836	0.858	8.93
17)	T	3+4-Methylphenol	0.929	0.988	1.093	1.203	1.341	1.356	1.373	1.347	1.286	1.233	1.215	13.21
18)	T	Hexachloroethane	0.502	0.515	0.534	0.547	0.553	0.543	0.557	0.555	0.545	0.528	0.538	3.40
19)	S	Nitrobenzene-d...	0.882	0.944	1.051	1.117	1.229	1.231	1.282	1.300	1.268	1.257	1.156	12.97
20)	T	Nitrobenzene	0.968	1.047	1.126	1.194	1.272	1.259	1.287	1.266	1.233	1.195	1.185	9.00
21)	I	Naphthalene-d8 (ISTD)	ISTD											3.65
22)	T	Isophorone	0.469	0.524	0.566	0.604	0.635	0.632	0.632	0.629	0.619	0.614	0.593	9.44
23)	T	2-Nitrophenol		0.080	0.099	0.115	0.148	0.166	0.172	0.184	0.186	0.187	0.149	27.43
24)	T	2,4-Dimethylph...	0.152	0.172	0.224	0.252	0.271	0.285	0.293	0.295	0.269	0.259	0.247	20.13
25)	T	Bis(2-chloroet...	0.365	0.407	0.412	0.418	0.421	0.410	0.406	0.393	0.378	0.363	0.397	5.38
26)	T	Benzoic acid					0.026	0.069	0.104	0.170	0.189	0.203	0.127	56.25
27)	T	2,4-Dichloroph...	0.147	0.177	0.165	0.185	0.218	0.238	0.259	0.275	0.275	0.272	0.221	22.39
28)	T	1,2,4-Trichlor...	0.287	0.327	0.337	0.330	0.335	0.323	0.325	0.319	0.311	0.301	0.320	4.94
29)	T	Naphthalene	1.084	1.110	1.130	1.120	1.122	1.077	1.074	1.024	0.972	0.921	1.063	6.60
30)	T	4-Chloroaniline	0.181	0.333	0.349	0.364	0.387	0.385	0.414	0.423	0.410	0.404	0.365	19.47
31)	T	Hexachlorobuta...	0.142	0.166	0.169	0.170	0.168	0.164	0.165	0.165	0.163	0.159	0.163	5.01
32)	T	4-Chloro-3-met...			0.094	0.147	0.205	0.227	0.251	0.265	0.260	0.257	0.213	29.16
33)	T	2-Methylnaphth...	0.678	0.726	0.741	0.753	0.759	0.748	0.740	0.707	0.672	0.642	0.717	5.59
34)	T	1-Methylnaphth...	0.644	0.690	0.710	0.708	0.723	0.703	0.703	0.673	0.637	0.610	0.680	5.56
35)	I	Acenaphthene-d10 (...	ISTD											4.41
36)	T	Hexachlorocycl...		0.226	0.250	0.274	0.301	0.307	0.334	0.332	0.331	0.308	0.296	12.98
37)	T	2,4,6-Trichlor...	0.161	0.206	0.239	0.284	0.335	0.349	0.375	0.392	0.385	0.385	0.311	26.92
38)	T	2,4,5-Trichlor...		0.169	0.202	0.249	0.317	0.344	0.380	0.391	0.390	0.375	0.313	27.29
39)	T	1,1'-Biphenyl	1.655	1.784	1.792	1.805	1.813	1.741	1.743	1.623	1.551	1.434	1.694	7.45

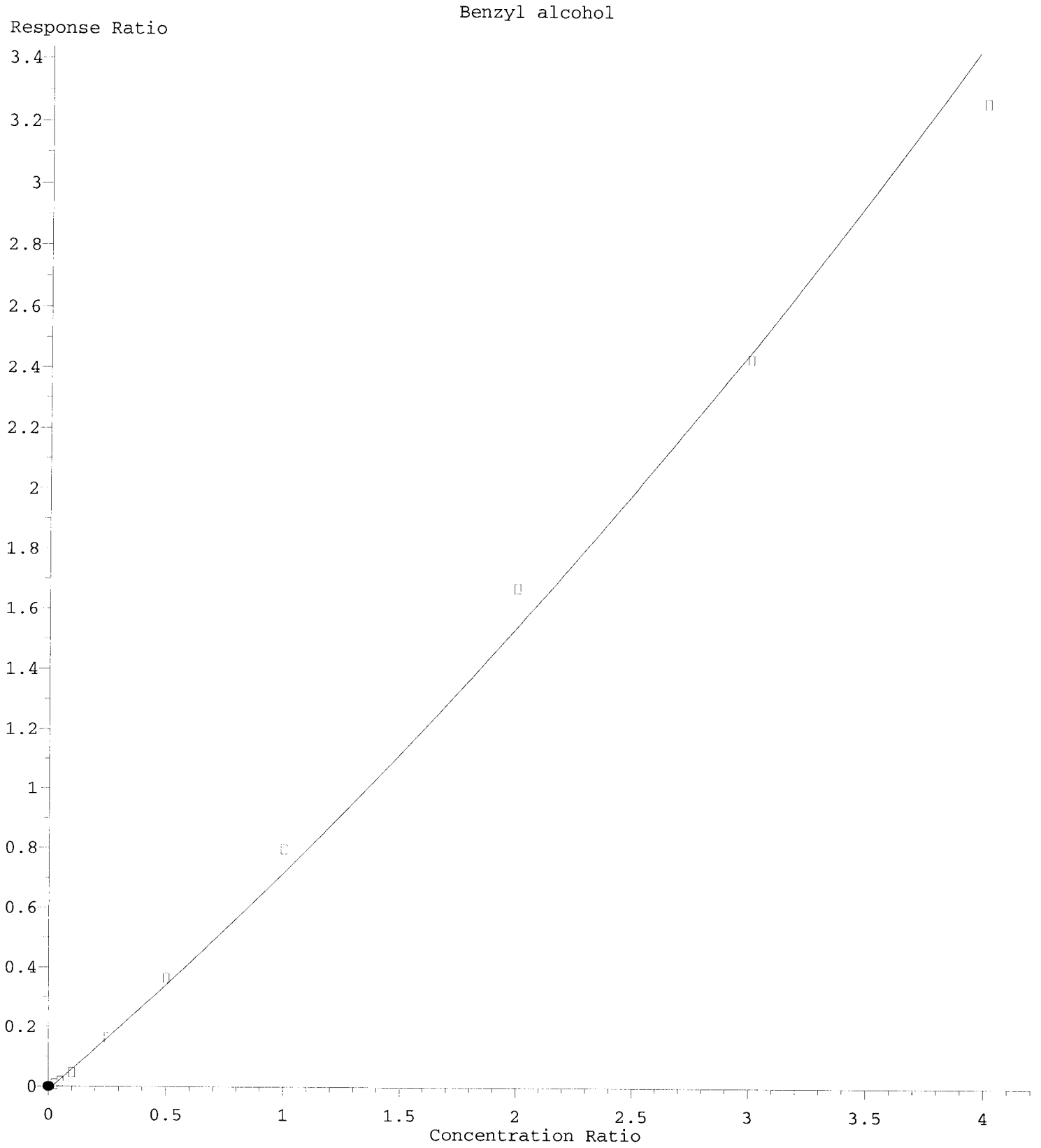
Method Path : Z:\METHODS\
Method File : SV5_100419.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.443	1.524	1.584	1.596	1.581	1.524	1.537	1.463	1.410	1.319	1.498	5.91
41)	T	2-Chloronaphth...	1.253	1.299	1.335	1.359	1.339	1.295	1.308	1.249	1.209	1.133	1.278	5.38
42)	T	2-Nitroaniline		0.173	0.202	0.243	0.336	0.366	0.408	0.431	0.431	0.426	0.335	30.82
43)	T	2,6-Dimethylna...	1.096	1.223	1.265	1.304	1.332	1.285	1.285	1.210	1.162	1.088	1.225	6.99
44)	T	1,4-Dinitroben...			0.067	0.084	0.126	0.149	0.182	0.202	0.211	0.214	0.154	37.36
45)	T	Dimethyl phtha...	1.178	1.311	1.390	1.437	1.466	1.422	1.441	1.391	1.350	1.305	1.369	6.33
46)	T	1,3-Dinitroben...			0.091	0.124	0.169	0.194	0.220	0.236	0.241	0.241	0.189	30.10
47)	T	2,6-Dinitrotol...		0.139	0.180	0.236	0.292	0.306	0.330	0.339	0.340	0.331	0.277	27.02
48)	T	1,2-Dinitroben...		0.056	0.076	0.098	0.128	0.135	0.150	0.158	0.159	0.152	0.124	30.81
49)	T	Acenaphthylene	1.612	1.841	1.974	2.037	2.110	2.053	2.073	1.986	1.891	1.757	1.933	8.17
50)	T	3-Nitroaniline				0.254	0.304	0.304	0.323	0.348	0.350	0.347	0.318	10.92
51)	T	Acenaphthene	1.309	1.408	1.391	1.413	1.410	1.350	1.357	1.281	1.224	1.152	1.330	6.62
52)	T	2,4-Dinitrophenol				0.009	0.028	0.049	0.082	0.132	0.151		0.075	75.80
53)	T	4-Nitrophenol			0.052	0.093	0.166	0.200	0.242	0.267	0.272	0.269	0.195	43.50
54)	T	2,4-Dinitrotol...			0.171	0.234	0.330	0.362	0.410	0.431	0.430	0.410	0.347	27.96
55)	T	Dibenzofuran	1.712	1.857	1.842	1.876	1.884	1.794	1.824	1.743	1.671	1.549	1.775	6.03
56)	T	2,3,5,6-Tetrac...		0.083	0.116	0.168	0.245	0.267	0.308	0.328	0.332	0.328	0.242	39.95
57)	T	2,3,4,6-Tetrac...		0.155	0.162	0.223	0.280	0.302	0.324	0.347	0.342	0.335	0.274	27.74
58)	T	Diethyl phthalate	1.153	1.239	1.349	1.427	1.474	1.407	1.408	1.301	1.240	1.163	1.316	8.64
59)	T	2,3,5-Trimethy...	1.012	1.135	1.191	1.228	1.245	1.188	1.199	1.090	1.027	0.963	1.128	8.79
60)	T	Fluorene	1.295	1.404	1.464	1.523	1.544	1.474	1.481	1.380	1.311	1.229	1.410	7.45
61)	T	4-Chlorophenyl...	0.659	0.679	0.680	0.707	0.714	0.681	0.694	0.659	0.639	0.603	0.671	4.92
62)	T	4-Nitroaniline				0.242	0.310	0.303	0.335	0.356	0.360	0.354	0.323	13.06
63)	T	4,6-Dinitro-2-...				0.030	0.067	0.104	0.150	0.198	0.213		0.127	57.28
64)	I	Phenanthrene-d10 (...	----------	ISTD	----------									5.20
65)	T	N-Nitrosodiphe...	0.519	0.572	0.629	0.664	0.683	0.666	0.668	0.647	0.618	0.588	0.625	8.33
66)	T	Azobenzene (1,...	0.538	0.607	0.674	0.714	0.727	0.705	0.695	0.657	0.615	0.575	0.651	9.83
67)	S	2,4,6-Tribromo...		0.044	0.057	0.068	0.086	0.093	0.101	0.108	0.107	0.107	0.086	27.83
68)	T	4-Bromophenyl ...	0.176	0.196	0.203	0.209	0.215	0.210	0.217	0.217	0.212	0.209	0.206	6.12
69)	T	Hexachlorobenzene	0.219	0.235	0.242	0.235	0.234	0.234	0.235	0.235	0.229	0.223	0.232	2.89
70)	T	Pentachlorophe...			0.042	0.051	0.076	0.094	0.113	0.130	0.130		0.091	39.54
71)	T	Phenanthrene	1.148	1.205	1.206	1.208	1.210	1.160	1.148	1.093	1.030	0.970	1.138	7.28
72)	T	Anthracene	0.973	1.045	1.094	1.143	1.188	1.151	1.158	1.095	1.049	0.976	1.087	6.93
73)	T	Carbazole	0.719	0.811	0.888	0.943	1.015	0.953	0.915	0.941	0.910	0.870	0.897	9.22
74)	T	Di-n-butyl pht...			0.946	1.071	1.208	1.222	1.244	1.180	1.106	1.031	1.126	9.35
75)	T	Fluoranthene	0.905	0.996	1.051	1.111	1.209	1.170	1.184	1.155	1.095	1.053	1.093	8.62
76)	T	Benzidine			0.159	0.237	0.405	0.473	0.539	0.621	0.598	0.577	0.451	38.22
77)	T	Pyrene	0.941	1.040	1.097	1.172	1.246	1.196	1.198	1.174	1.114	1.069	1.125	8.09
78)	I	Chrysene-d12 (ISTD)	----------	ISTD	----------									6.86
79)	S	Terphenyl-d14 ...	0.761	0.841	0.900	0.916	0.952	0.920	0.964	0.953	0.929	0.890	0.903	6.81
80)	T	Butyl benzyl p...		0.206	0.258	0.325	0.446	0.482	0.551	0.573	0.573	0.565	0.442	32.59
81)	T	Bis(2-ethylhex...			0.227	0.284	0.387	0.411	0.480	0.500	0.499	0.491	0.410	25.61
82)	T	3,3-Dichlorobe...	0.108	0.147	0.189	0.239	0.300	0.236	0.214	0.343	0.373	0.389	0.254	37.54
83)	T	Benz(a)anthracene	1.025	0.983	0.996	1.057	1.126	1.099	1.132	1.135	1.115	1.090	1.076	5.31
84)	T	Chrysene	1.004	1.063	1.056	1.074	1.106	1.087	1.116	1.106	1.083	1.051	1.075	3.10
85)	T	Bis(2-ethylhex...			0.346	0.478	0.654	0.707	0.798	0.812	0.808	0.784	0.673	25.86
86)	I	Perylene-d12 (ISTD)	----------	ISTD	----------									7.558
87)	T	Di-n-octyl pht...			0.358	0.535	0.806	1.018	1.267	1.368	1.408	1.394	1.019	40.51

Method Path : Z:\METHODS\
Method File : SV5_100419.M
Title : EPA 8270D: Semivolatile Organics

88)	T	Benzo(b)fluora...	0.588	0.737	0.846	1.002	1.097	1.128	1.189	1.212	1.198	1.270	1.027	22.36 ✓
89)	T	Benzo(k)fluora...	0.573	0.751	0.896	1.015	1.111	1.133	1.177	1.171	1.121	1.063	1.001	20.09 ✓
90)	T	Benzo(b+k)fluo...	0.640	0.797	0.922	1.051	1.139	1.161	1.211	1.215	1.203	1.193	1.053	19.14 ✓
91)	T	Benzo(e)pyrene	0.679	0.795	0.927	1.016	1.100	1.115	1.161	1.163	1.145	1.134	1.023	16.61 ✓
92)	T	Benzo(a)pyrene	0.412	0.534	0.698	0.843	0.997	1.043	1.106	1.104	1.101	1.085	0.892	29.01 ✓
93)	T	Perylene	0.840	0.896	0.943	0.953	0.970	0.991	0.997	0.988	0.991	0.966	0.954	5.27 ✓
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											13.74
95)	T	Indeno(1,2,3-c...	1.142	1.135	1.148	1.187	1.203	1.191	1.212	1.259	1.305	1.388	1.217	6.59 ✓
96)	T	Dibenz(a,h)ant...	0.980	1.012	1.076	1.084	1.131	1.130	1.220	1.209	1.195	1.171	1.121	7.35 ✓
97)	T	Benzo(g,h,i)pe...	0.892	0.997	1.103	1.198	1.275	1.245	1.277	1.257	1.237	1.208	1.169	11.19 ✓

(#) = Out of Range

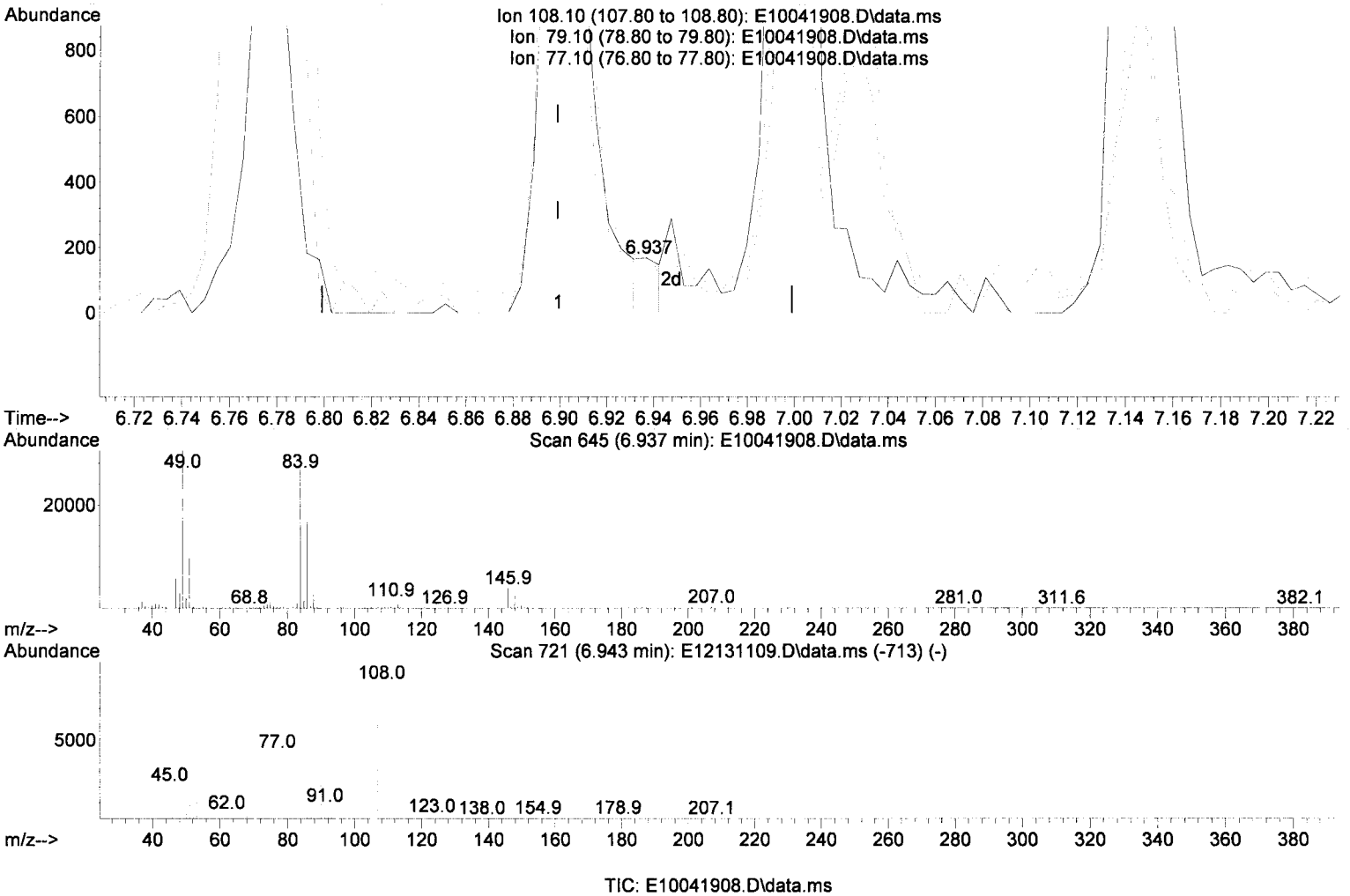


R = 4.64e-002 A*A + 6.84e-001 A - 1.19e-002
Coef of Det (r^2) = 0.987 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



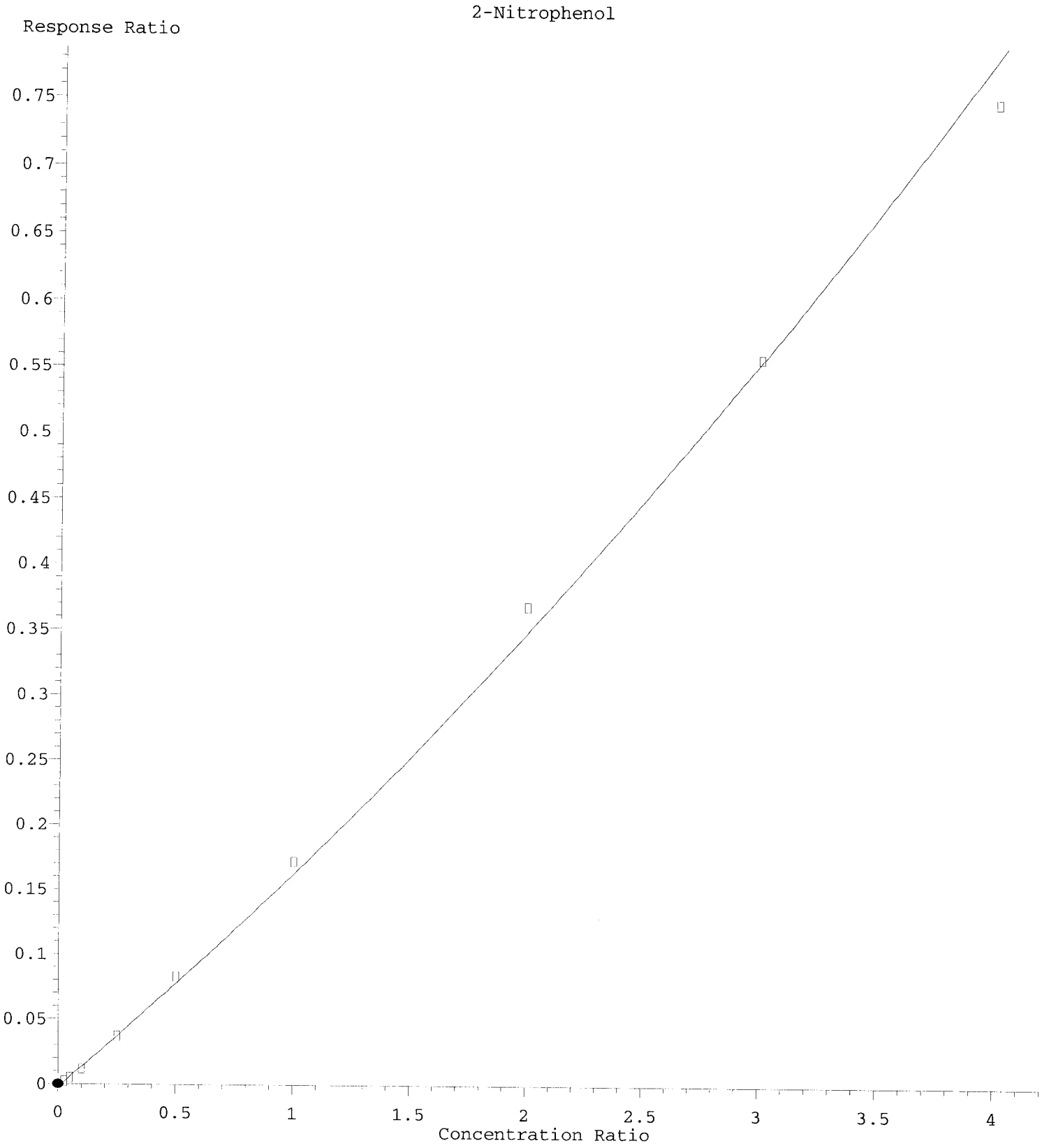
TIC: E10041908.D\data.ms

(12) Benzyl alcohol (T)

6.937min (+ 0.038) 35.35 ng/ml m

response 101

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	113.60	118.93
77.10	71.40	155.62#
0.00	0.00	0.00

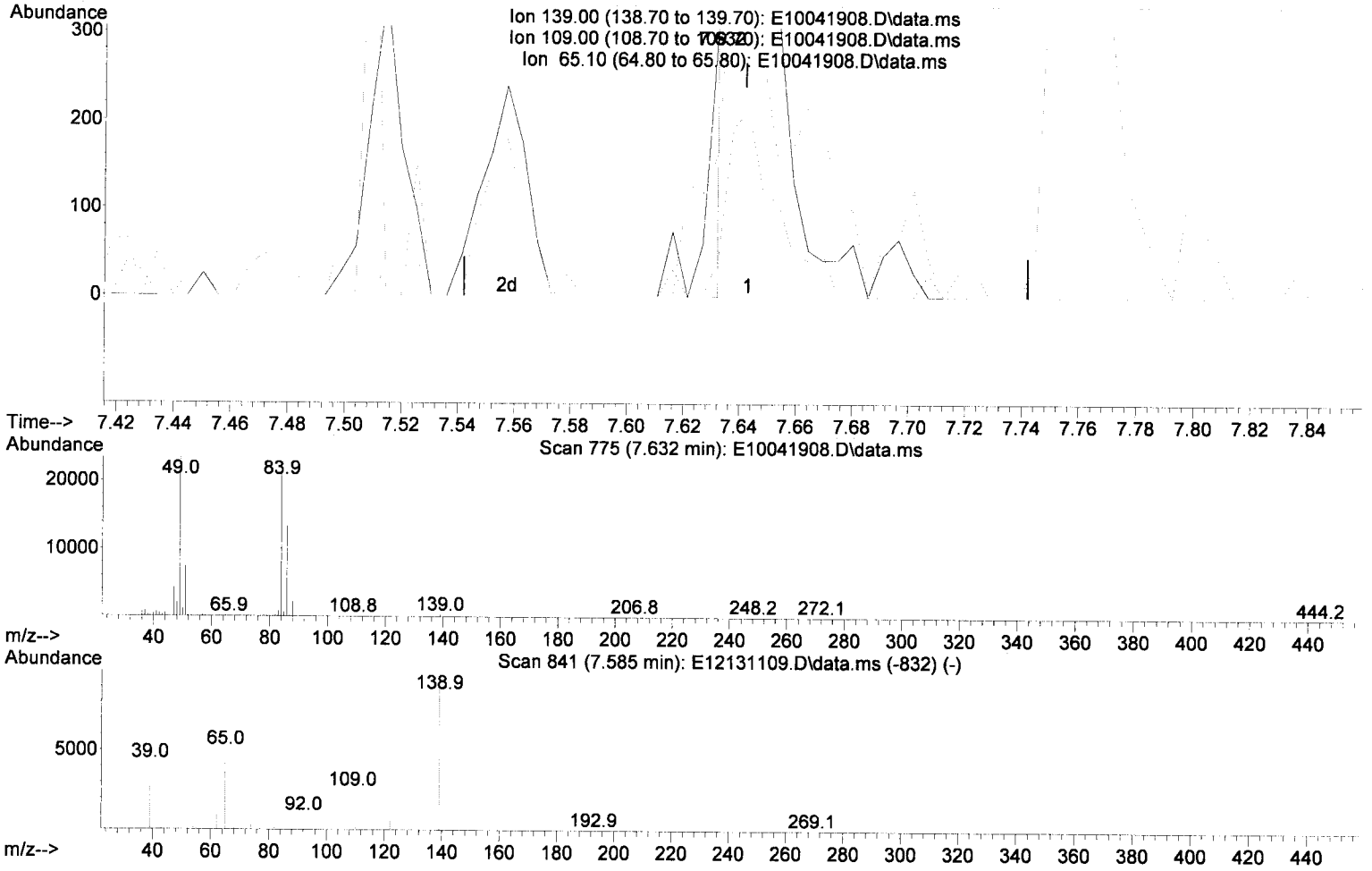


R = 1.05e-002 A*A + 1.54e-001 A - 2.13e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



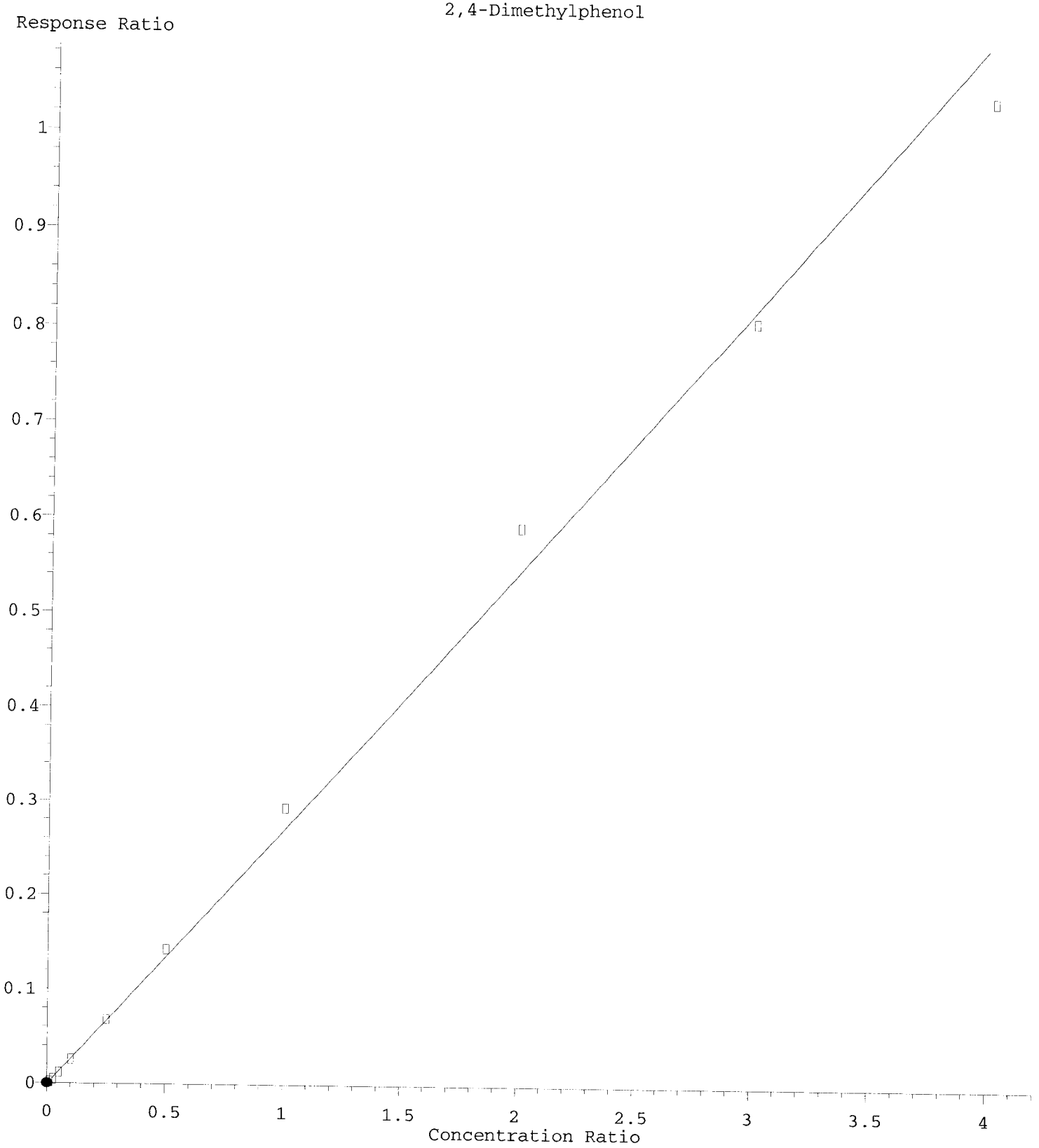
TIC: E10041908.D\data.ms

(23) 2-Nitrophenol (T)

7.632min (-0.010) 28.40 ng/ml m

response 118

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	20.70	13.27
65.10	36.50	52.75
0.00	0.00	0.00

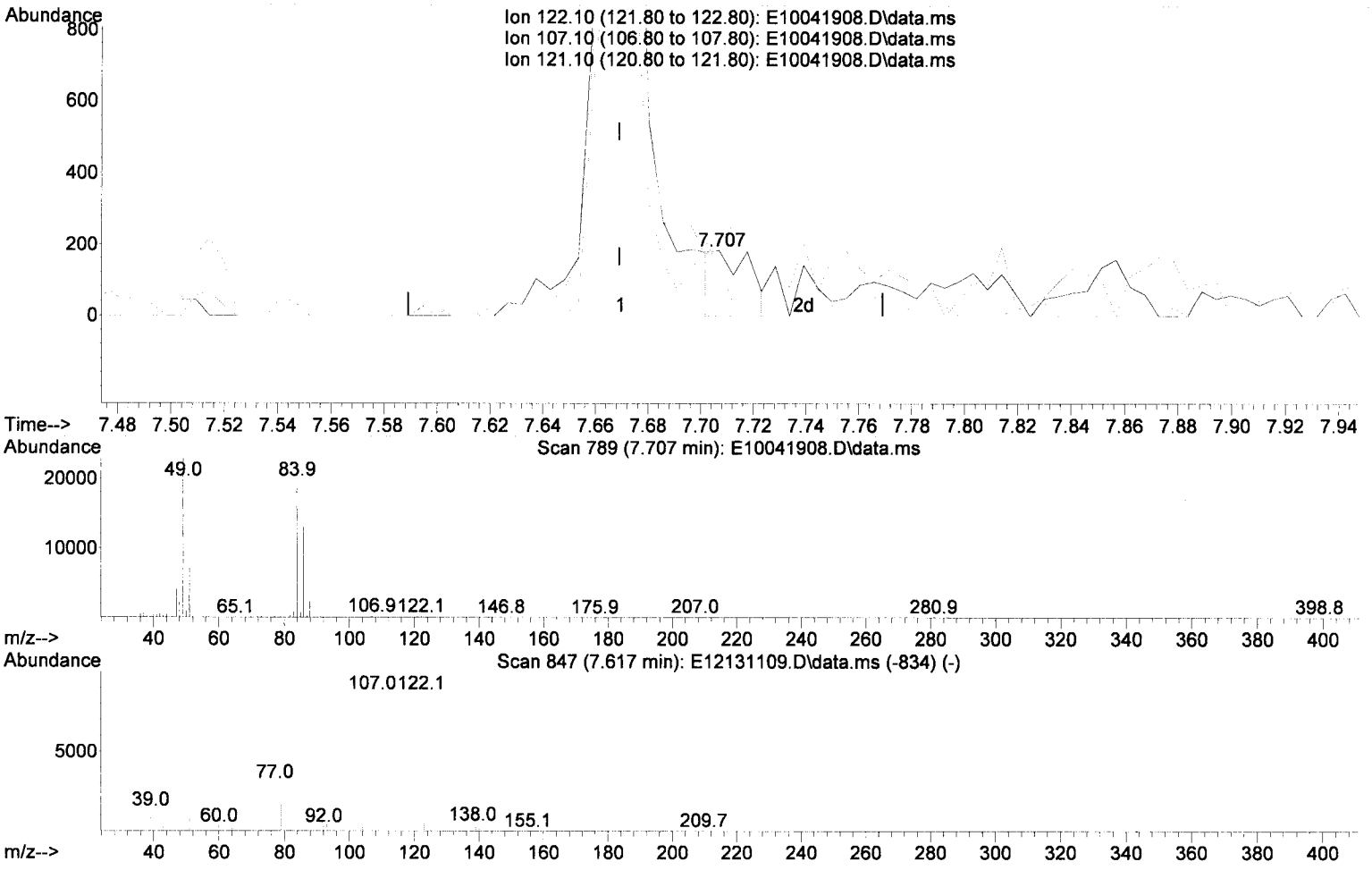


R = 8.35e-004 A*A + 2.71e-001 A - 1.40e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



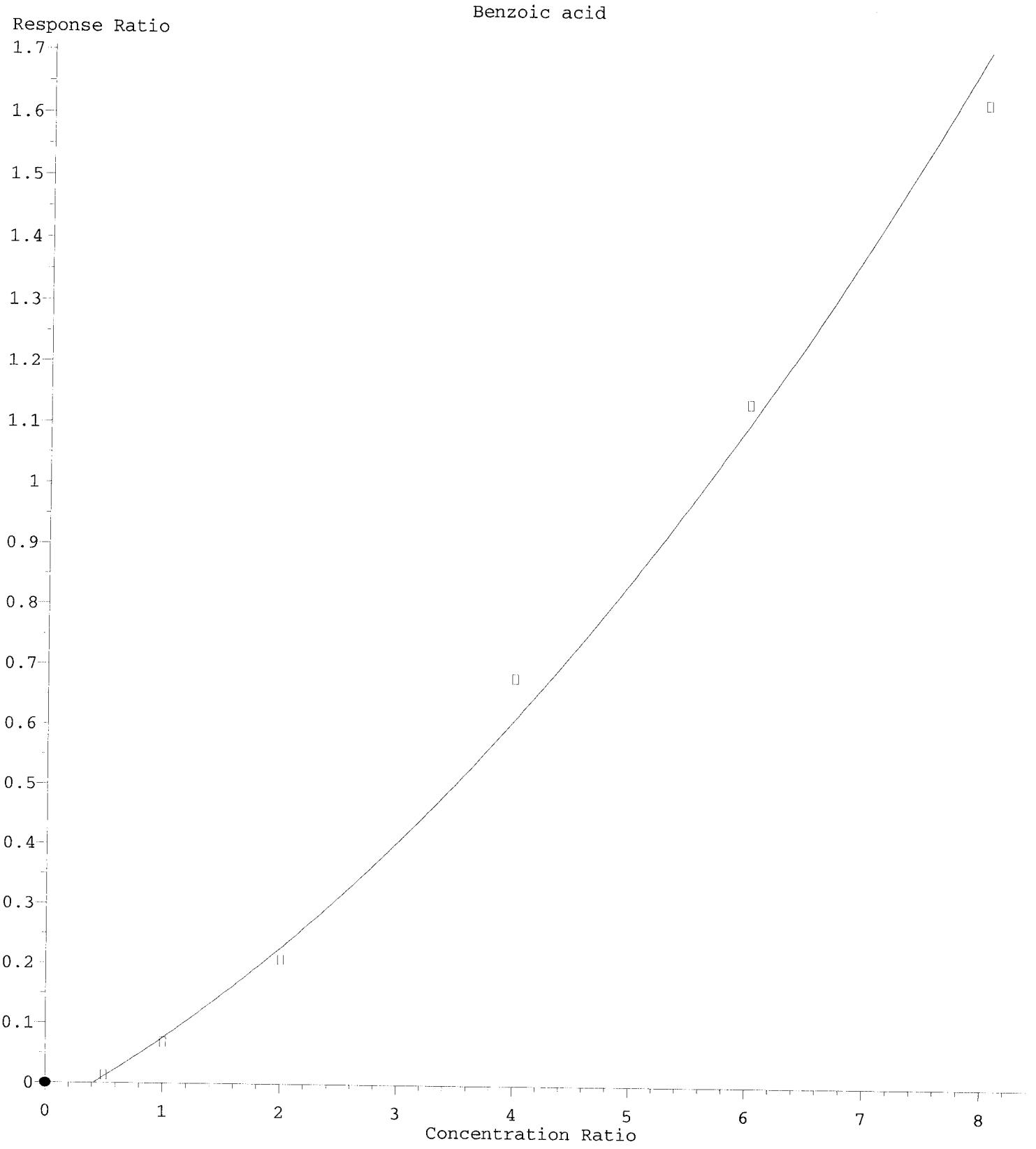
TIC: E10041908.D\data.ms

(24) 2,4-Dimethylphenol (T)

7.707min (+ 0.038) 10.98 ng/ml m

response 175

Ion	Exp%	Act%
122.10	100.00	100.00
107.10	105.60	111.41
121.10	56.90	73.37
0.00	0.00	0.00

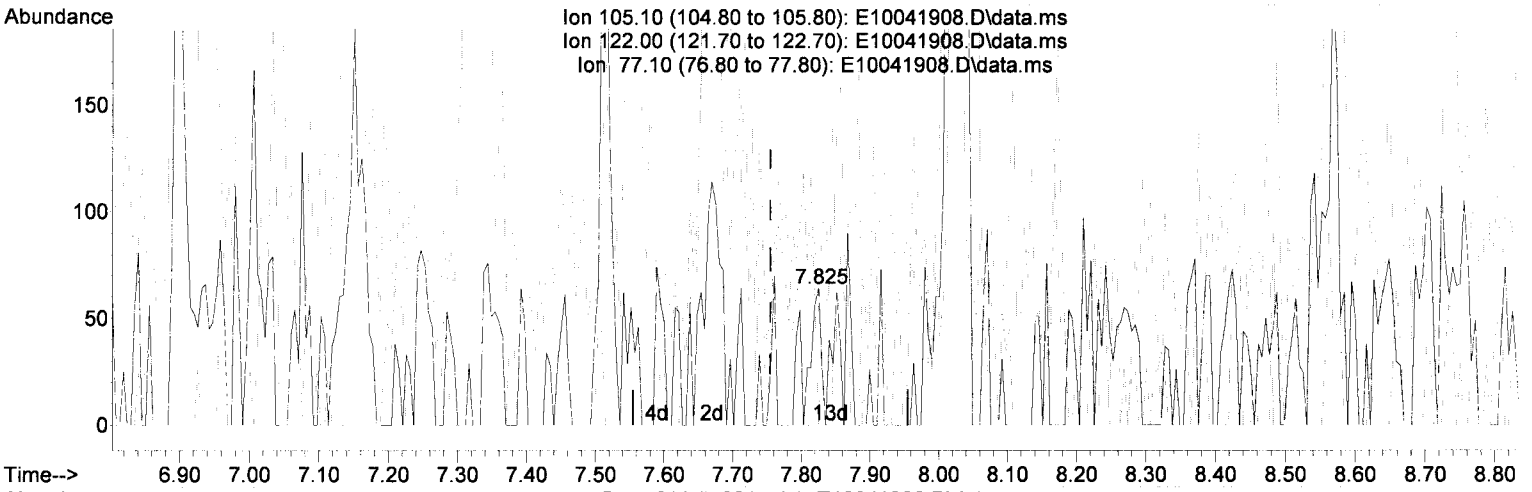


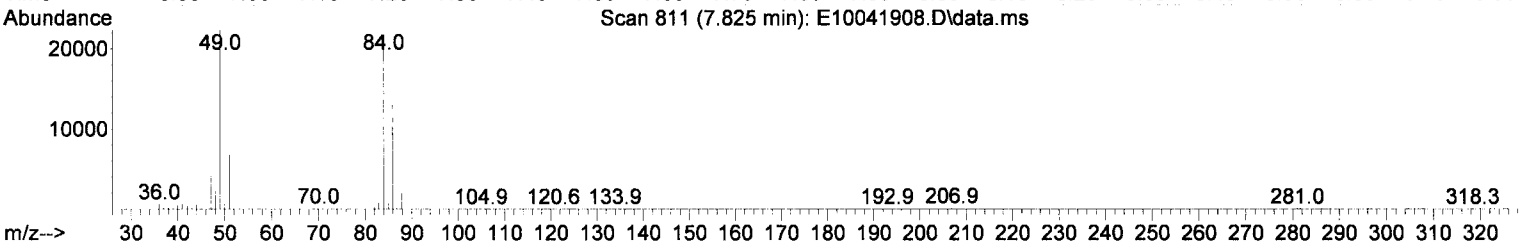
R = 1.35e-002 A*A + 1.11e-001 A - 4.76e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

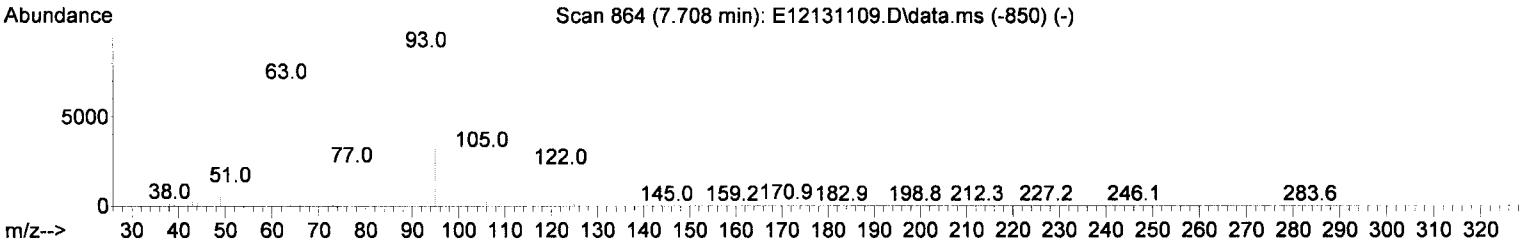
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







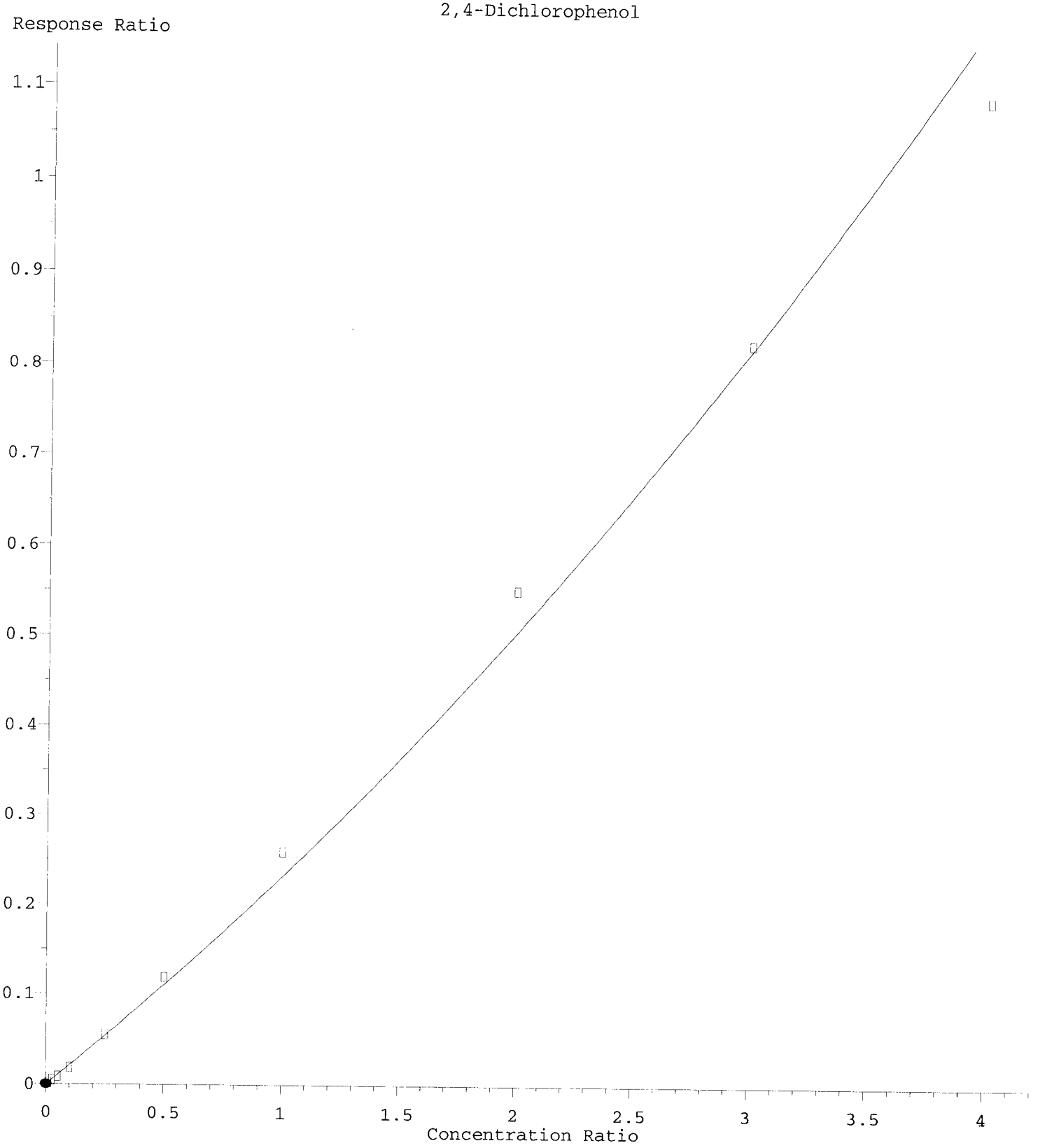
TIC: E10041908.D\data.ms

(26) Benzoic acid (T)

7.825min (+ 0.070) 820.42 ng/ml m

response 117

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	87.10	0.00#
77.10	69.80	82.81
0.00	0.00	0.00

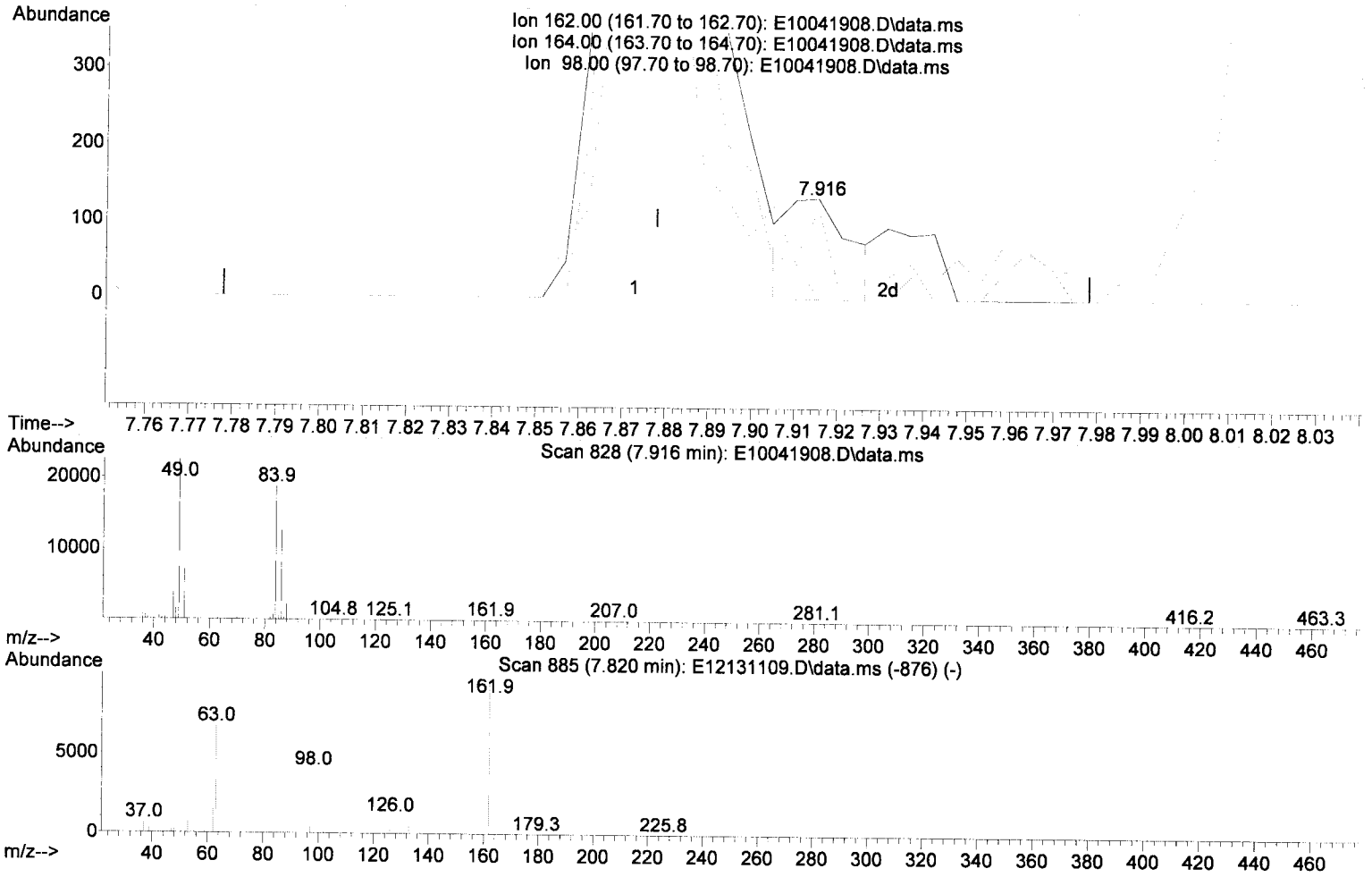


R = 2.01e-002 A*A + 2.13e-001 A - 7.62e-004
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/x^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



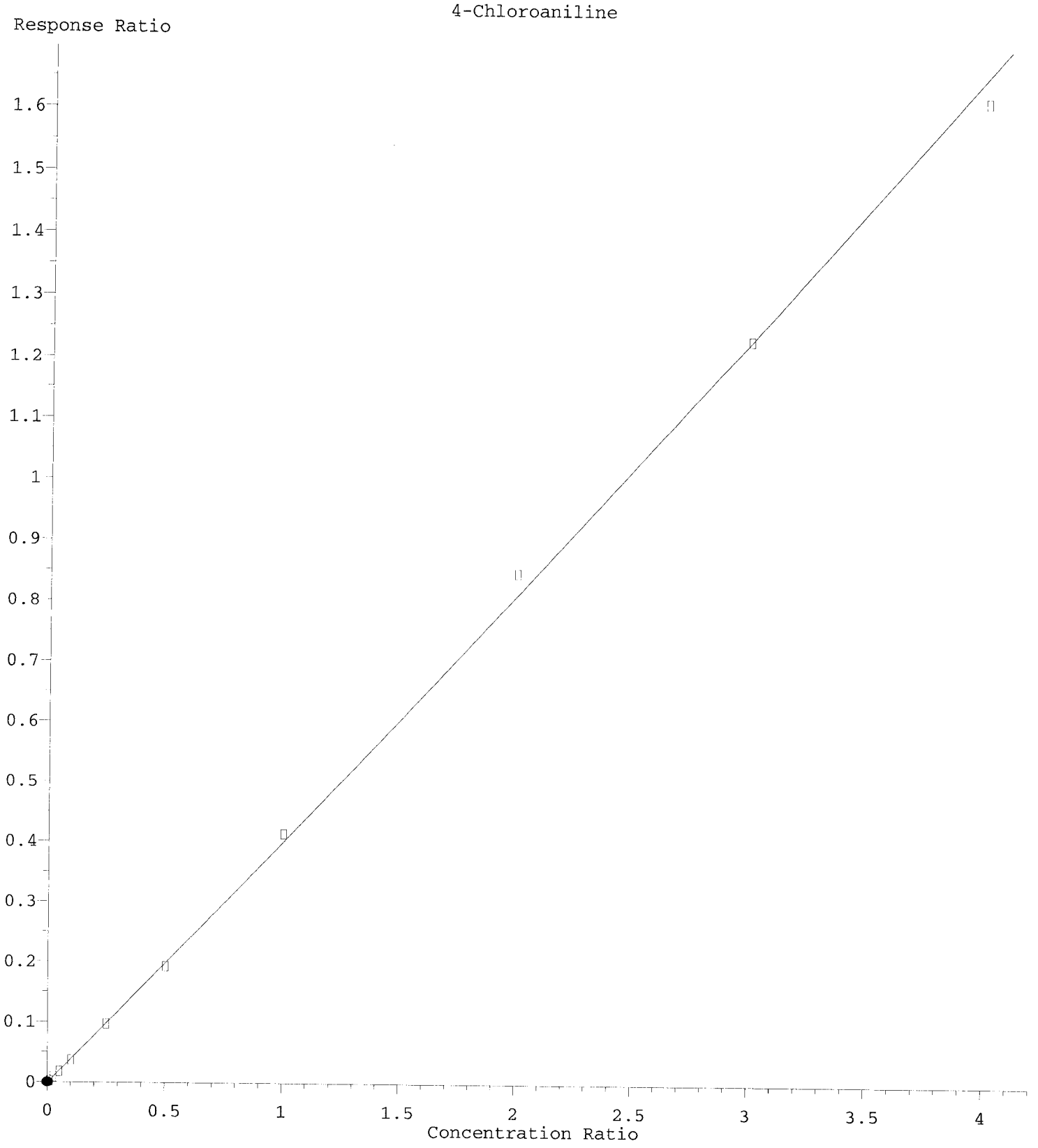
TIC: E10041908.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.916min (+ 0.038) 7.82 ng/ml m J

response 135

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	62.60	89.47
98.00	34.00	0.00#
0.00	0.00	0.00

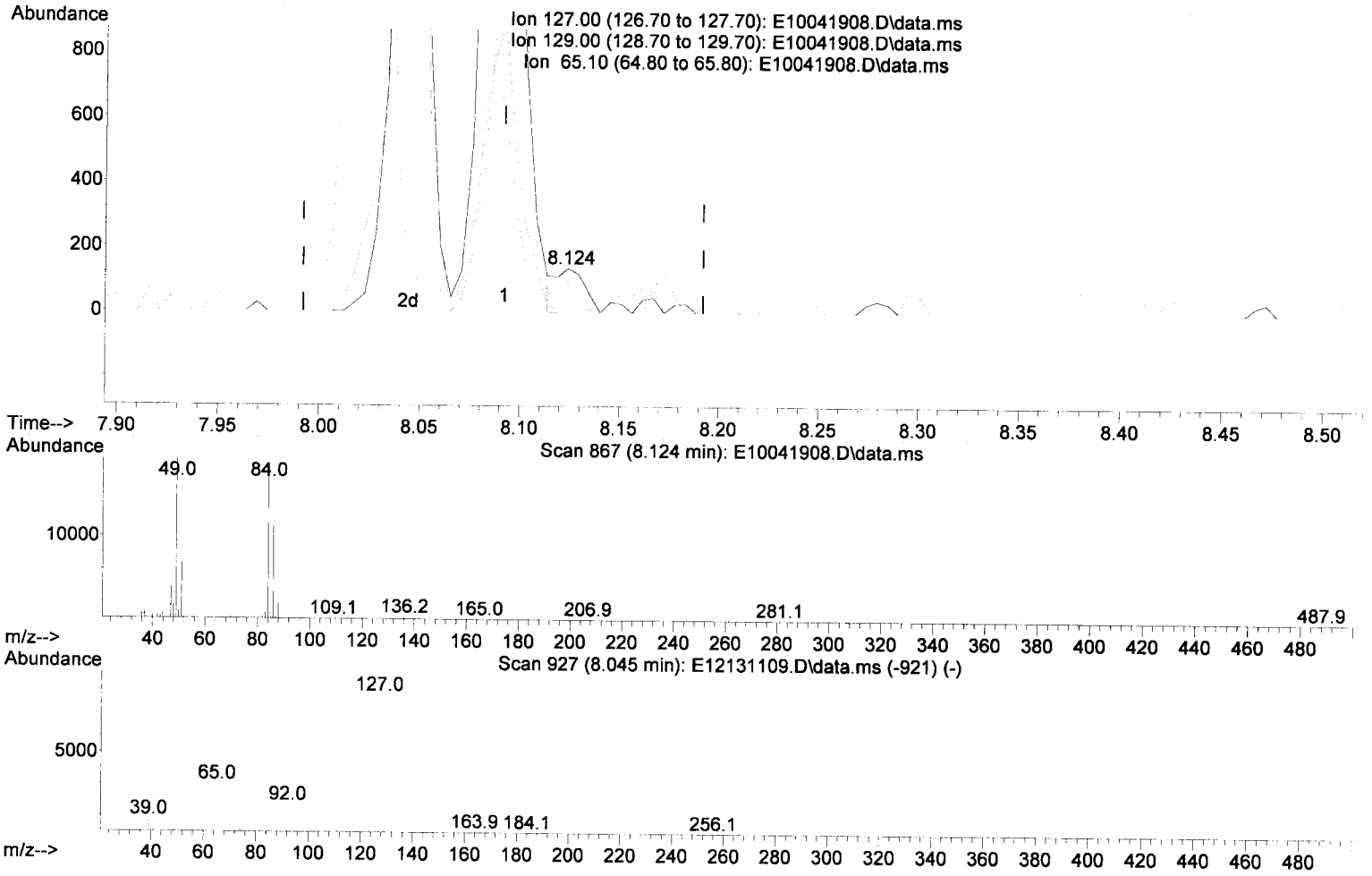


R = 4.06e-003 A*A + 3.98e-001 A - 2.13e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



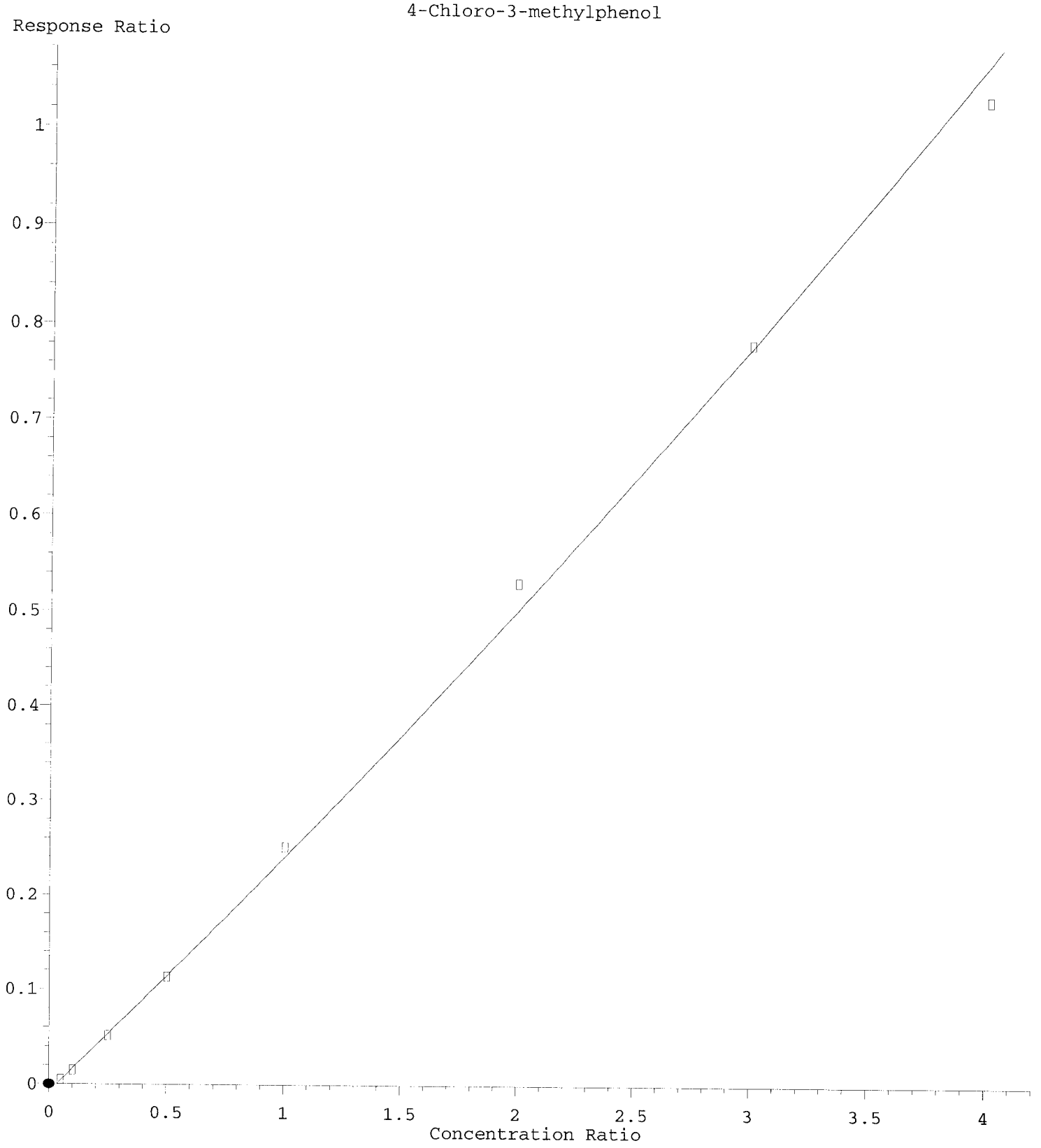
TIC: E10041908.D\data.ms

(30) 4-Chloroaniline (T)

8.124min (+ 0.032) 11.08 ng/ml m

response 155

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	32.40	0.00#
65.10	23.60	69.34#
0.00	0.00	0.00

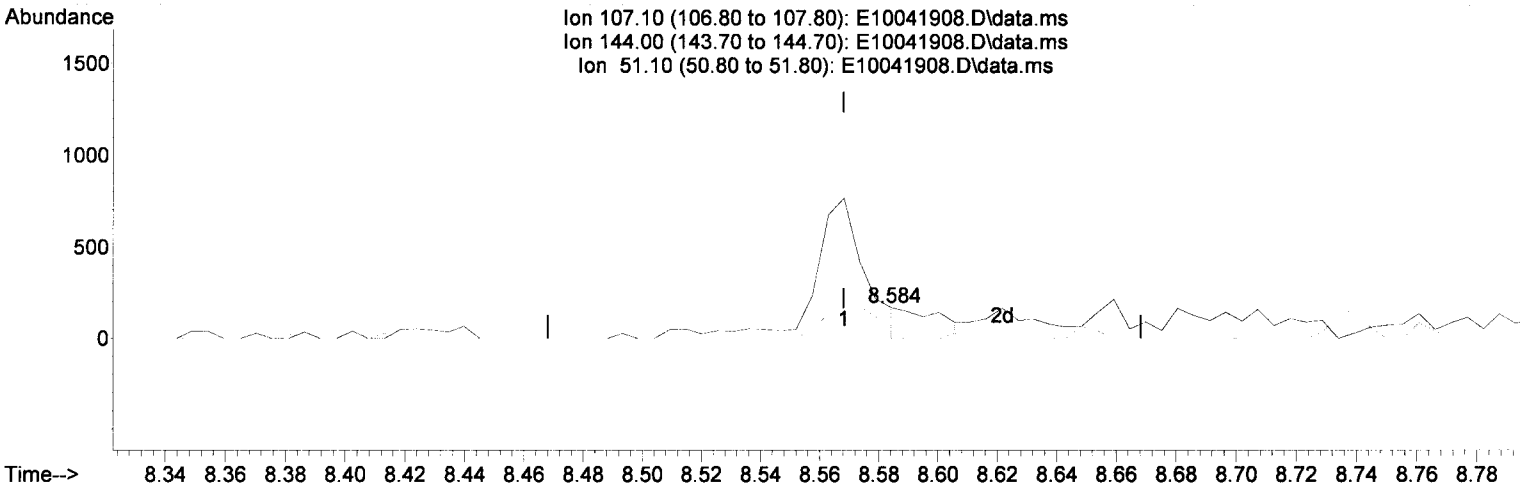


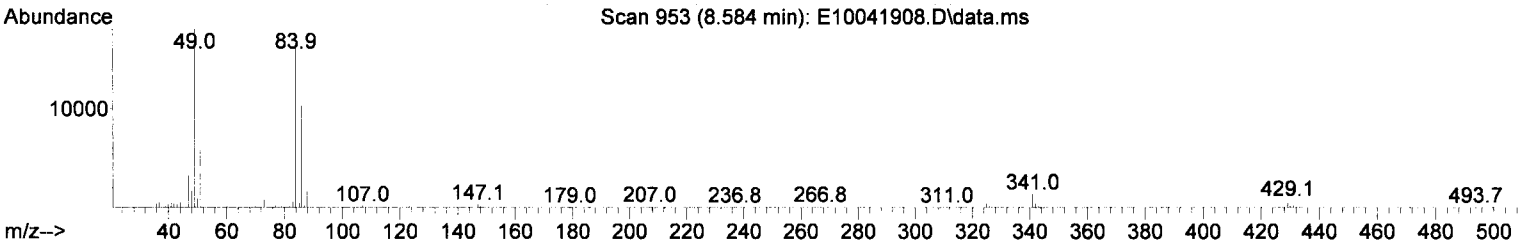
R = 6.84e-003 A*A + 2.41e-001 A - 7.83e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/A^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:30:11 2019

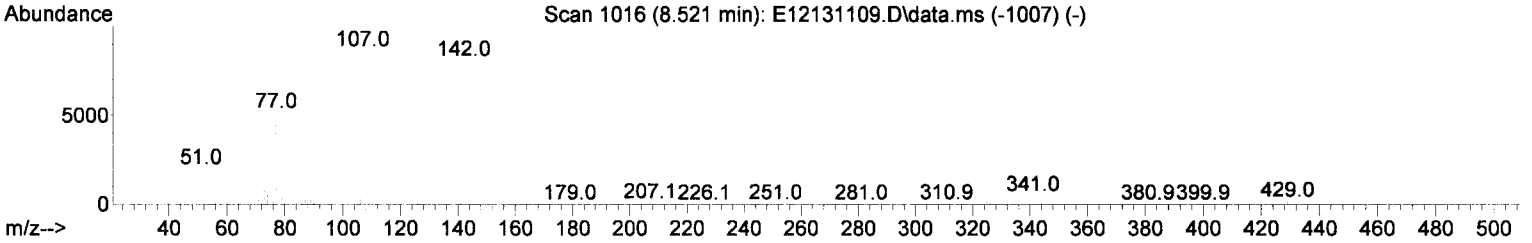
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







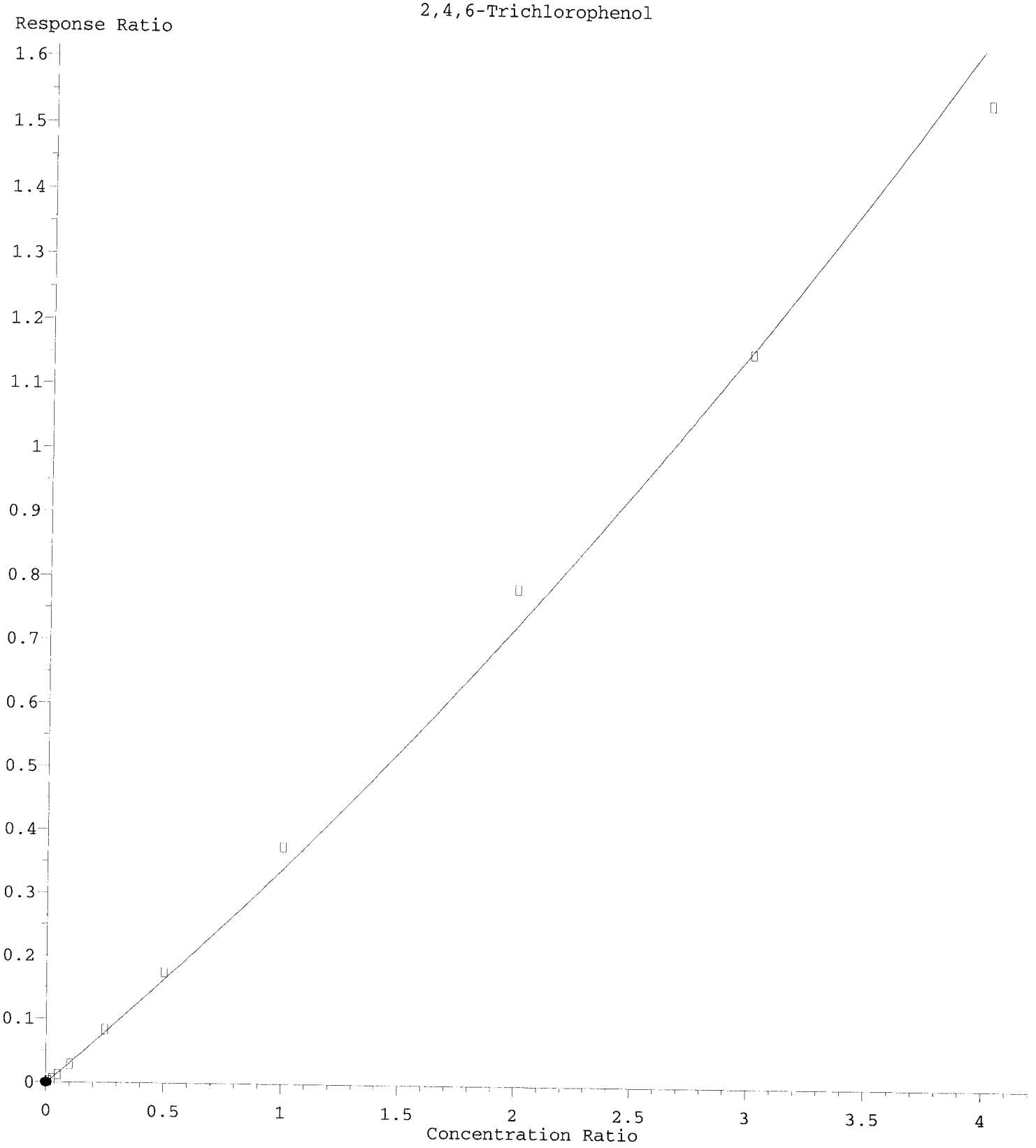
TIC: E10041908.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.584min (+ 0.016) 65.54 ng/ml m

response 159

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	30.30	28.40
51.10	18.80	3457.40#
0.00	0.00	0.00

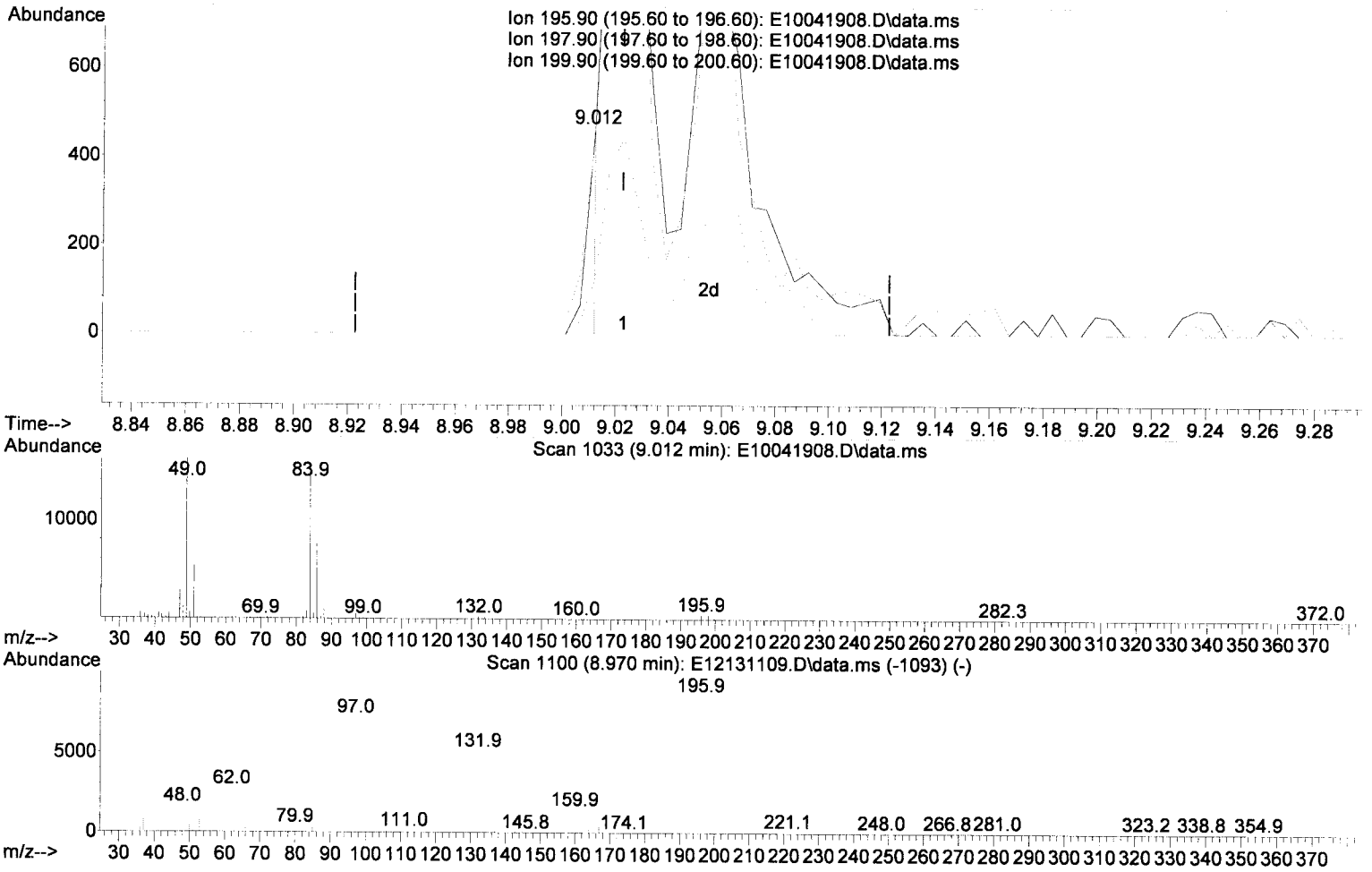


R = 2.28e-002 A*A + 3.19e-001 A - 1.83e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



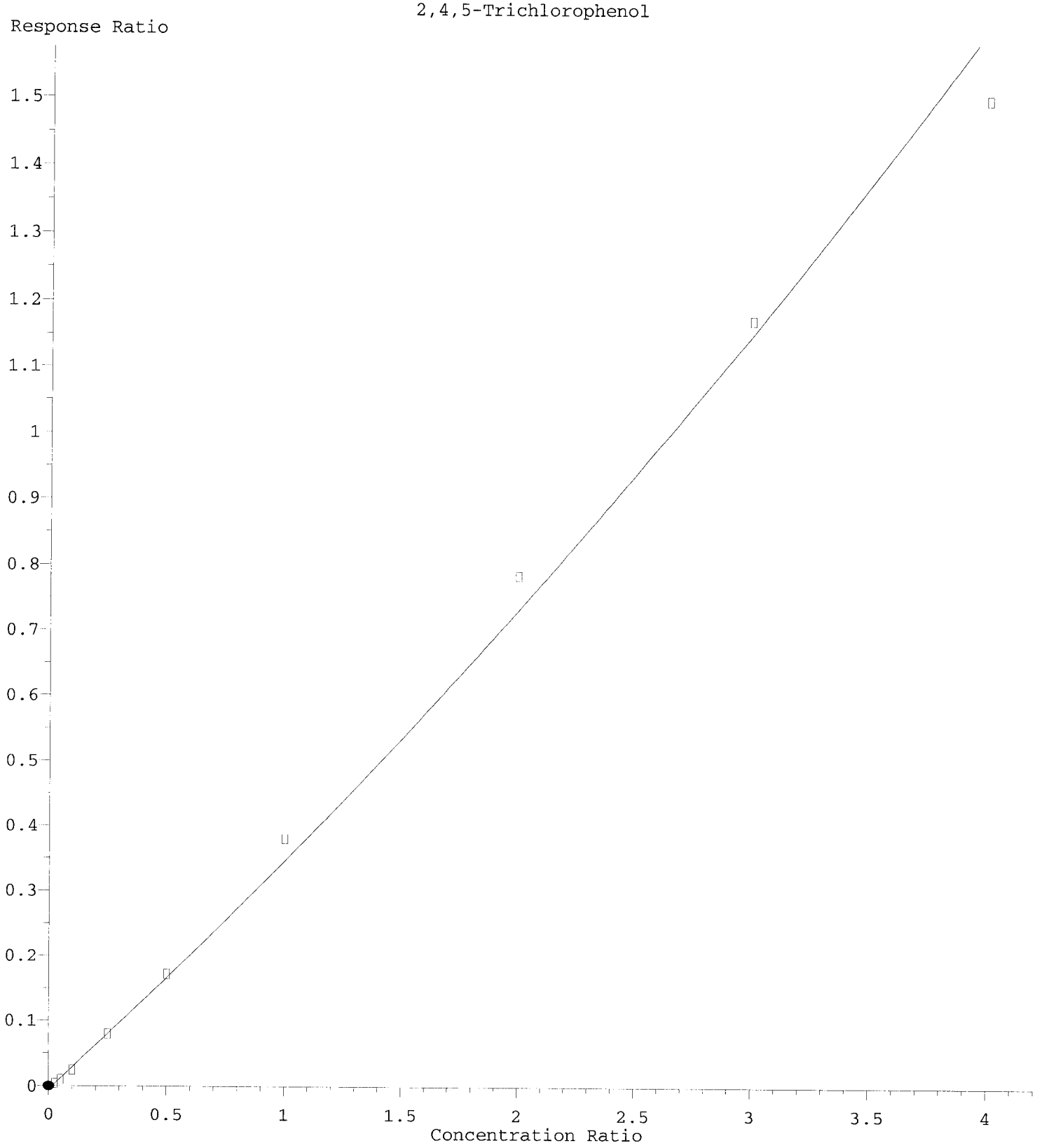
TIC: E10041908.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

9.012min (-0.011) 12.58 ng/ml m

response 170

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	95.90	96.35
199.90	30.70	25.97
0.00	0.00	0.00

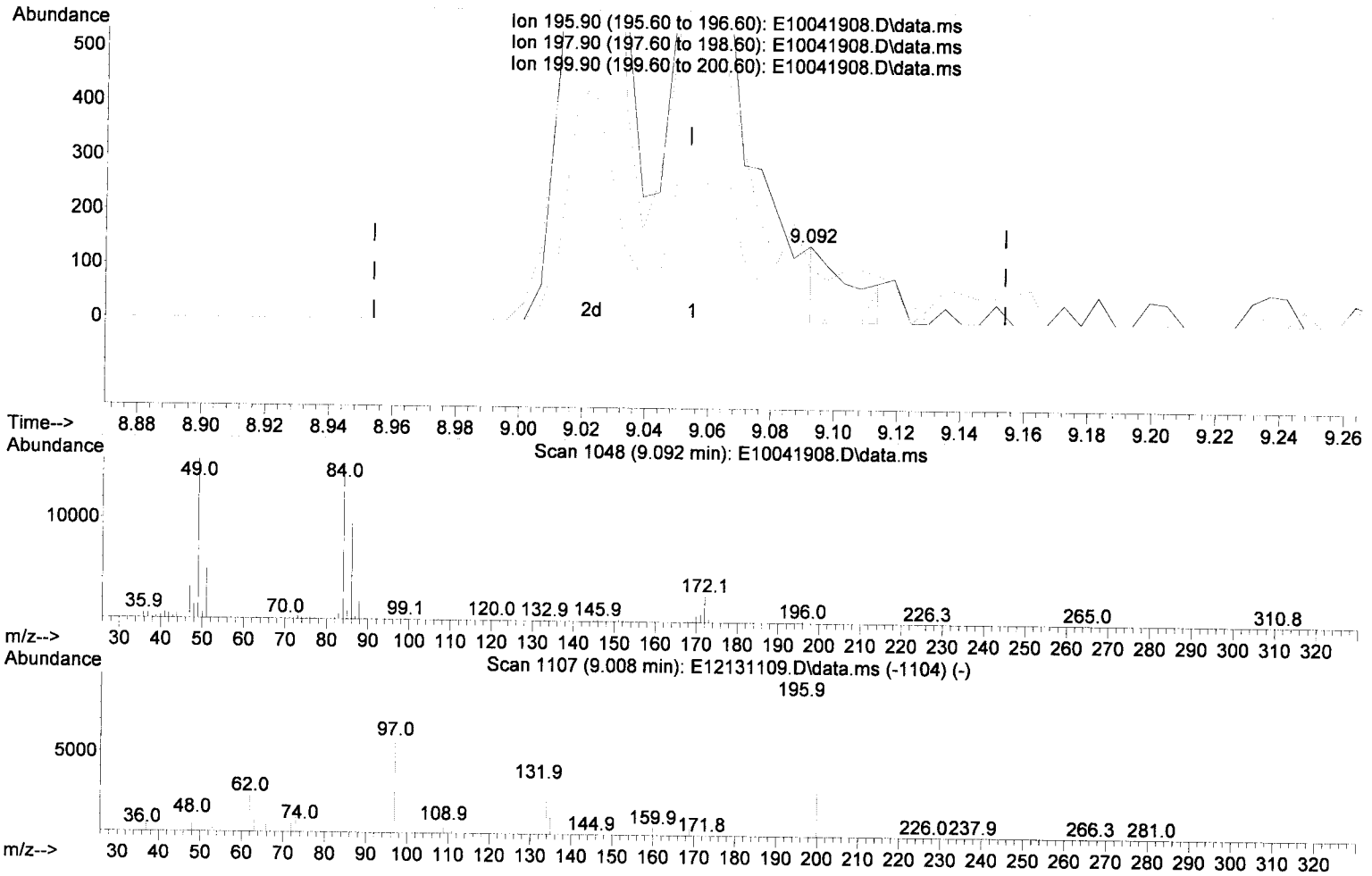


R = 1.71e-002 A*A + 3.34e-001 A - 4.79e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/x^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



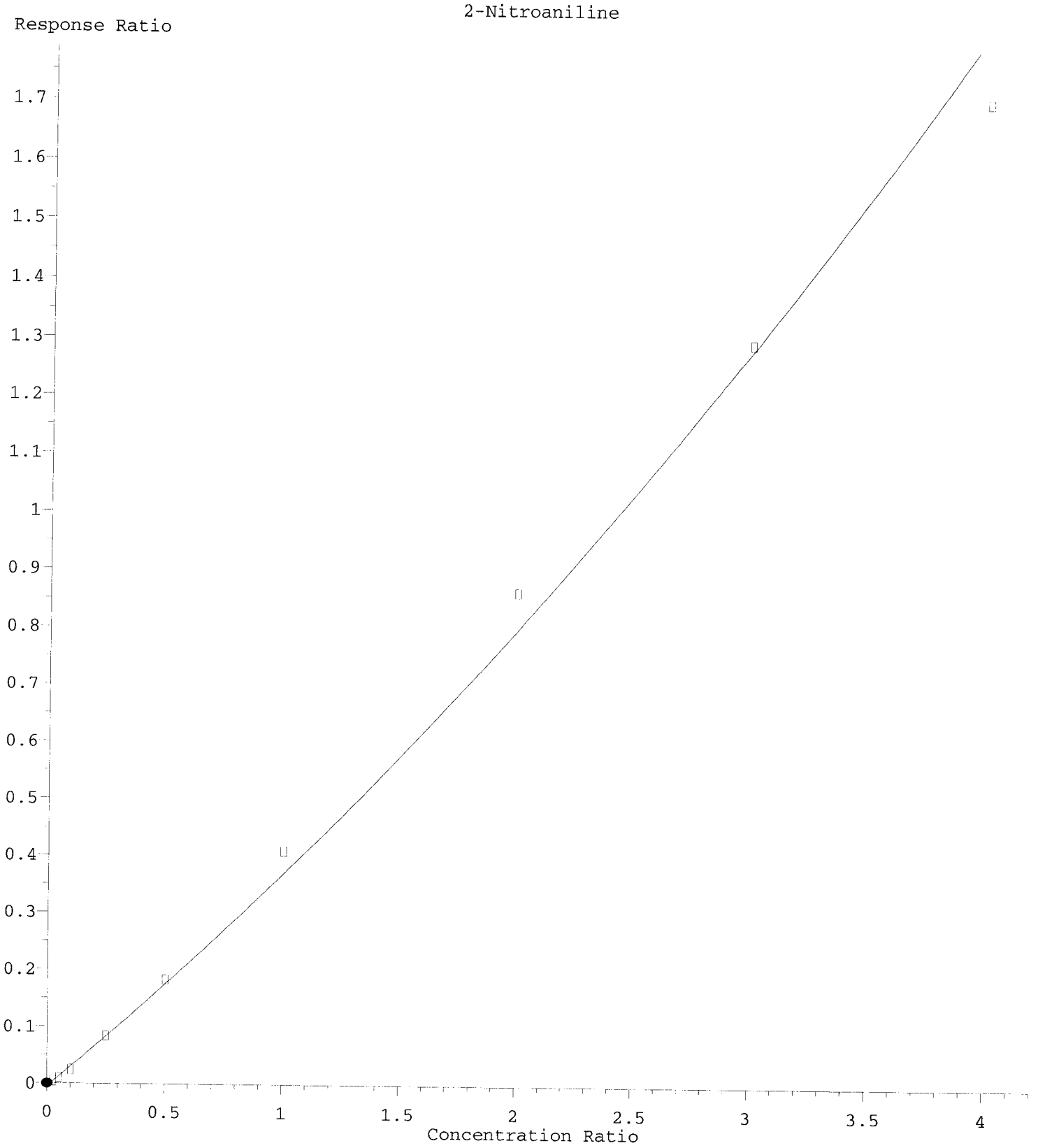
TIC: E10041908.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.092min (+ 0.038) 29.29 ng/ml m

response 101

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	95.70	70.92
199.90	30.70	34.75
0.00	0.00	0.00

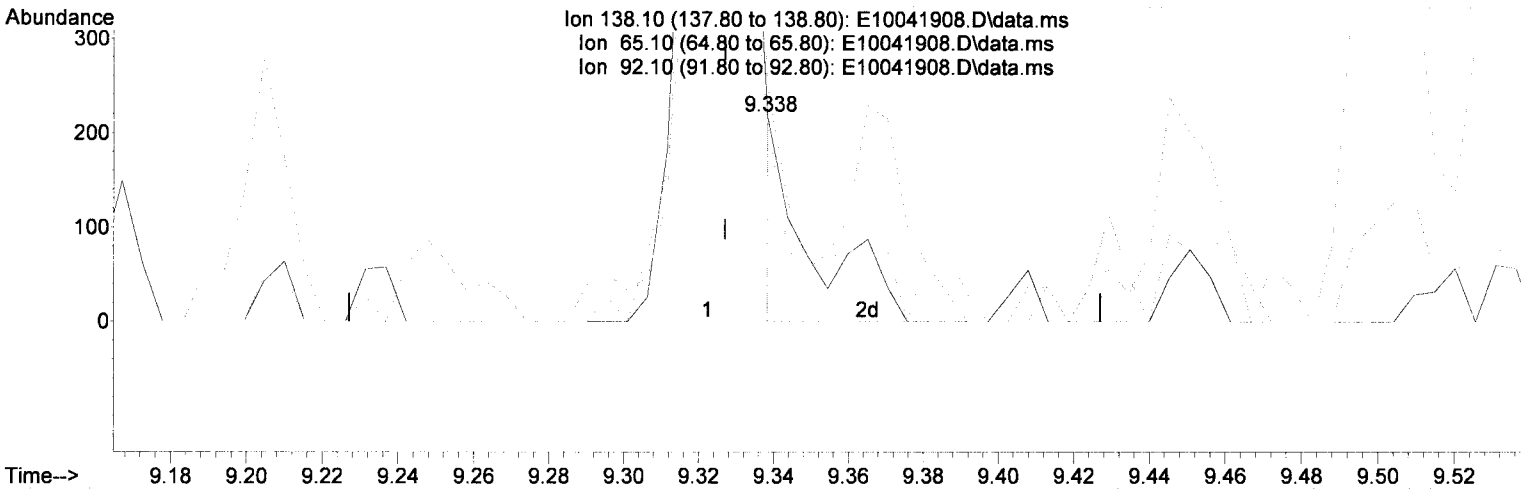


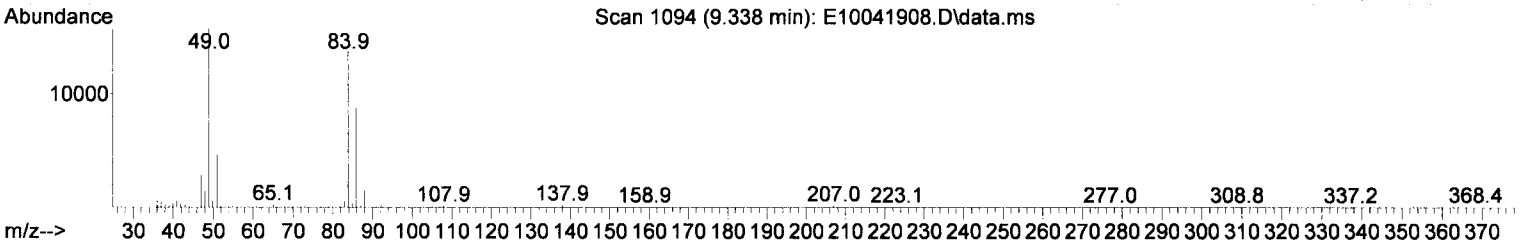
R = 2.73e-002 A*A + 3.47e-001 A - 5.18e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

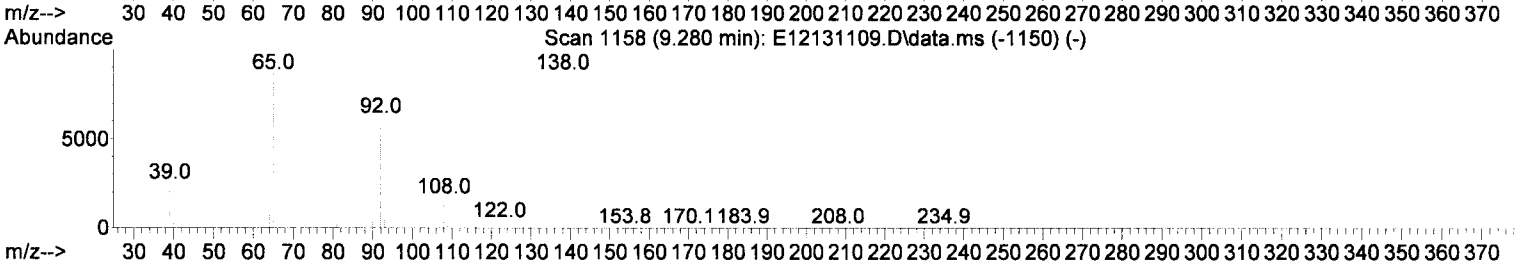
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







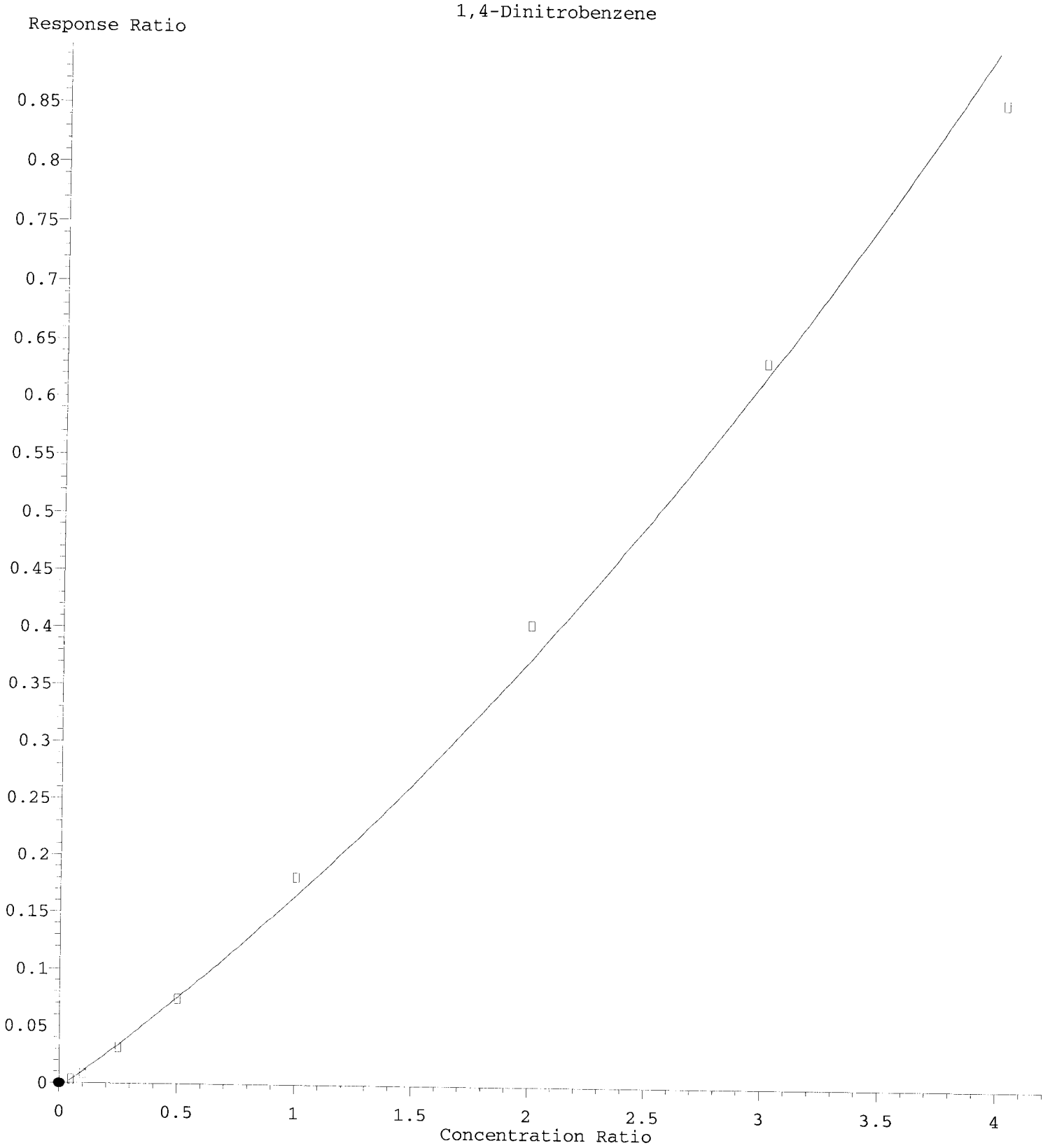
TIC: E10041908.D\data.ms

(42) 2-Nitroaniline (T)

9.338min (+ 0.011) 30.64 ng/ml m

response 133

Ion	Exp%	Act%
138.10	100.00	100.00
65.10	72.60	114.68#
92.10	56.50	97.25#
0.00	0.00	0.00

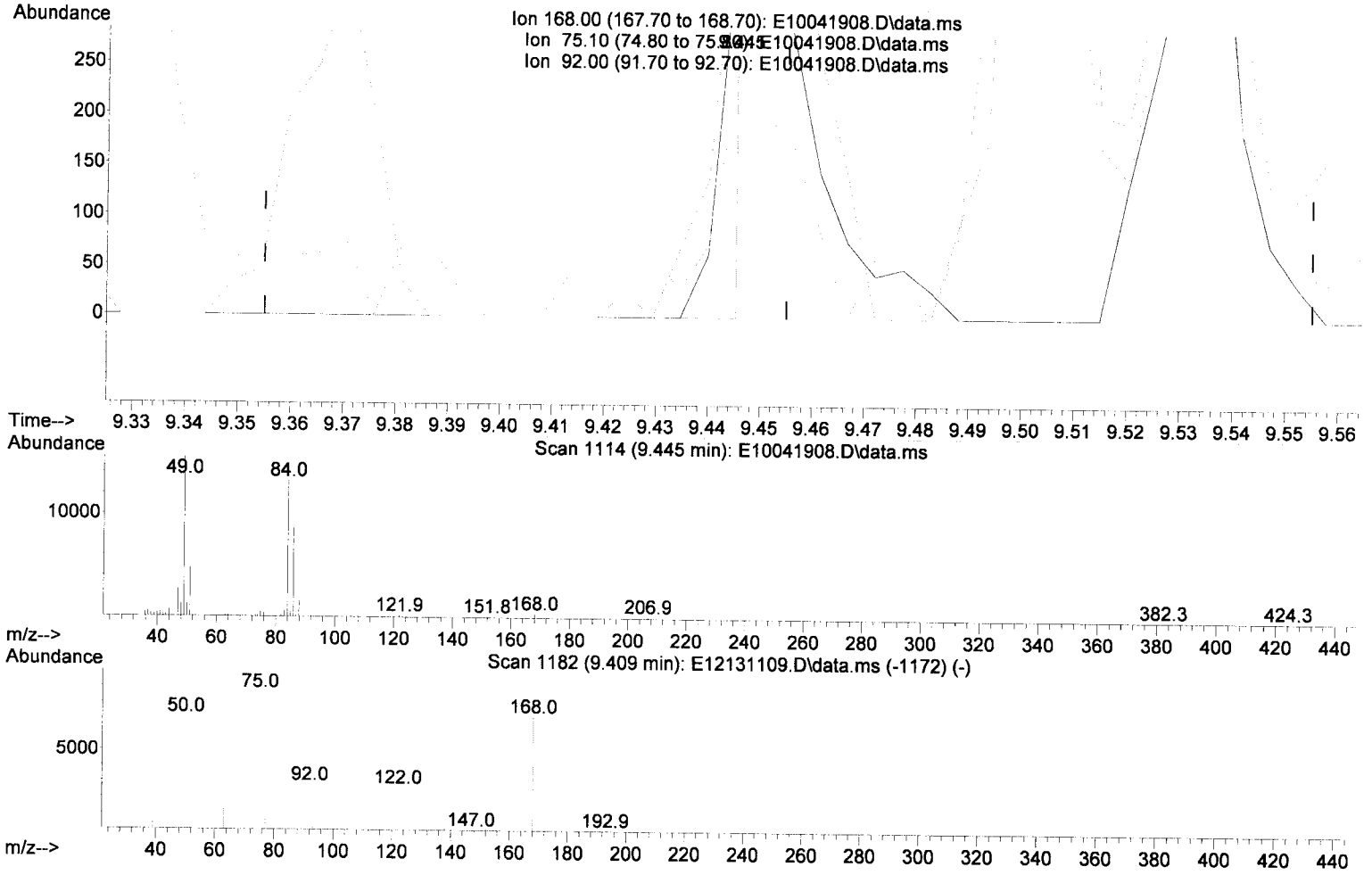


R = 1.93e-002 A*A + 1.51e-001 A - 4.85e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041908.D\data.ms

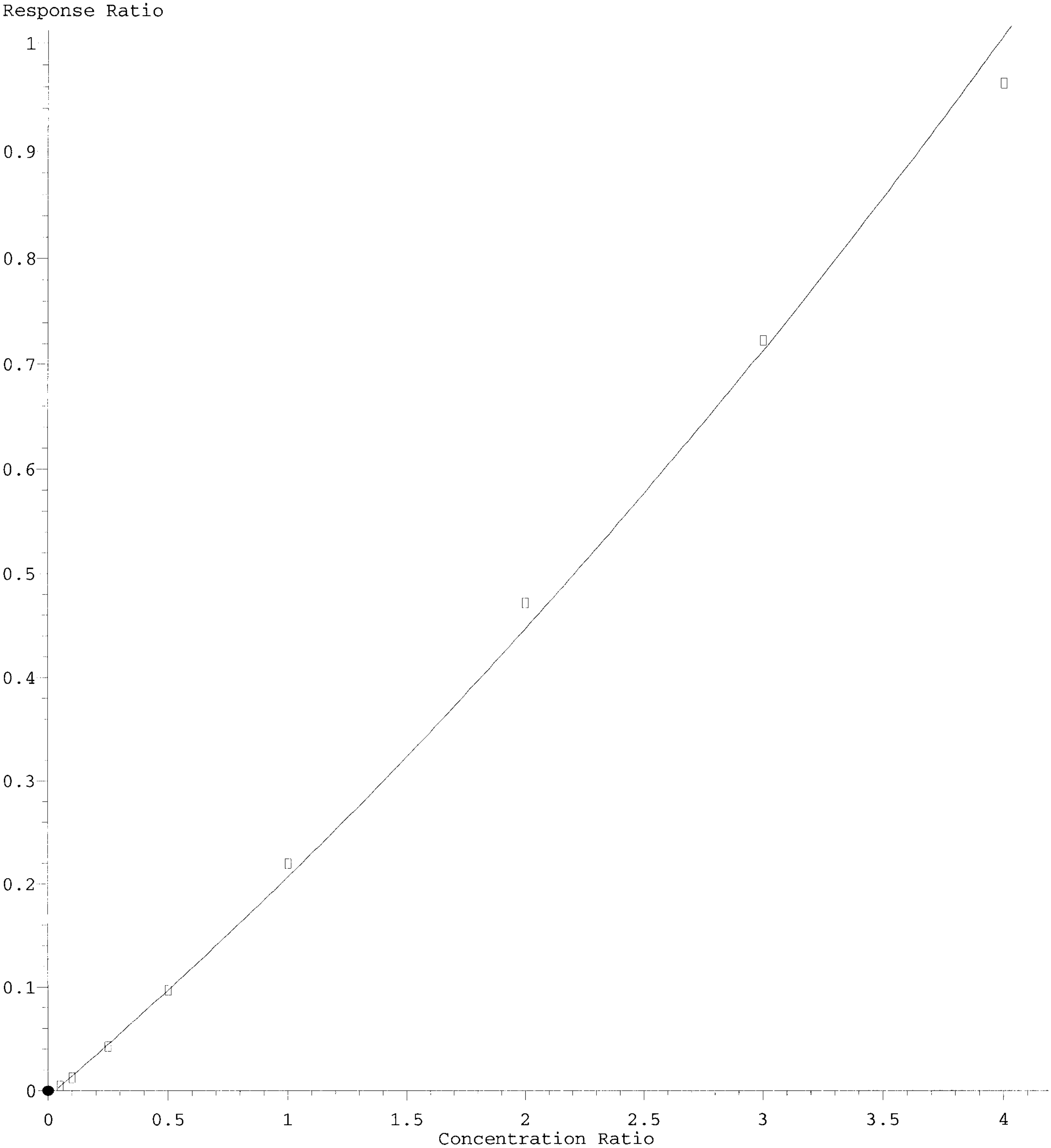
(44) 1,4-Dinitrobenzene (T)

9.445min (-0.010) 65.86 ng/ml m

response 146

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	98.00	114.25
92.00	32.10	60.56
0.00	0.00	0.00

1,3-Dinitrobenzene

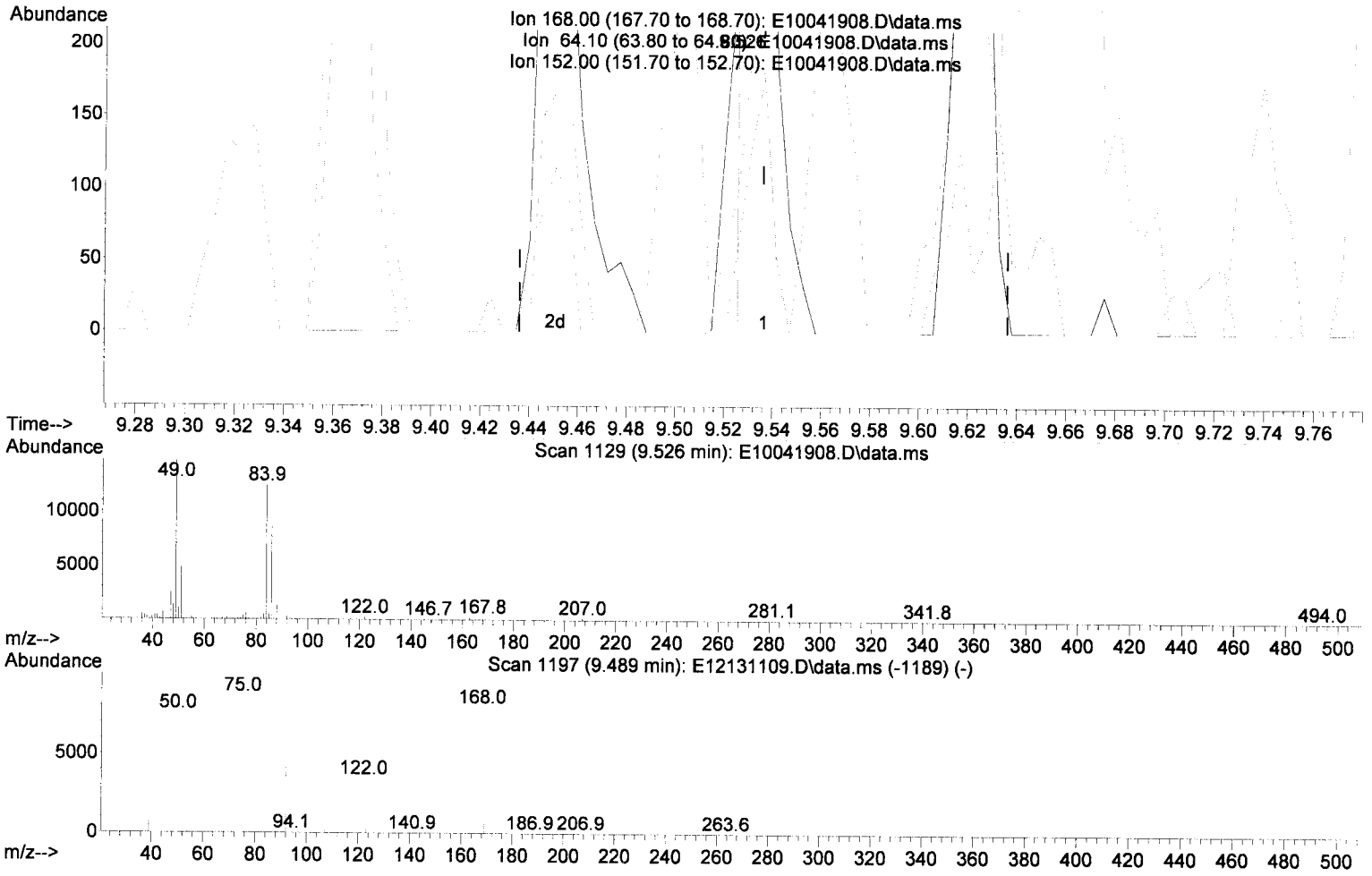


R = 1.36e-002 A*A + 1.99e-001 A - 5.92e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



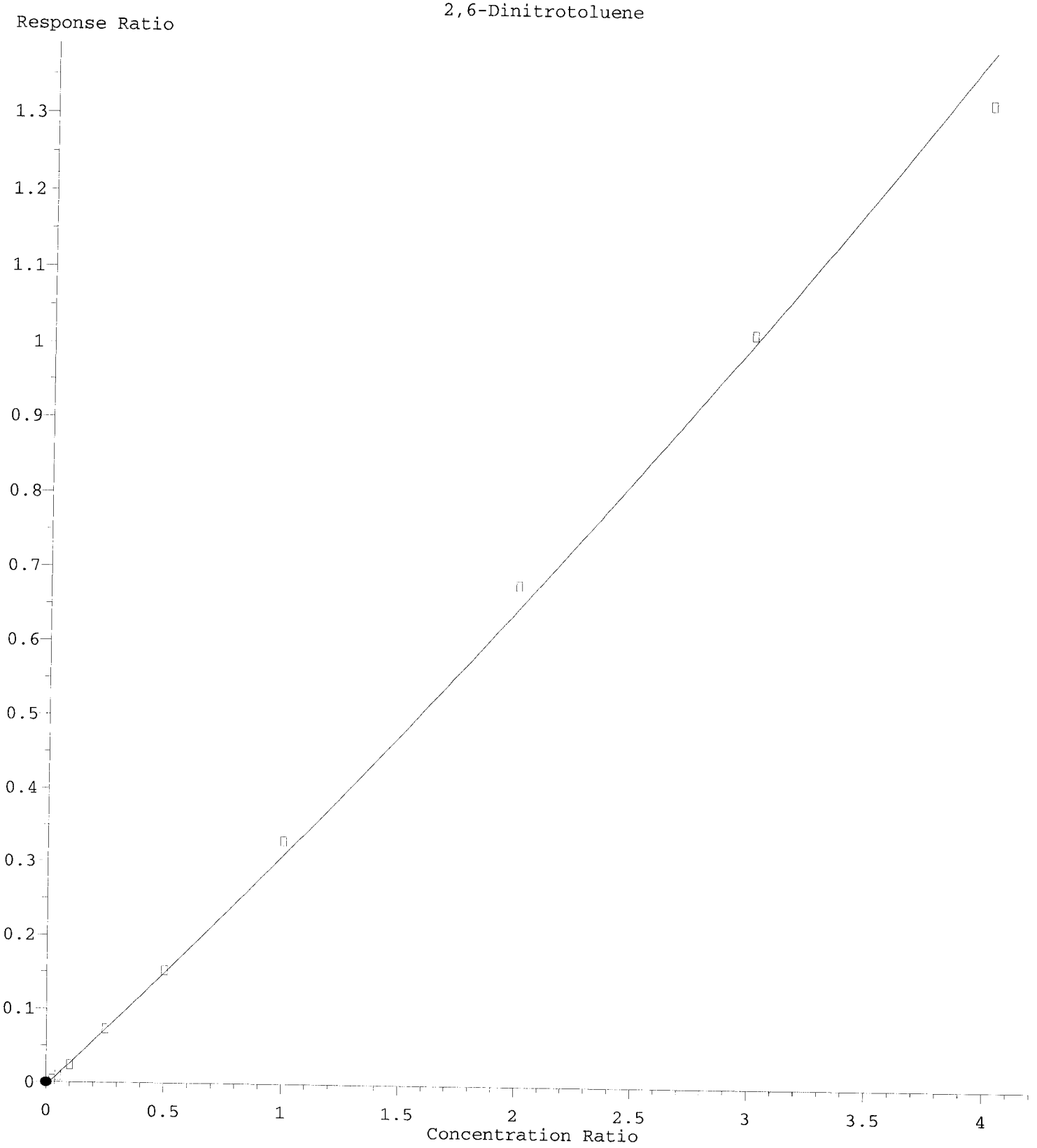
TIC: E10041908.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.526min (-0.010) 60.63 ng/ml m

response 124

Ion	Exp%	Act%
168.00	100.00	100.00
64.10	22.60	23.72
152.00	7.70	37.94#
0.00	0.00	0.00

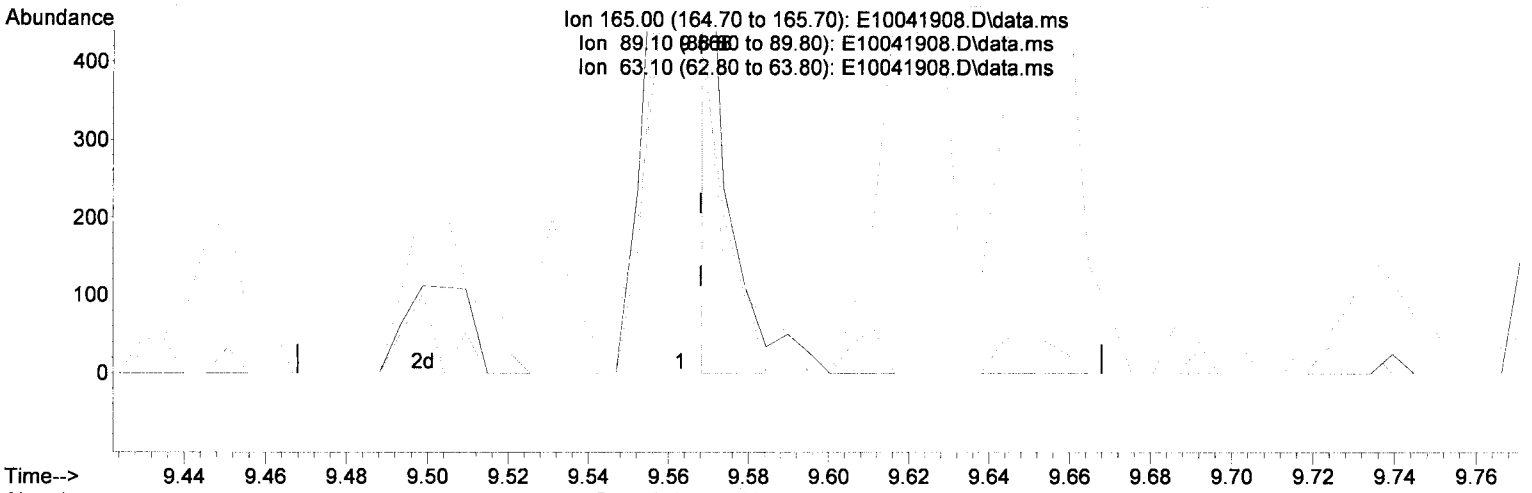


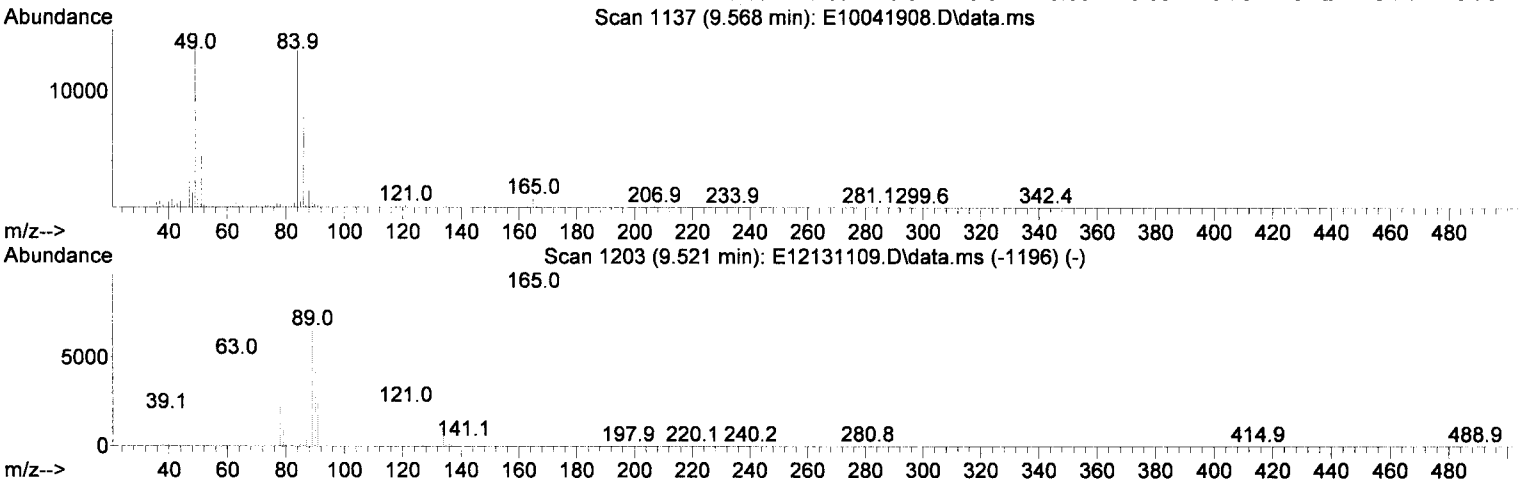
R = 1.11e-002 A*A + 3.04e-001 A - 4.64e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5





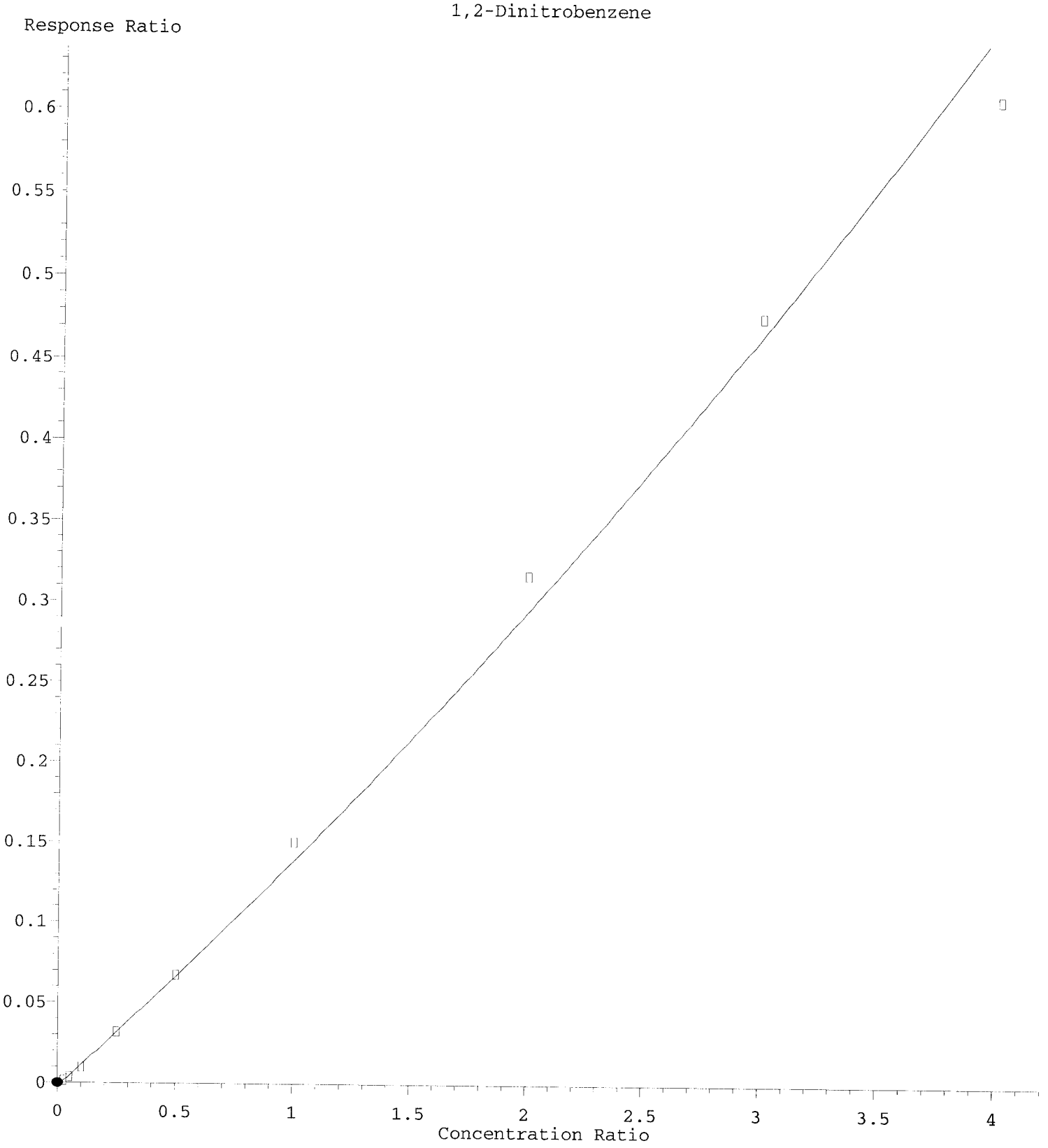
TIC: E10041908.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.568min (+ 0.000) 31.34 ng/ml m

response 123

Ion	Exp%	Act%
165.00	100.00	100.00
89.10	45.80	51.82
63.10	41.30	58.36
0.00	0.00	0.00

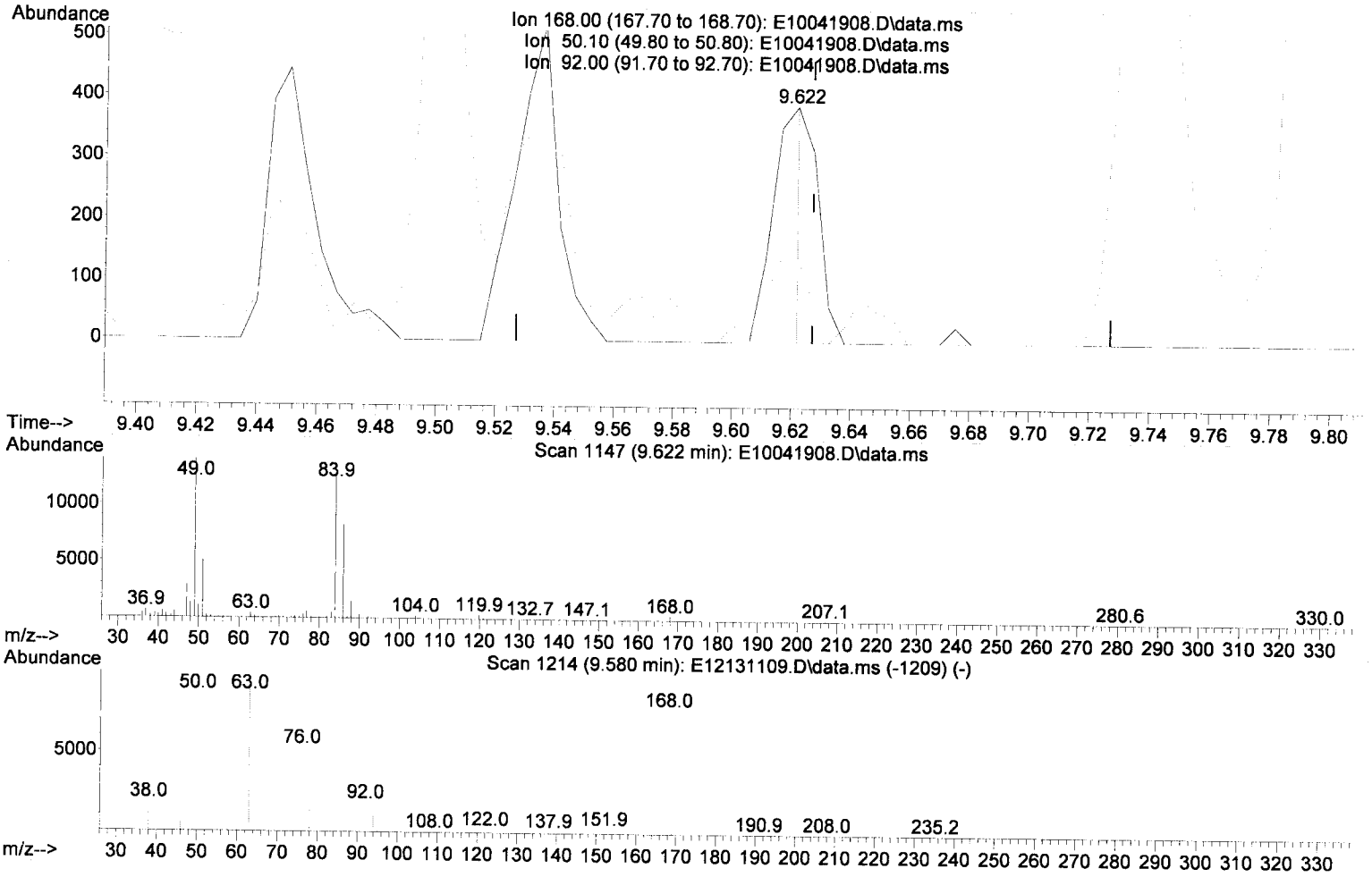


R = 7.45e-003 A*A + 1.33e-001 A - 2.19e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/r^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



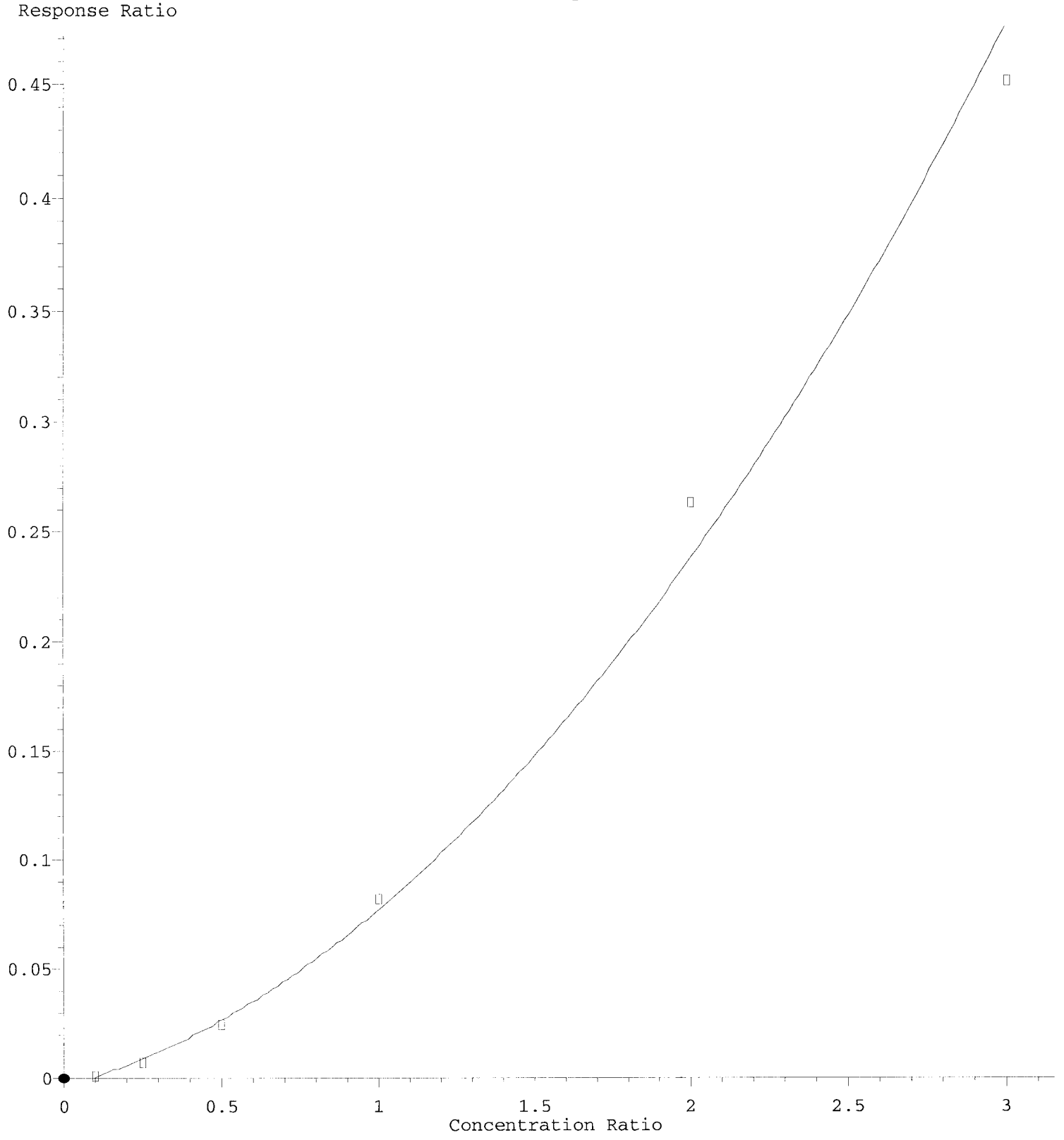
TIC: E10041908.D\data.ms

(48) 1,2-Dinitrobenzene (T)

9.622min (-0.005) 34.65 ng/ml m

response 120

Ion	Exp%	Act%
168.00	100.00	100.00
50.10	84.30	279.12#
92.00	18.10	36.60
0.00	0.00	0.00

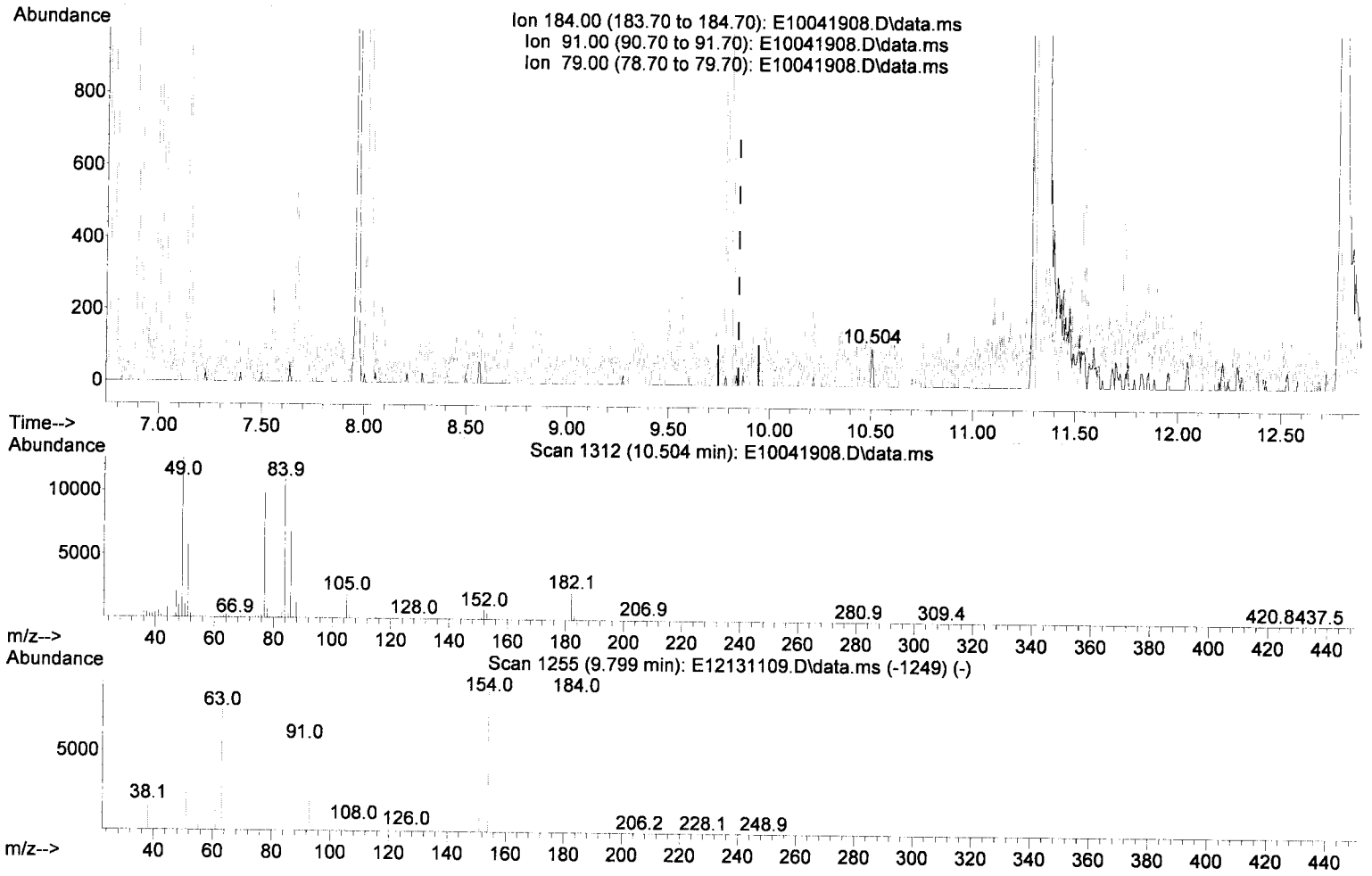


R = 3.99e-002 A*A + 4.12e-002 A - 3.91e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/1/(a^2)
Method Name: Z:\METHODS\SV5_100419.M

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



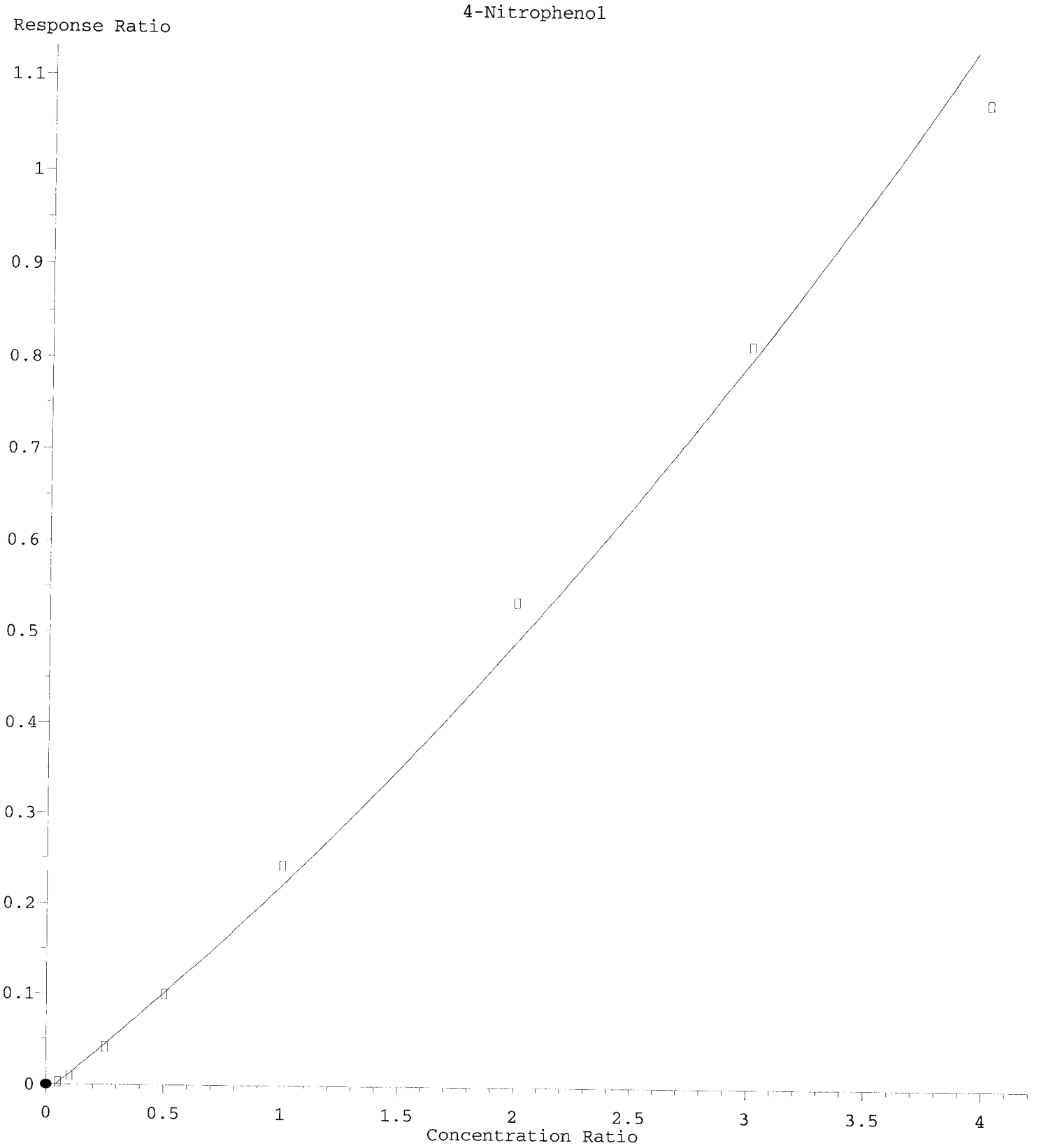
TIC: E10041908.D\data.ms

(52) 2,4-Dinitrophenol (T)

10.504min (+ 0.658) 179.65 ng/ml m

response 108

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	40.80	72.73#
79.00	29.20	100.91#
0.00	0.00	0.00

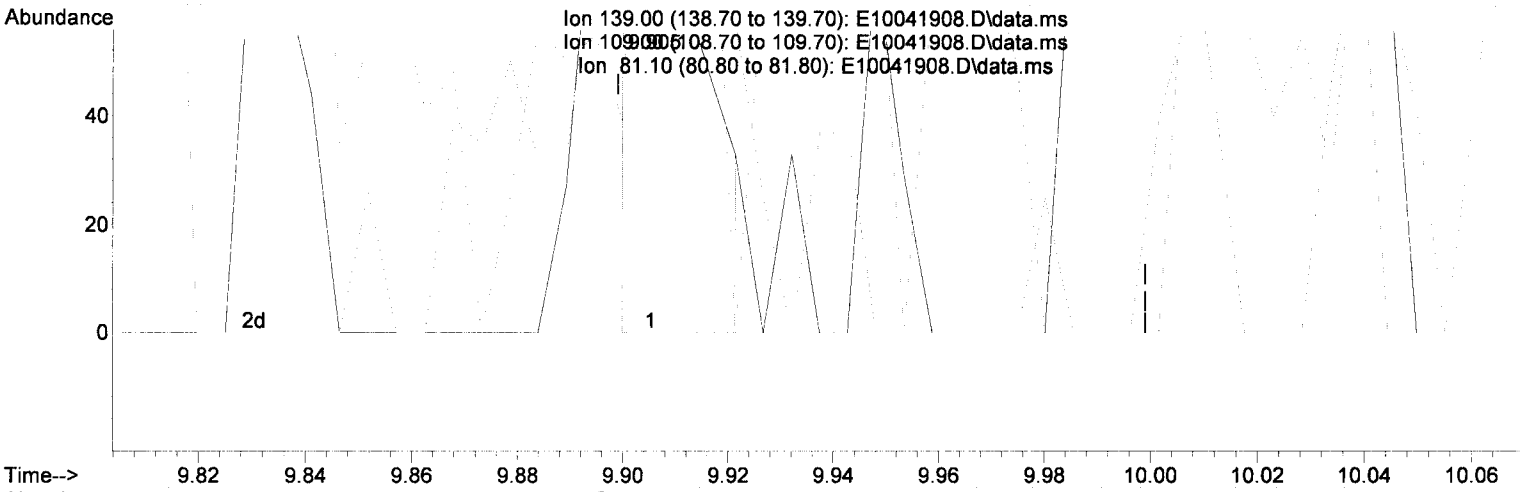


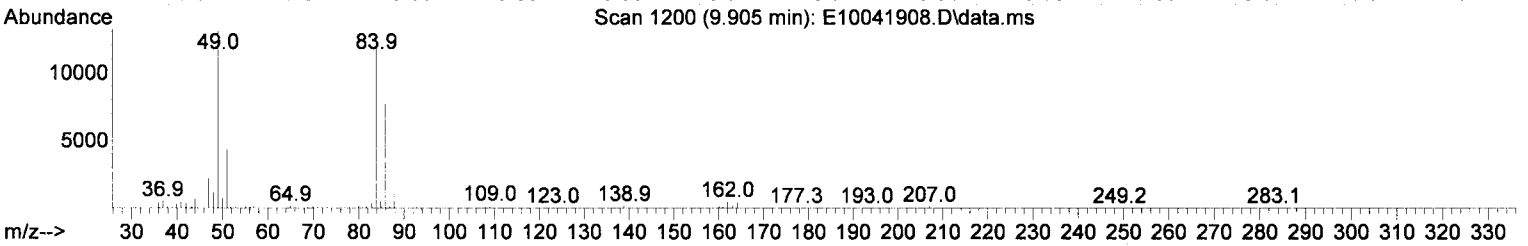
R = 2.00e-002 A*A + 2.10e-001 A - 8.79e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

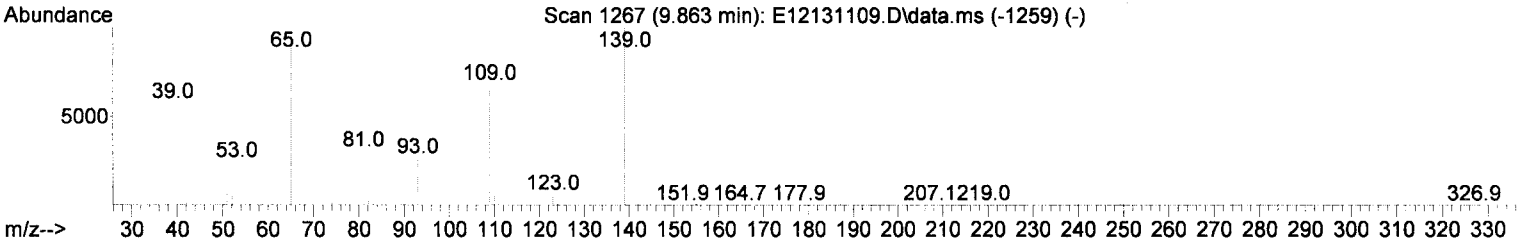
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







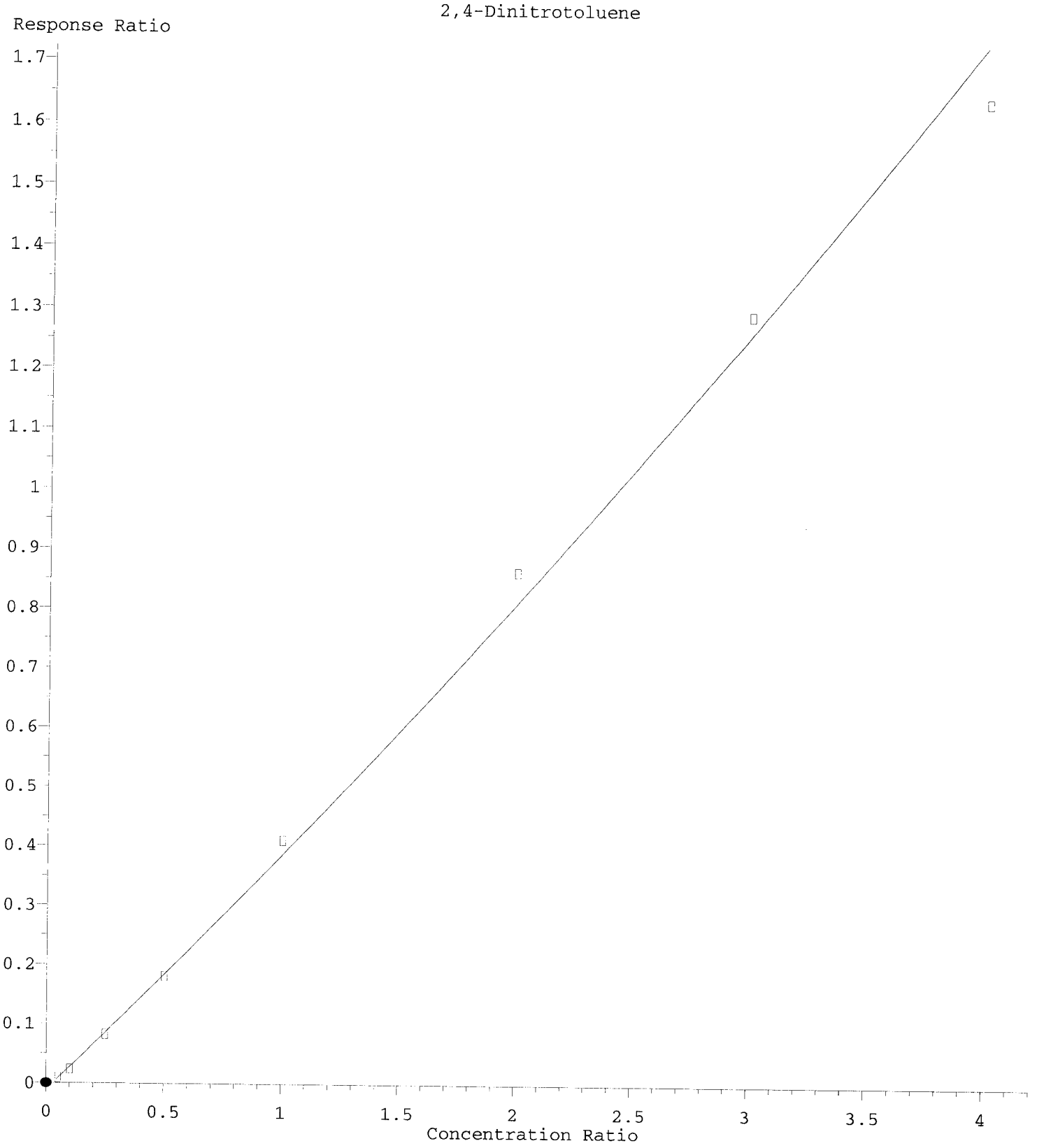
TIC: E10041908.D\data.ms

(53) 4-Nitrophenol (T)

9.905min (+ 0.006) 84.41 ng/ml m

response 107

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	51.30	109.66#
81.10	24.30	93.18#
0.00	0.00	0.00

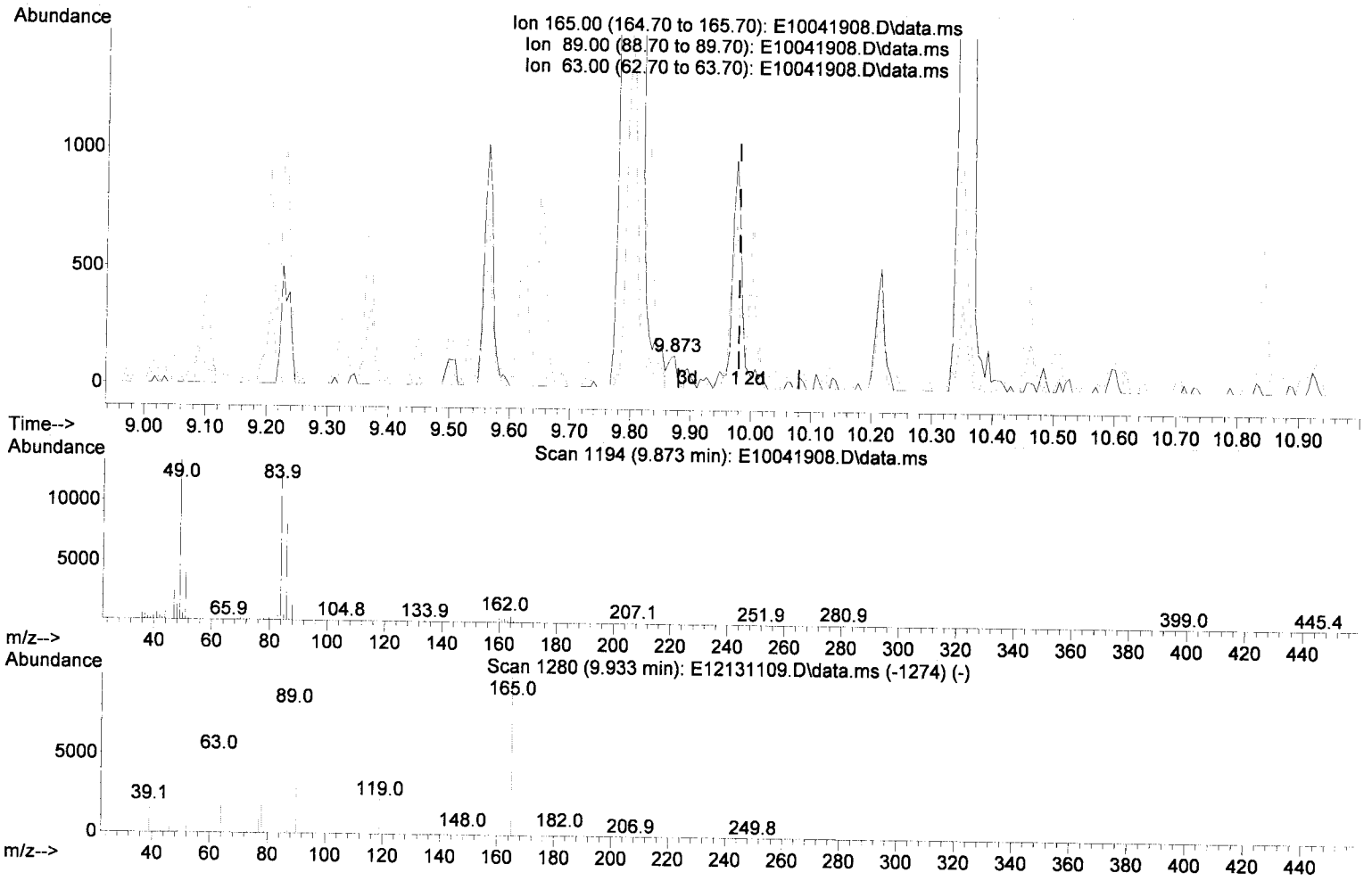


R = 1.28e-002 A*A + 3.86e-001 A - 1.17e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



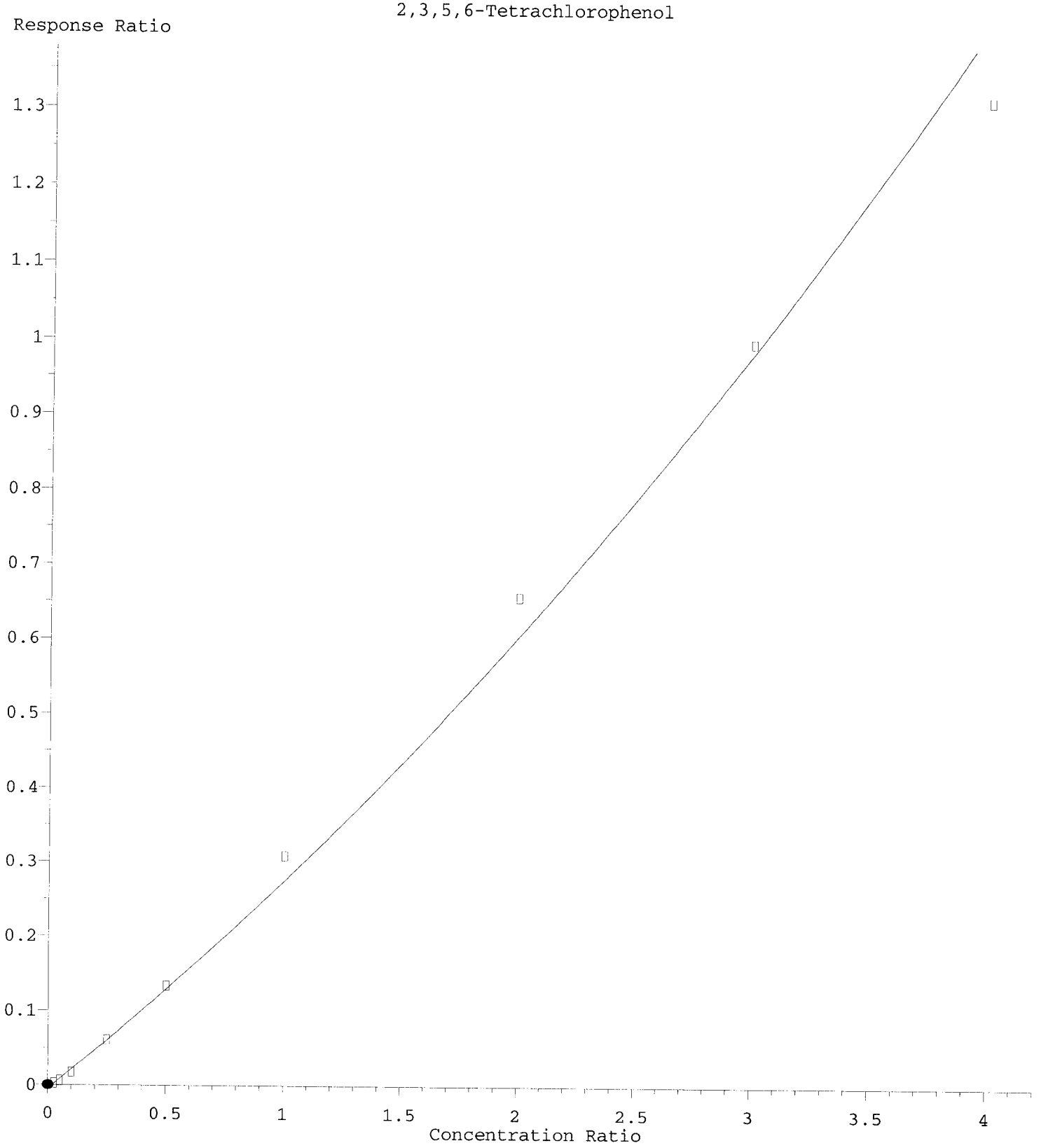
TIC: E10041908.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.873min (-0.107) 61.63 ng/ml m

response 176

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	60.50	0.00#
63.00	33.10	0.00#
0.00	0.00	0.00

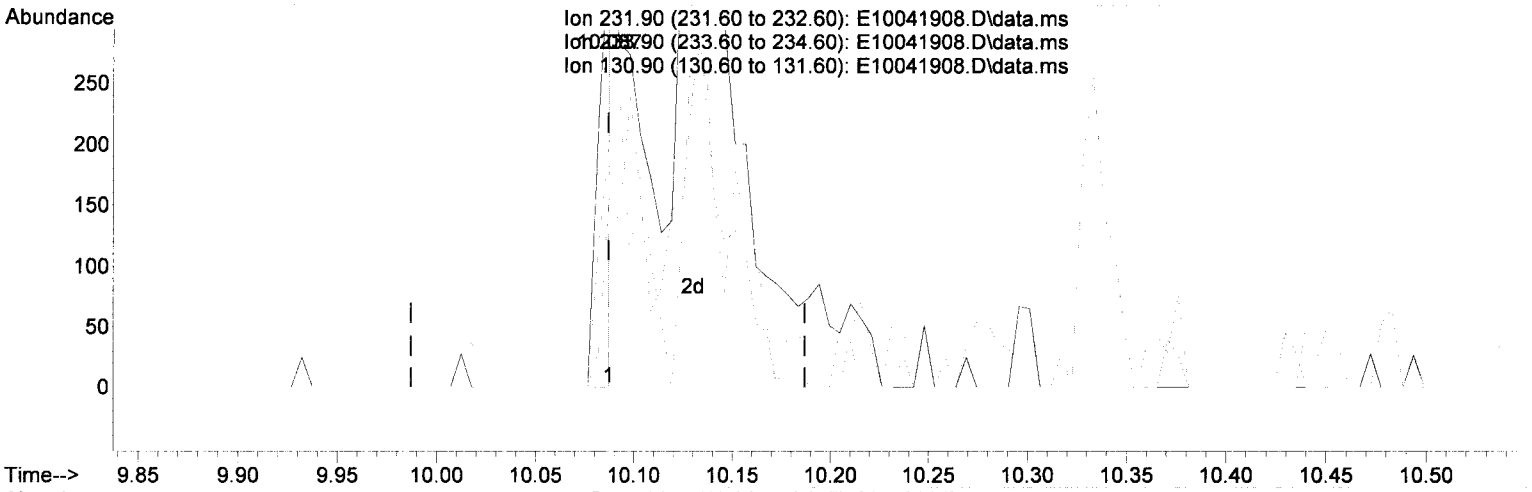


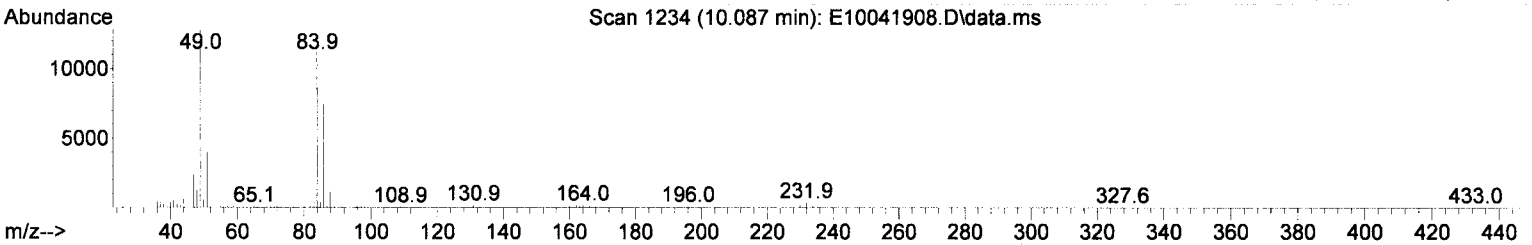
R = 2.47e-002 A*A + 2.55e-001 A - 5.02e-003
Coef of Det (r^2) = 0.988 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

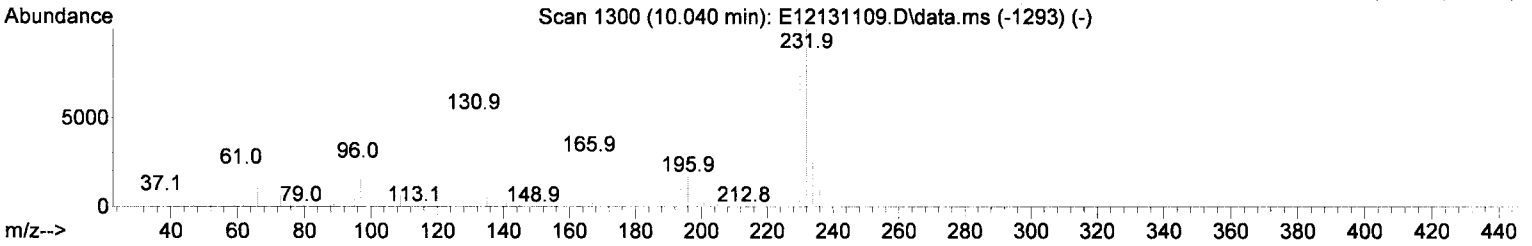
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







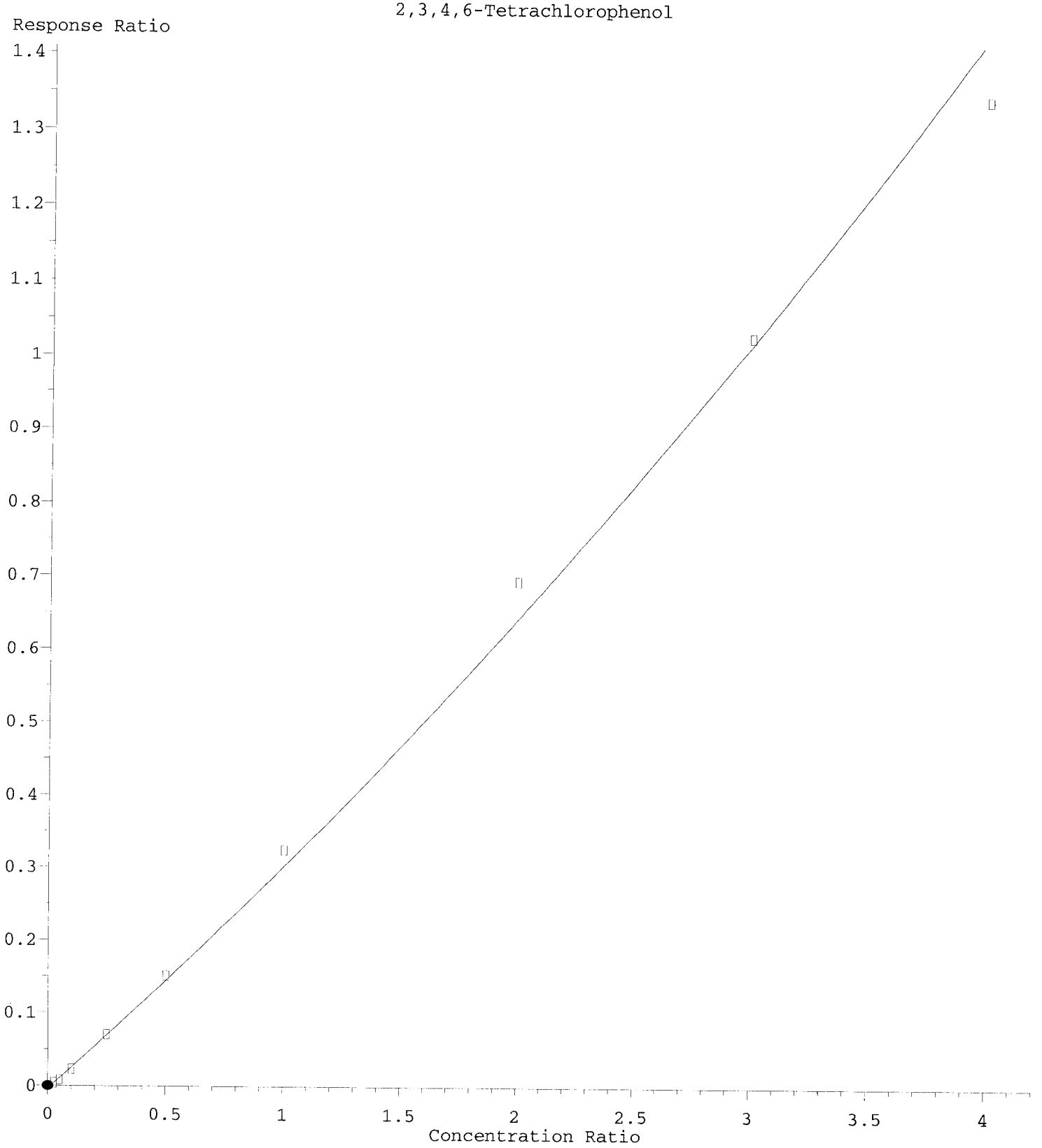
TIC: E10041908.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

10.087min (+ 0.000) 40.75 ng/ml m

response 188

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	47.90	41.82
130.90	38.50	54.16
0.00	0.00	0.00

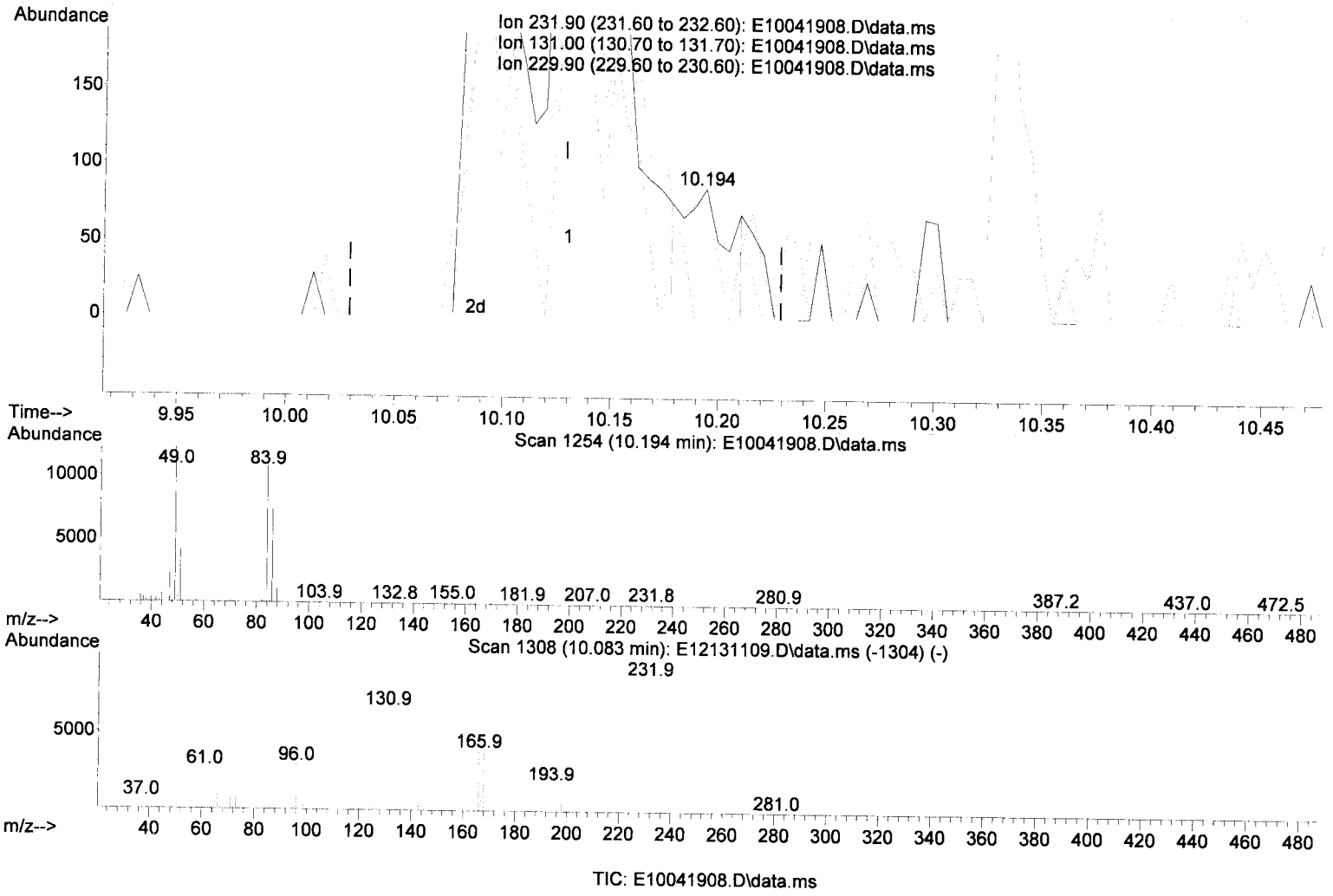


R = 1.72e-002 A*A + 2.89e-001 A - 4.06e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



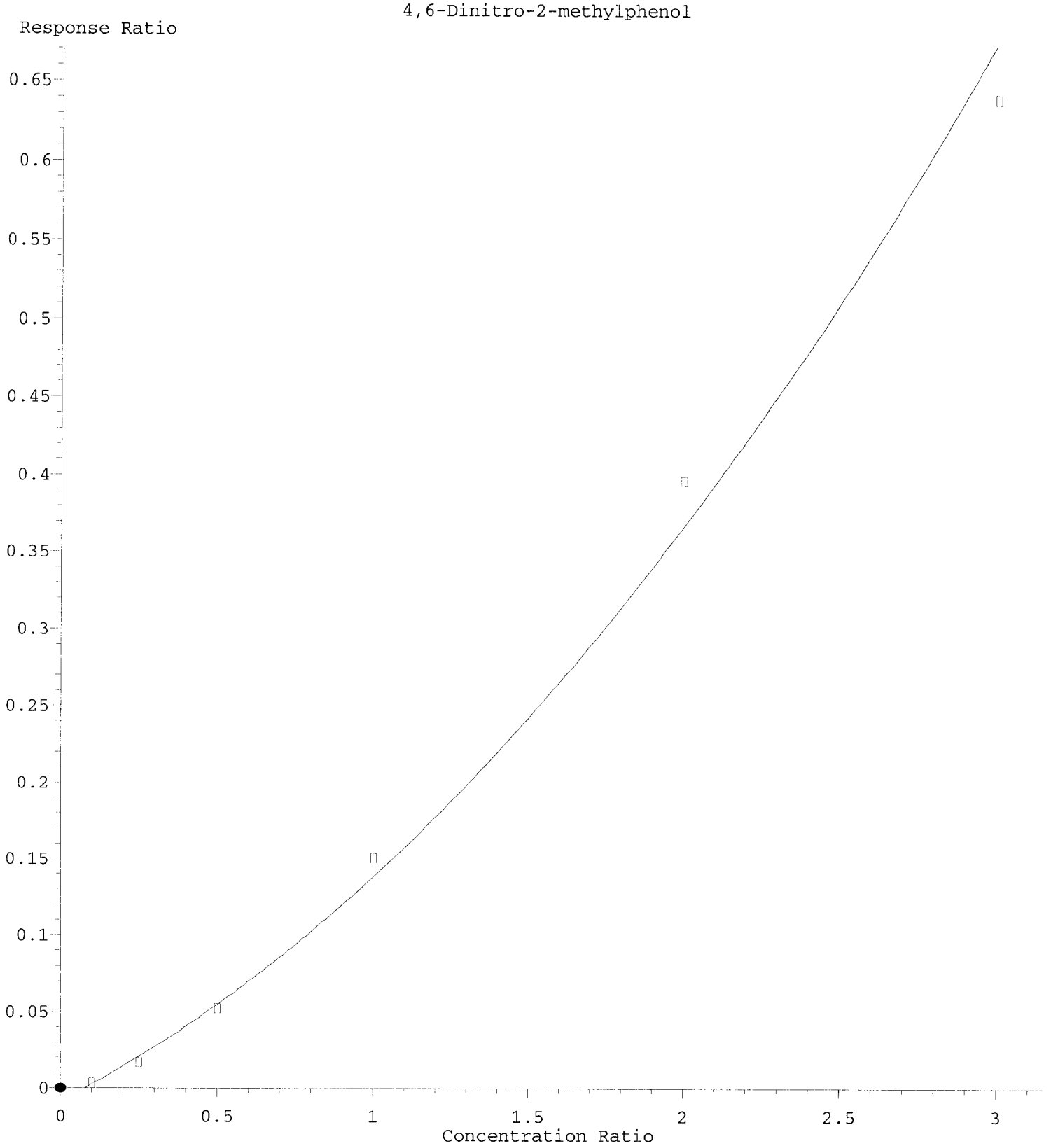
TIC: E10041908.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.065) 29.00 ng/ml m

response 126

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	44.50	0.00#
229.90	78.30	83.72
0.00	0.00	0.00

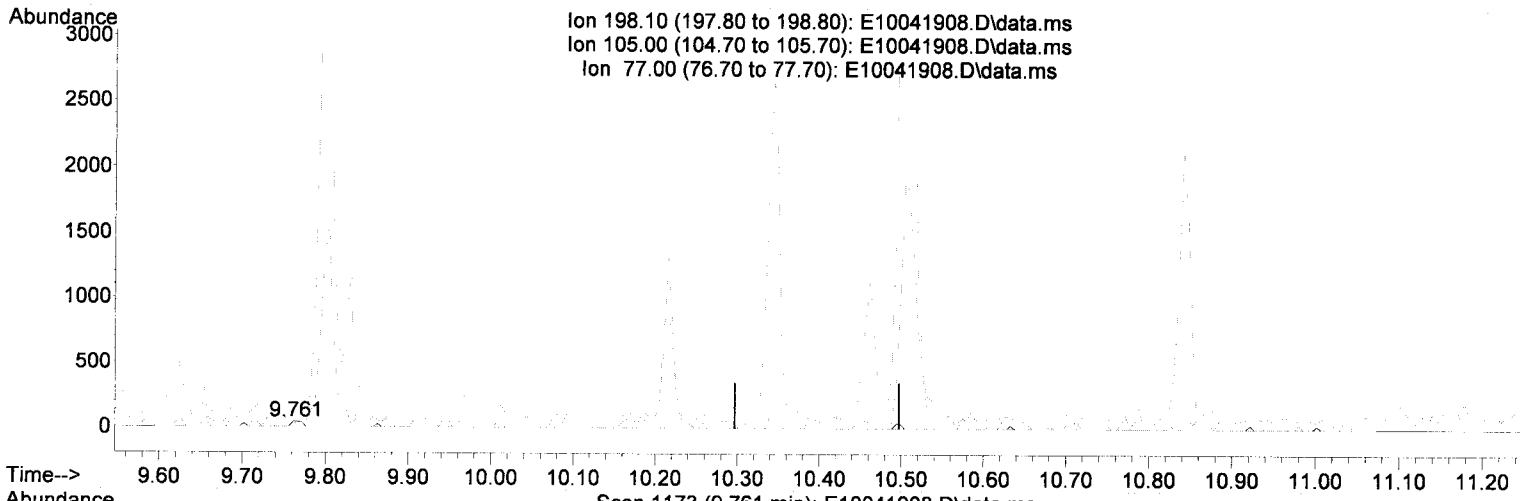


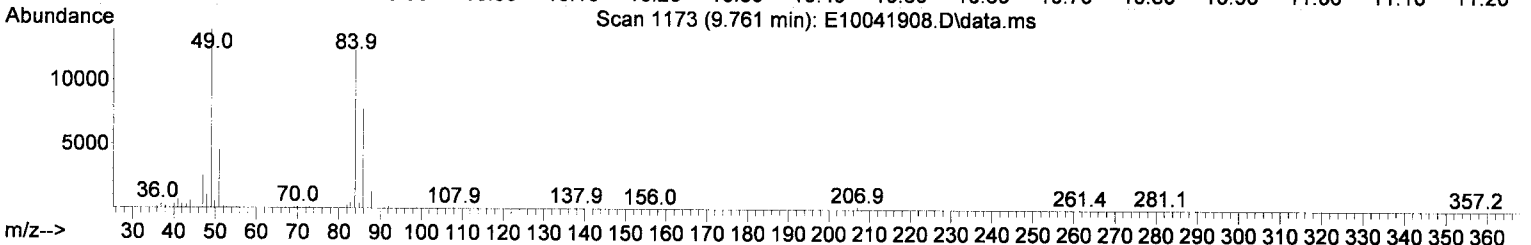
R = 4.04e-002 A*A + 1.07e-001 A - 8.63e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

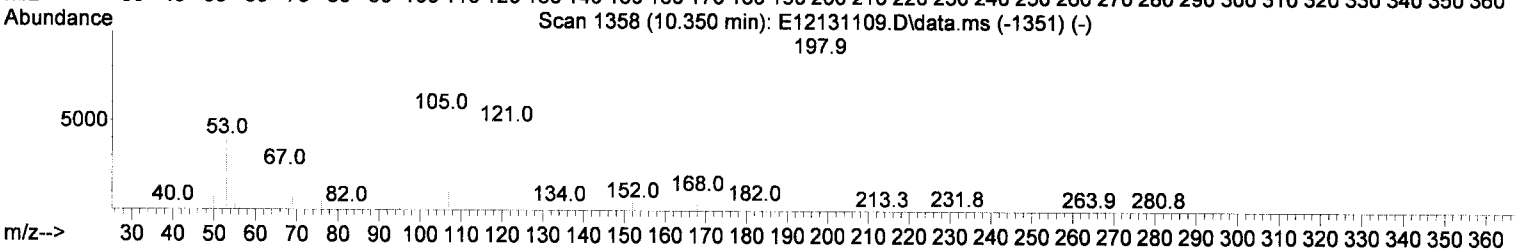
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







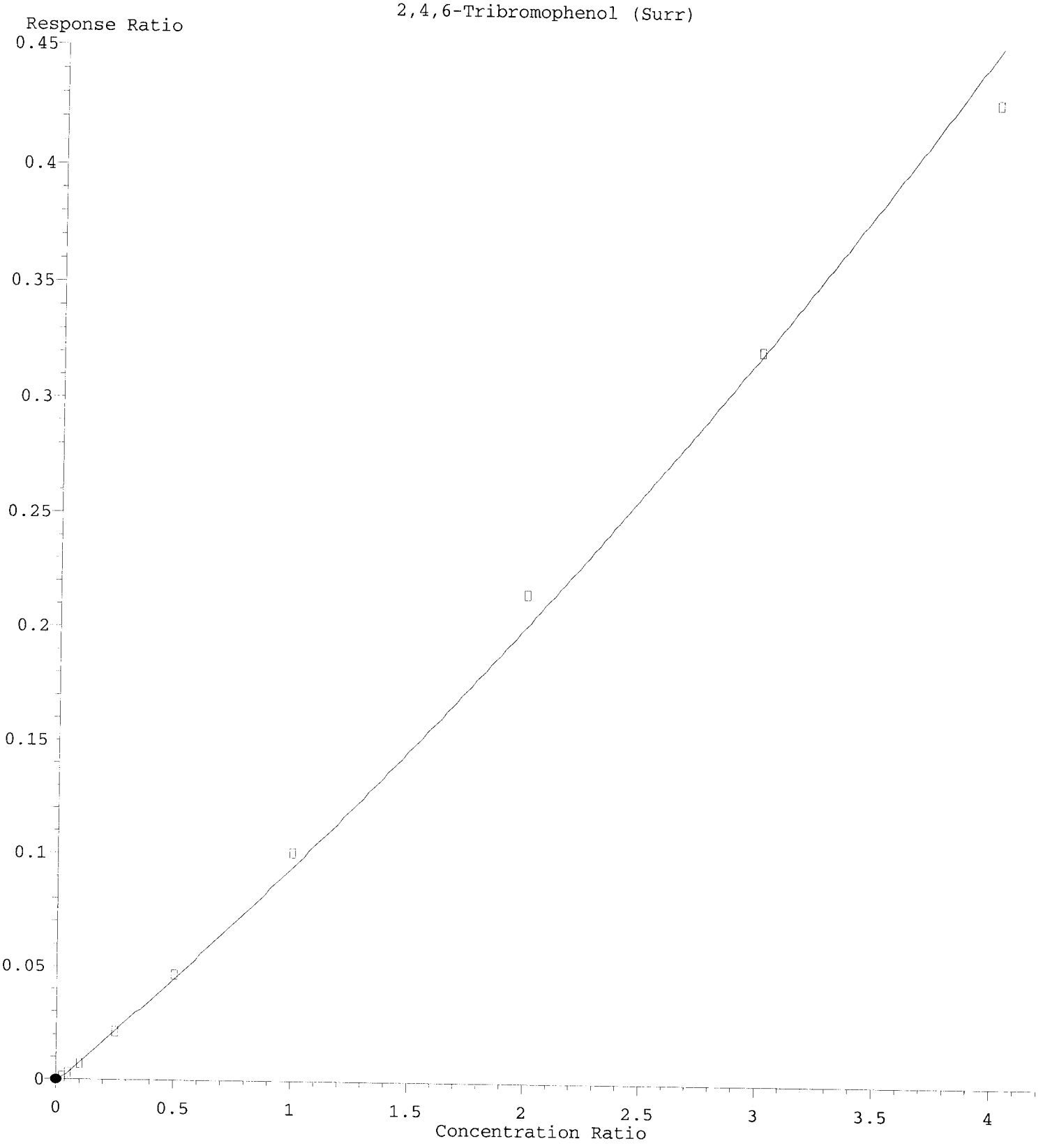
TIC: E10041908.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

9.761min (-0.636) 159.02 ng/ml m

response 102

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	42.30	151.28#
77.00	20.30	0.00
0.00	0.00	0.00

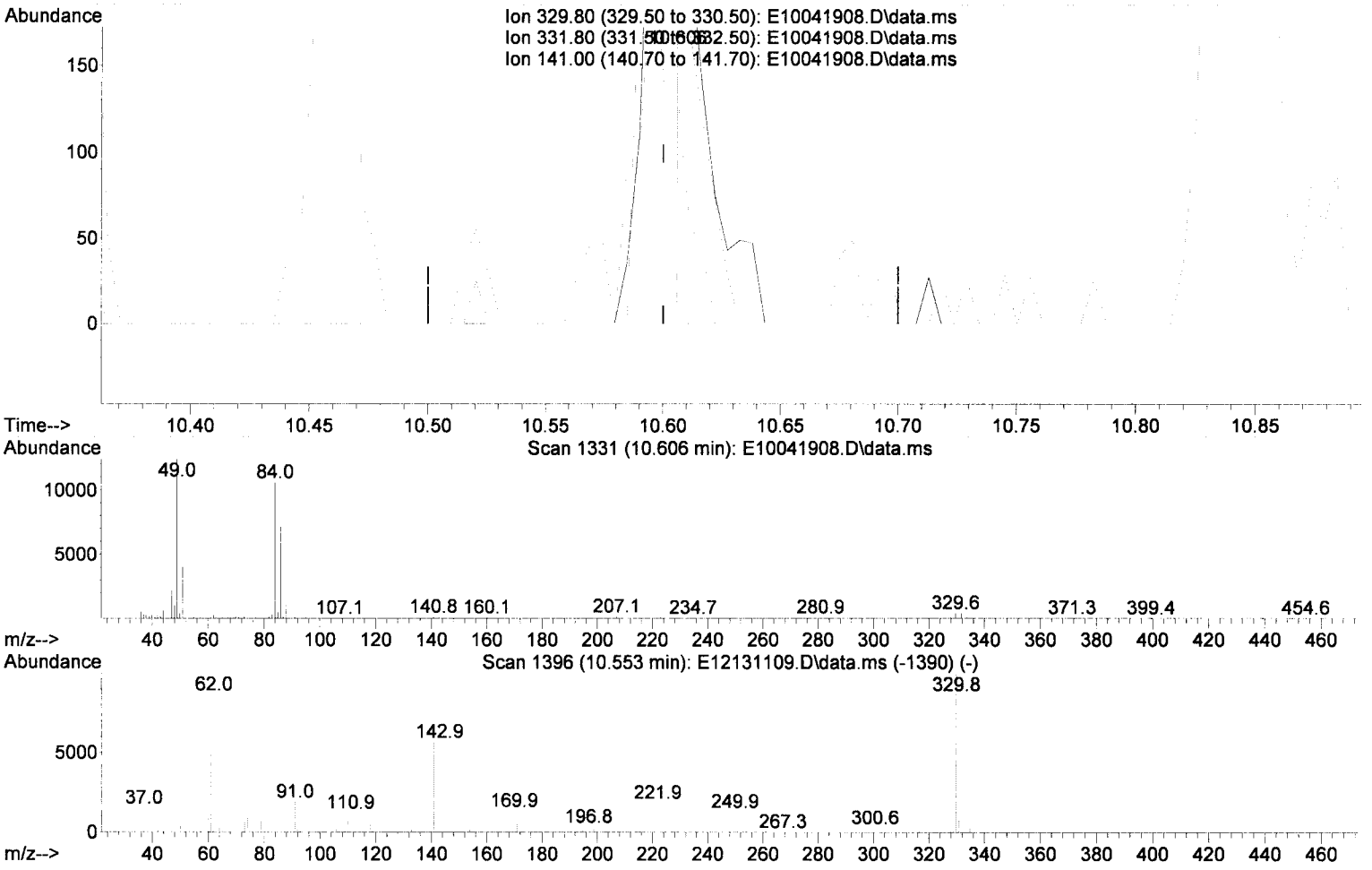


R = 5.87e-003 A*A + 8.97e-002 A - 1.28e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



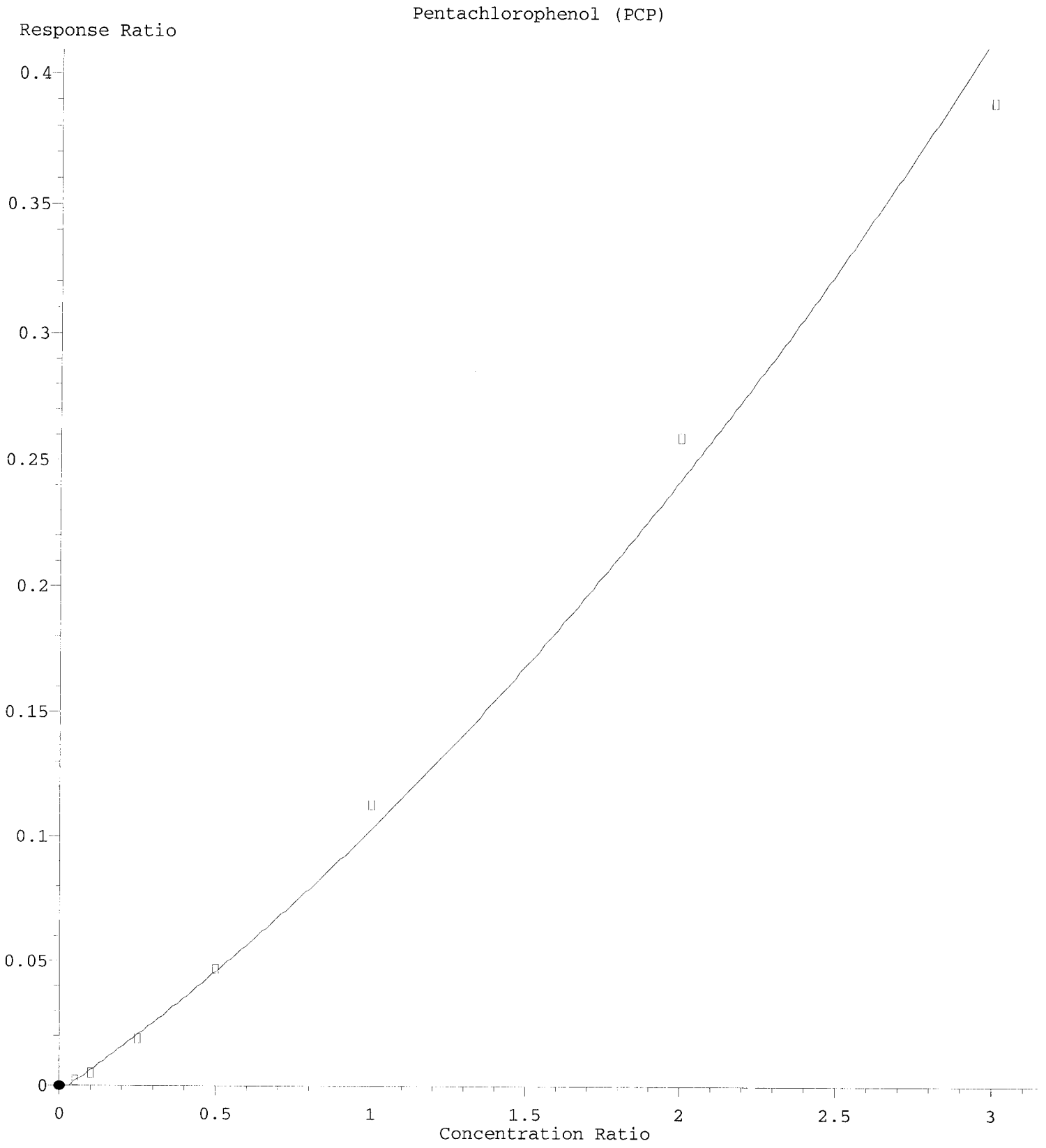
TIC: E10041908.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.606min (+ 0.006) 30.79 ng/ml m

response 182

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	95.80	99.04
141.00	34.90	31.89
0.00	0.00	0.00

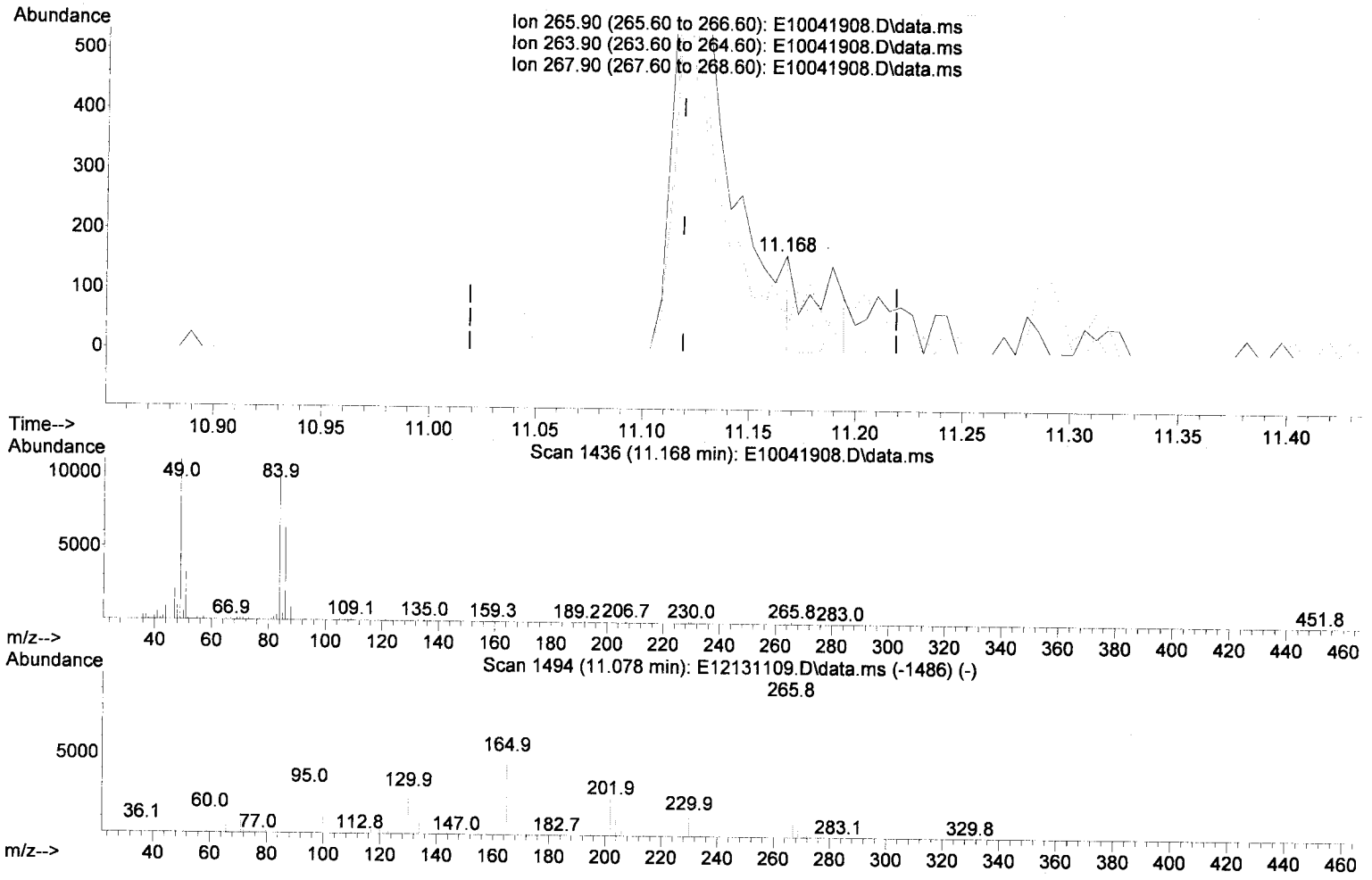


R = 1.69e-002 A*A + 8.87e-002 A - 2.71e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



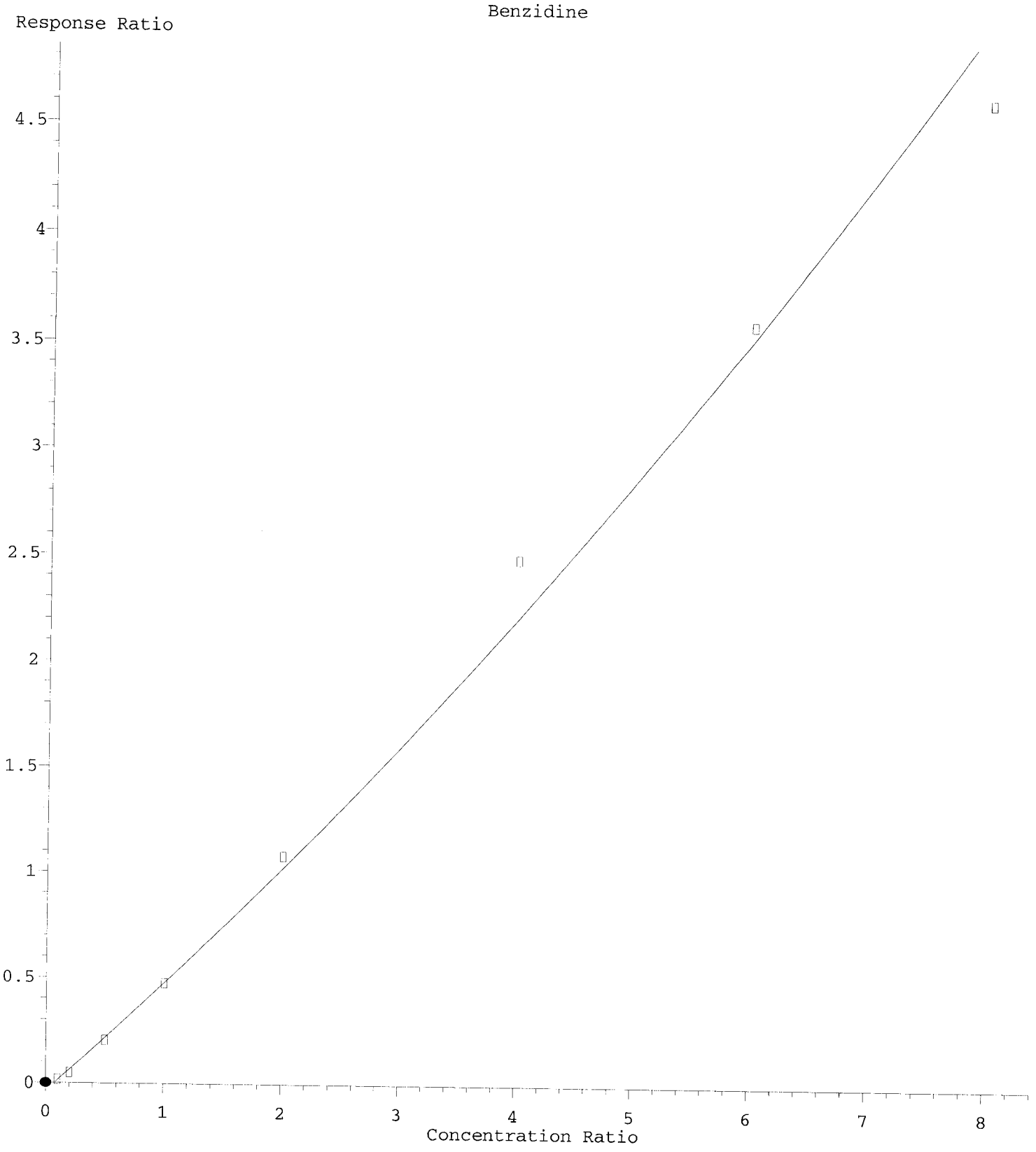
TIC: E10041908.D\data.ms

(70) Pentachlorophenol (PCP) (T)

11.168min (+ 0.049) 62.60 ng/ml m

response 151

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	61.80	33.13
267.90	64.40	23.93#
0.00	0.00	0.00

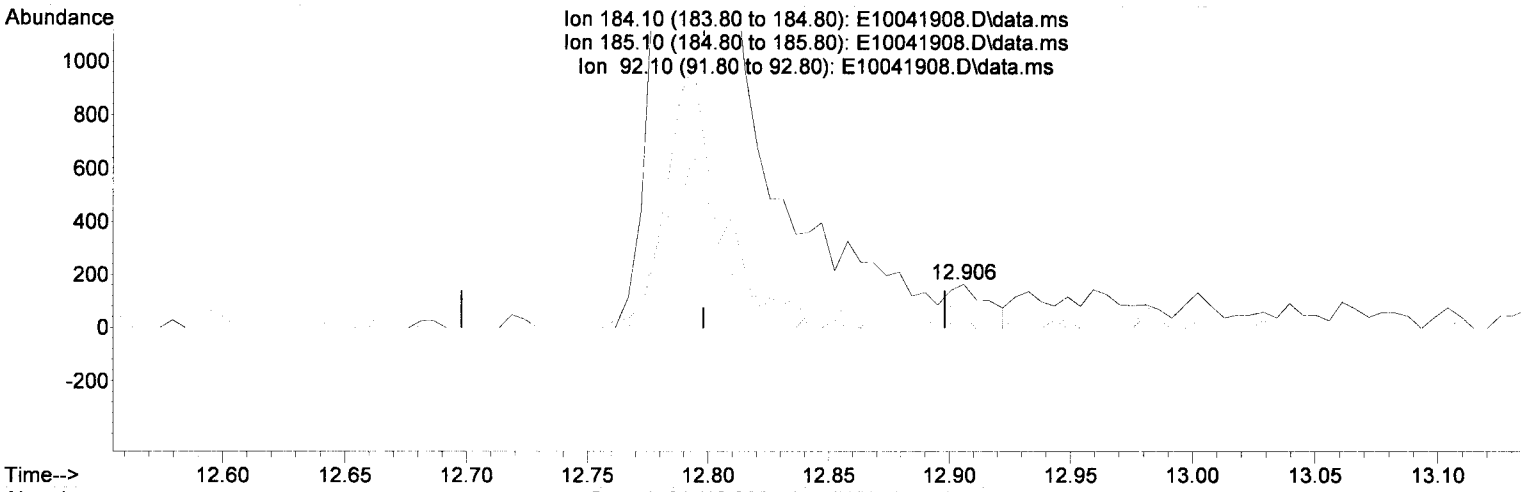


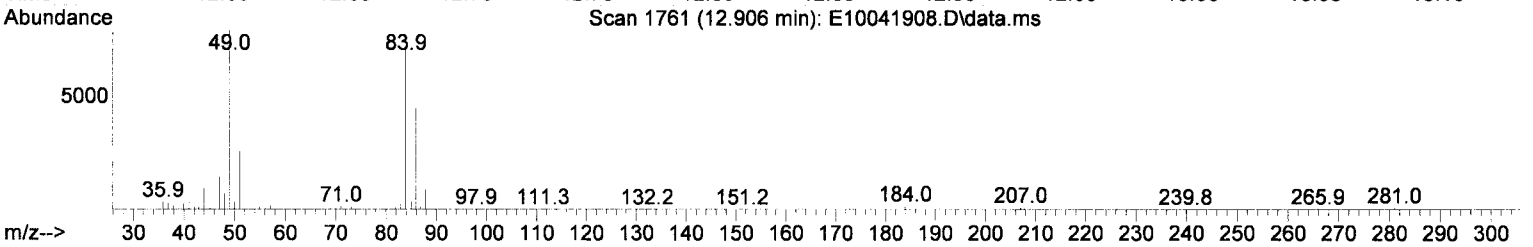
R = 1.62e-002 A*A + 4.97e-001 A - 3.80e-002
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

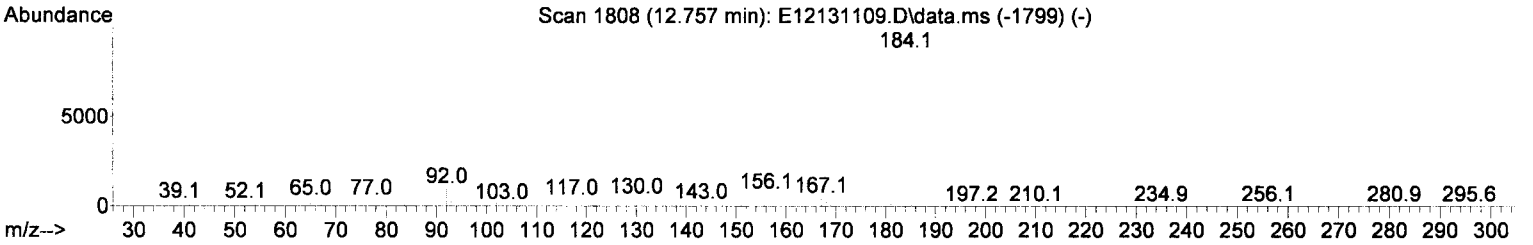
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







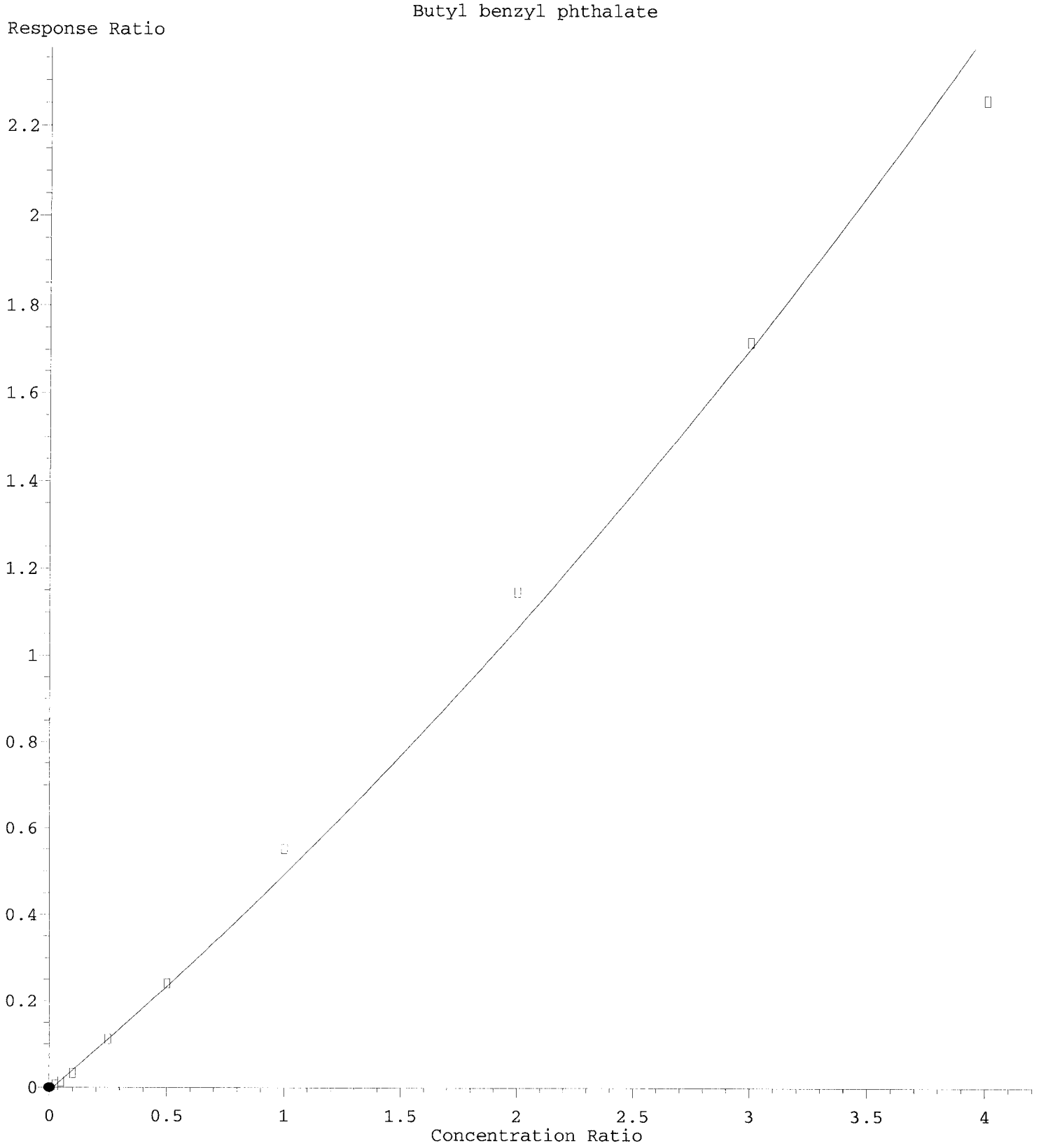
TIC: E10041908.D\data.ms

(76) Benzidine (T)

12.906min (+ 0.108) 152.65 ng/ml m

response 144

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	15.30	0.00
92.10	9.30	25.30
0.00	0.00	0.00

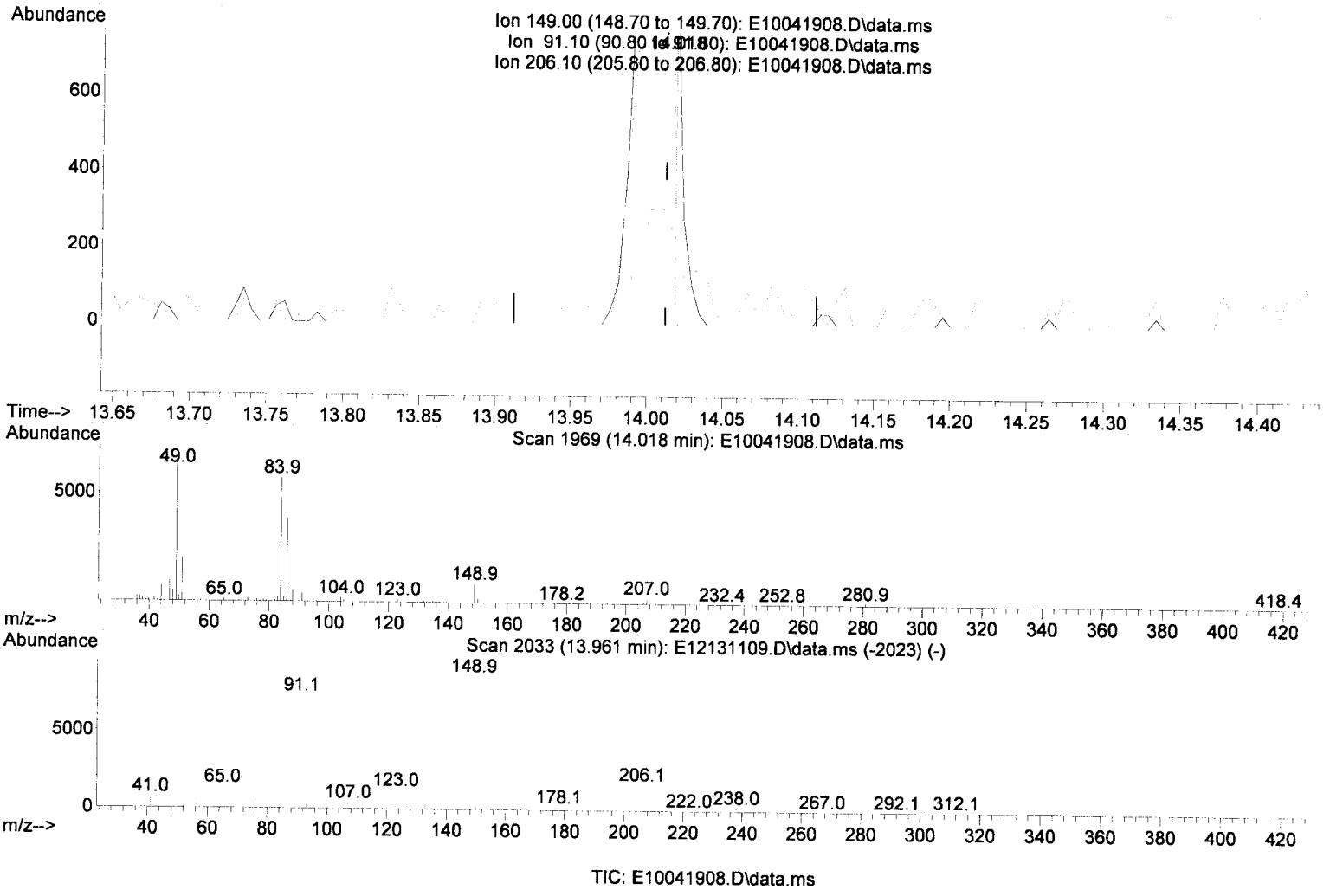


R = 3.50e-002 A*A + 4.66e-001 A - 7.59e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



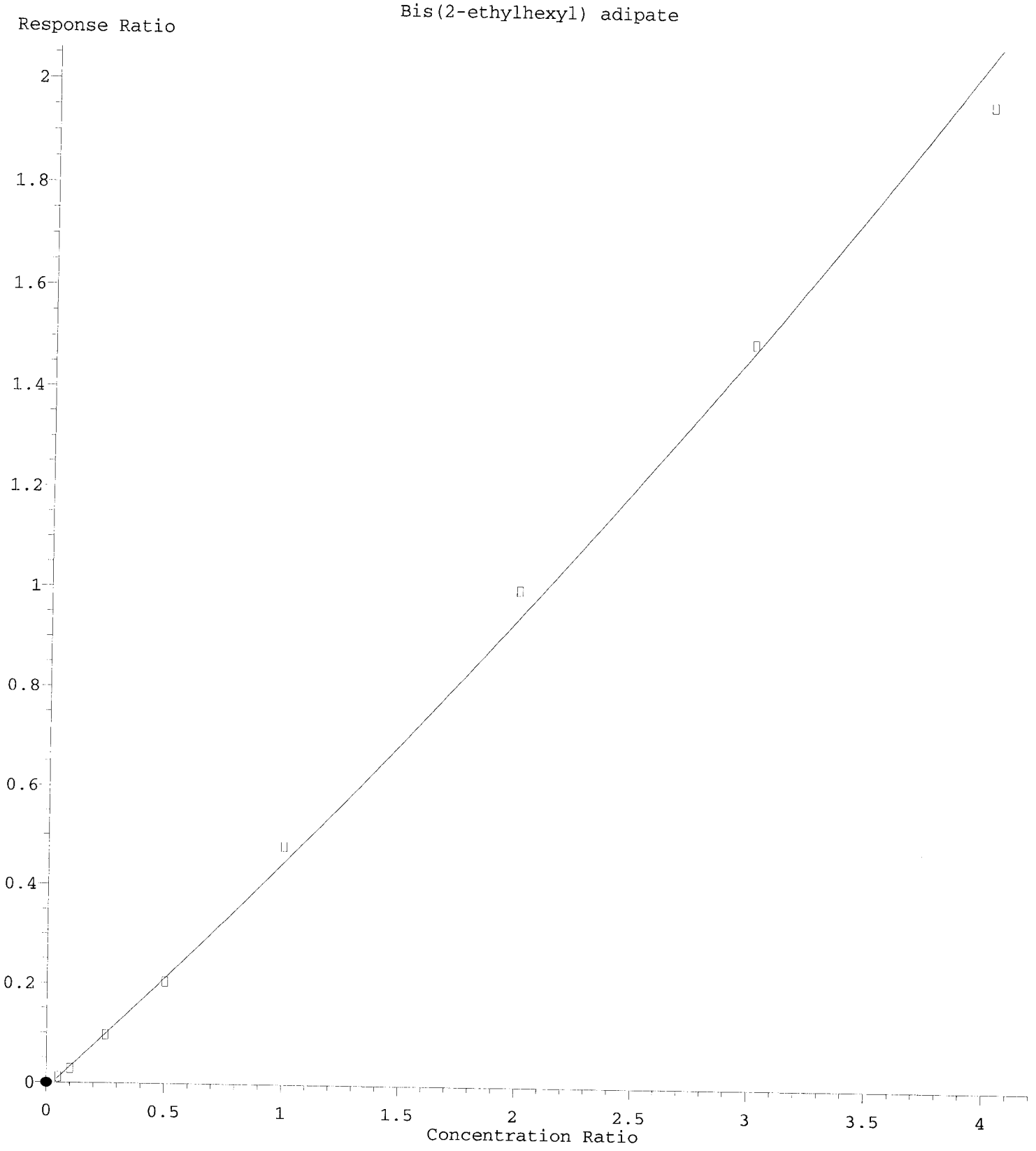
TIC: E10041908.D\data.ms

(80) Butyl benzyl phthalate (T)

14.018min (+ 0.006) 32.92 ng/ml m ✓

response 131

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	65.80	45.32
206.10	21.70	17.16
0.00	0.00	0.00

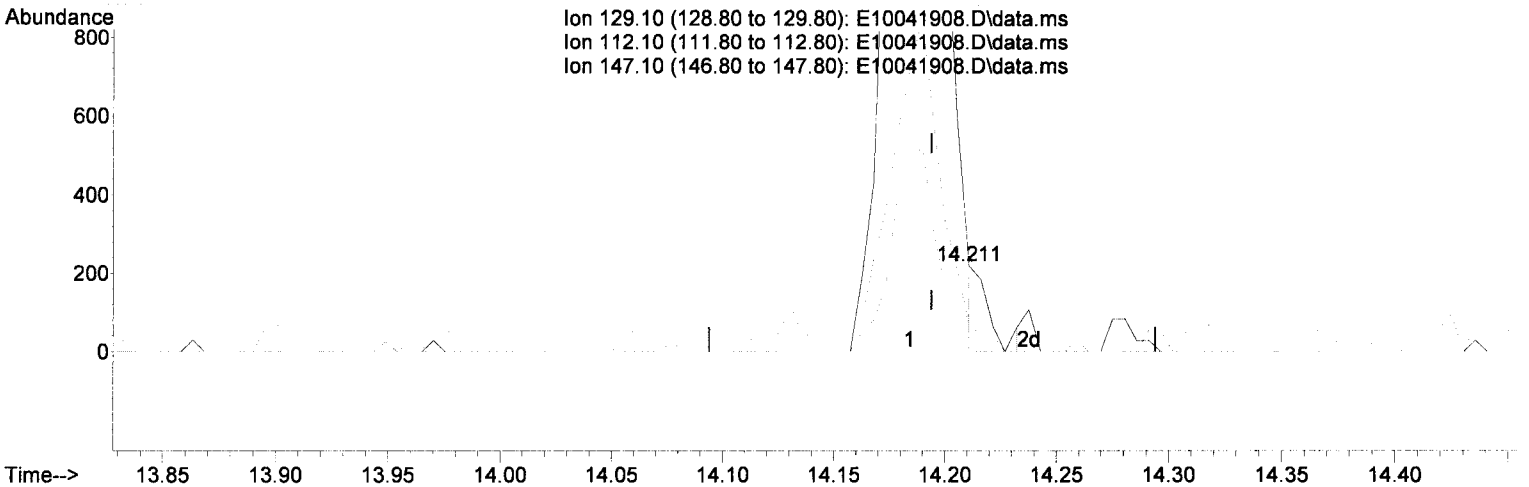


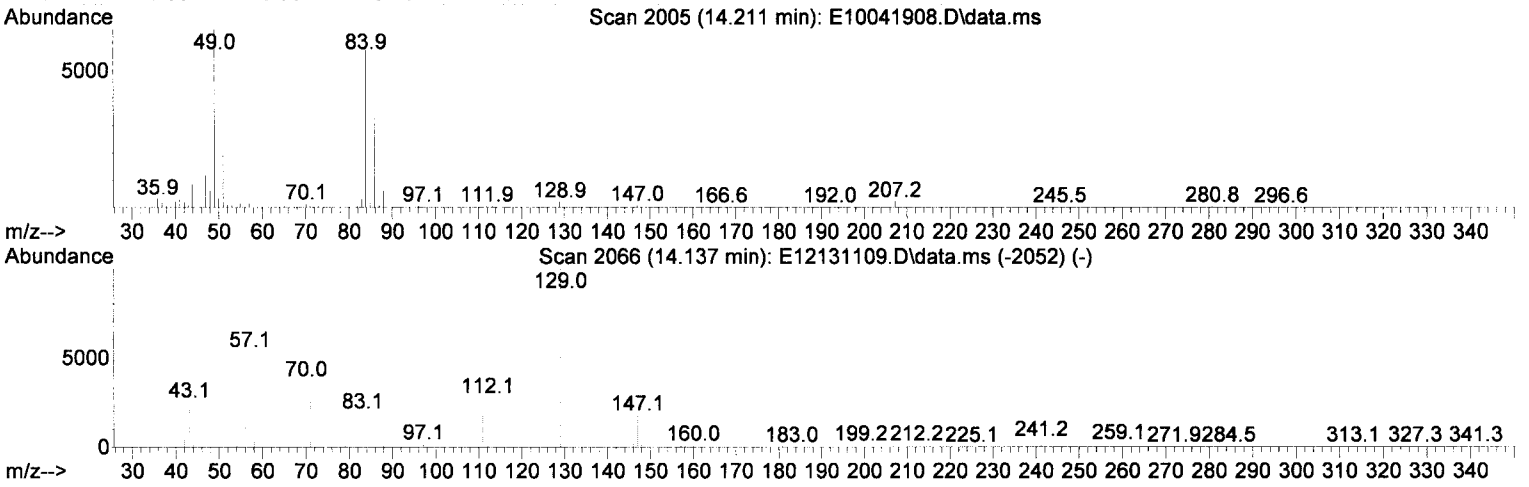
R = 1.96e-002 A*A + 4.39e-001 A - 1.17e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic, 1/(r^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5





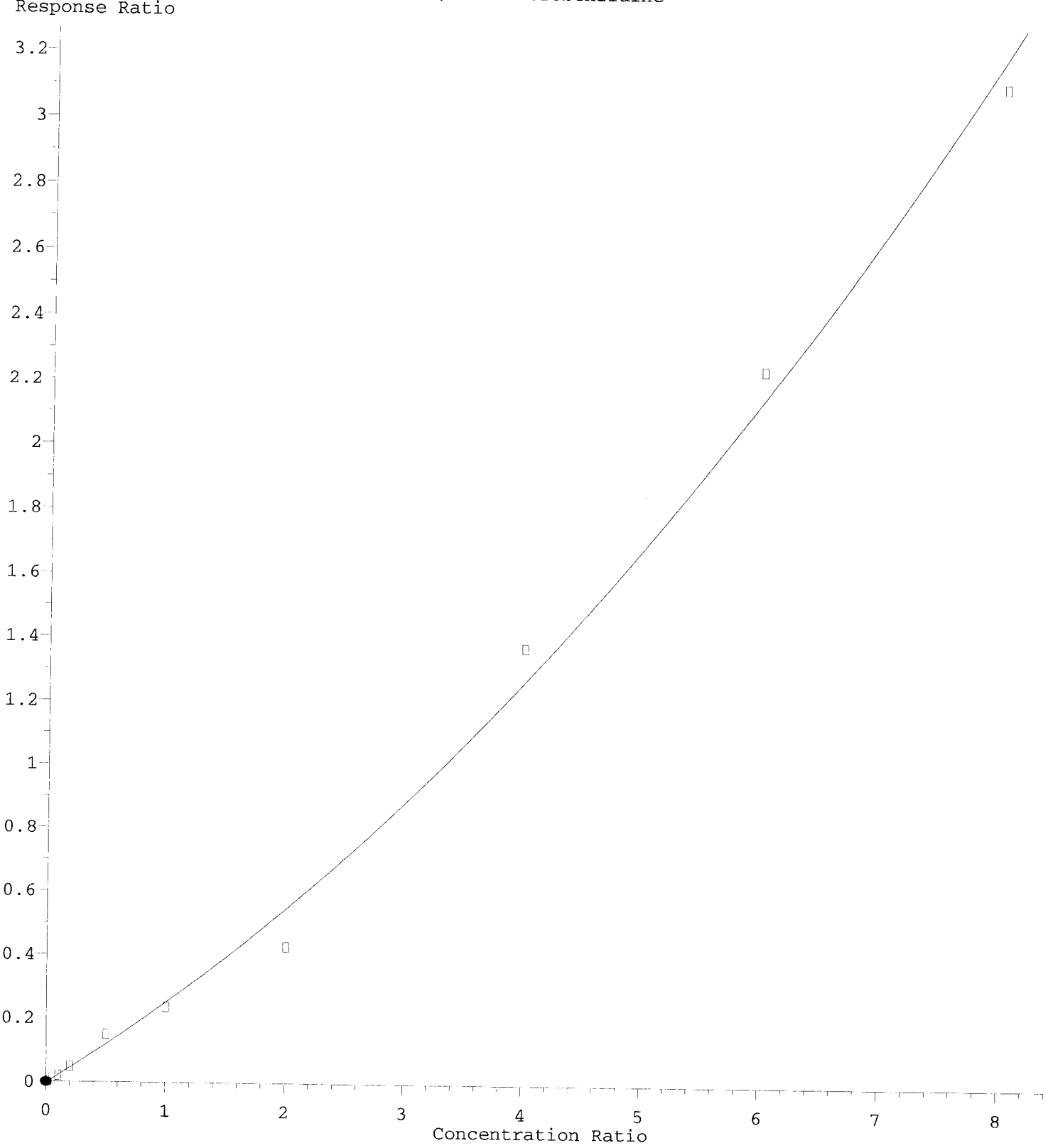
TIC: E10041908.D\data.ms

(81) Bis(2-ethylhexyl) adipate (T)

14.211min (+ 0.017) 53.49 ng/ml m ✓

response 100

Ion	Exp%	Act%
129.10	100.00	100.00
112.10	26.80	30.14
147.10	17.00	39.73
0.00	0.00	0.00

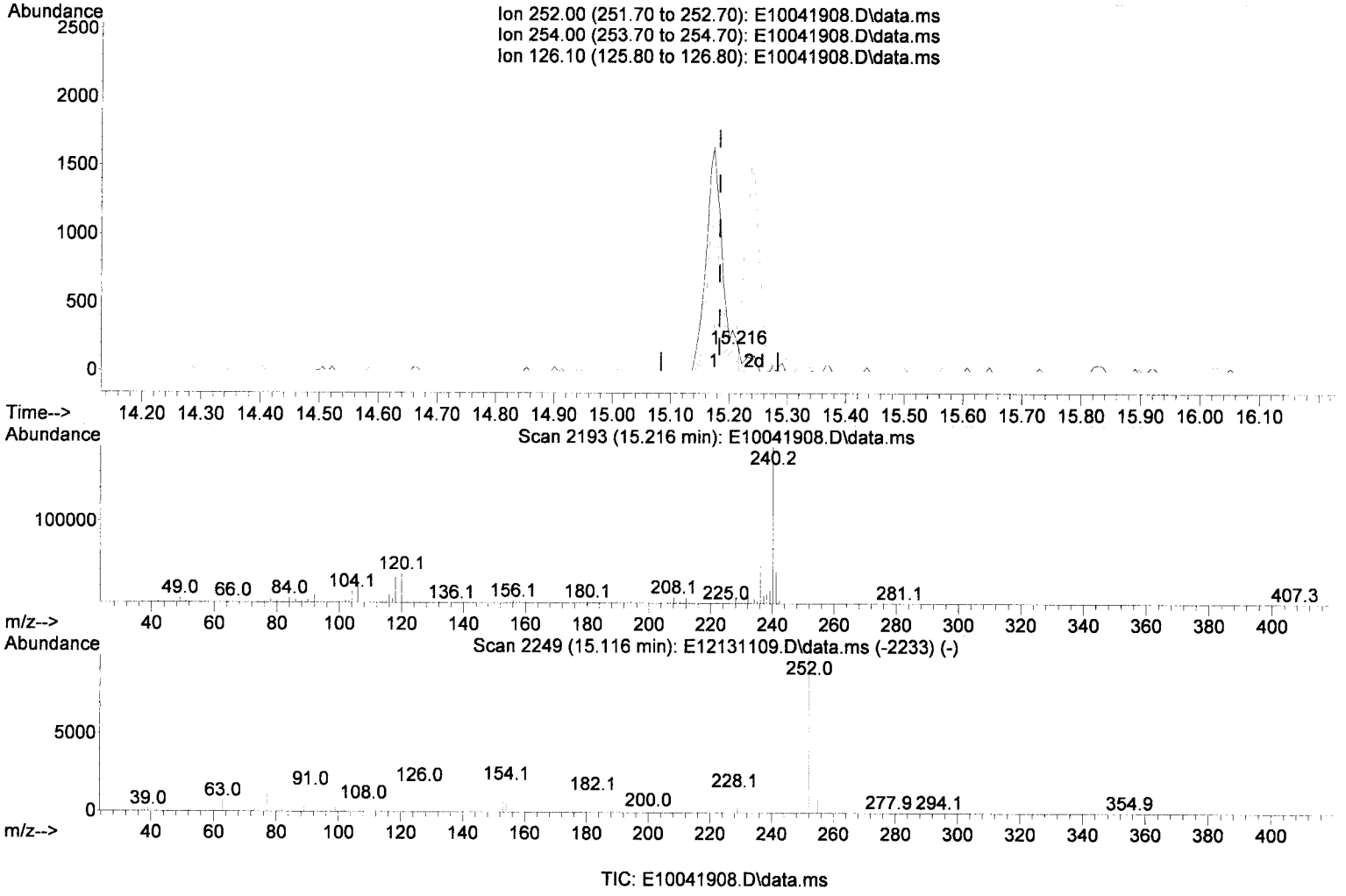


R = 2.08e-002 A*A + 2.34e-001 A - 2.89e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



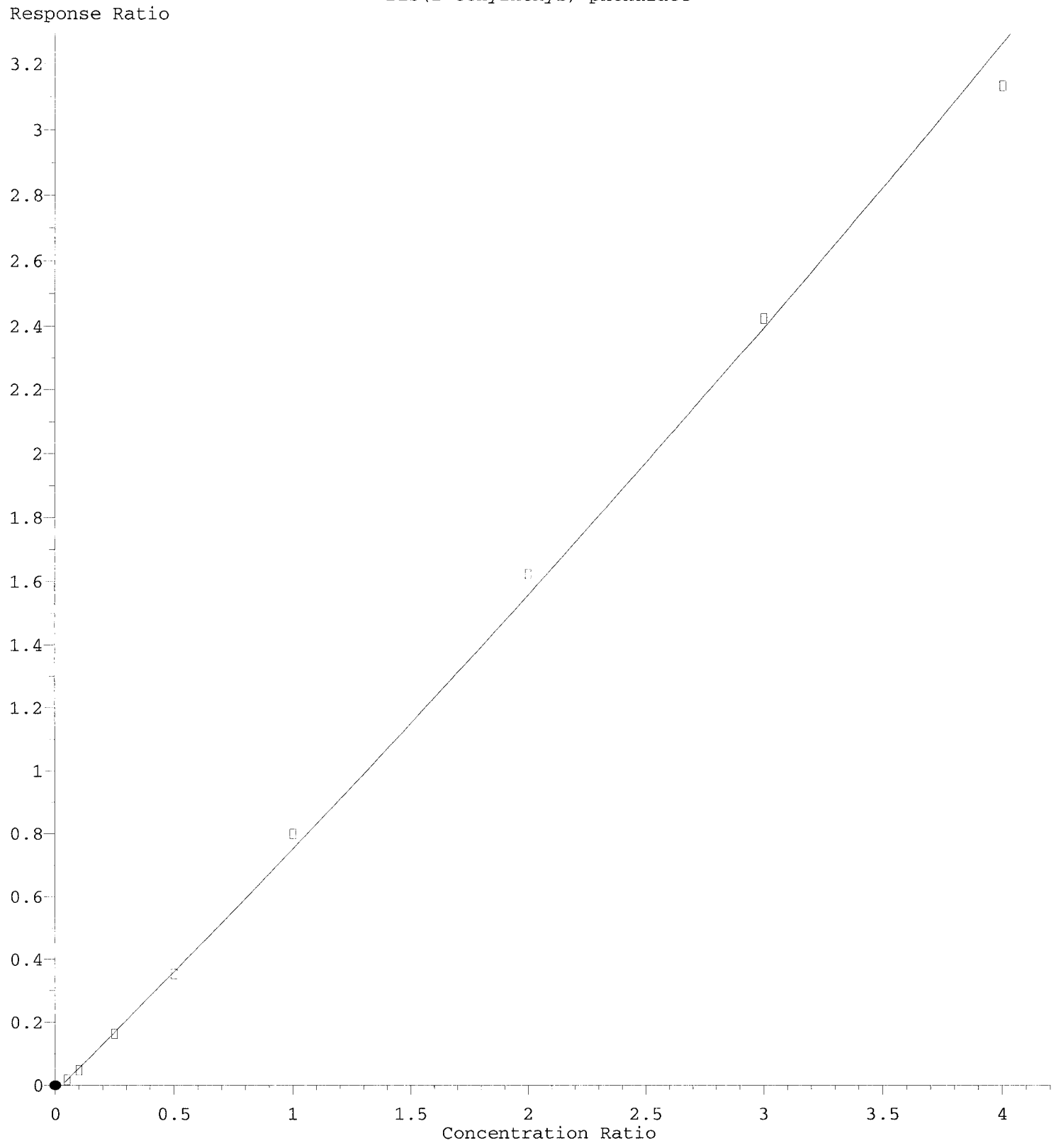
TIC: E10041908.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.216min (+ 0.032) 25.48 ng/ml m

response 147

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.20	69.19
126.10	15.30	280.81#
0.00	0.00	0.00

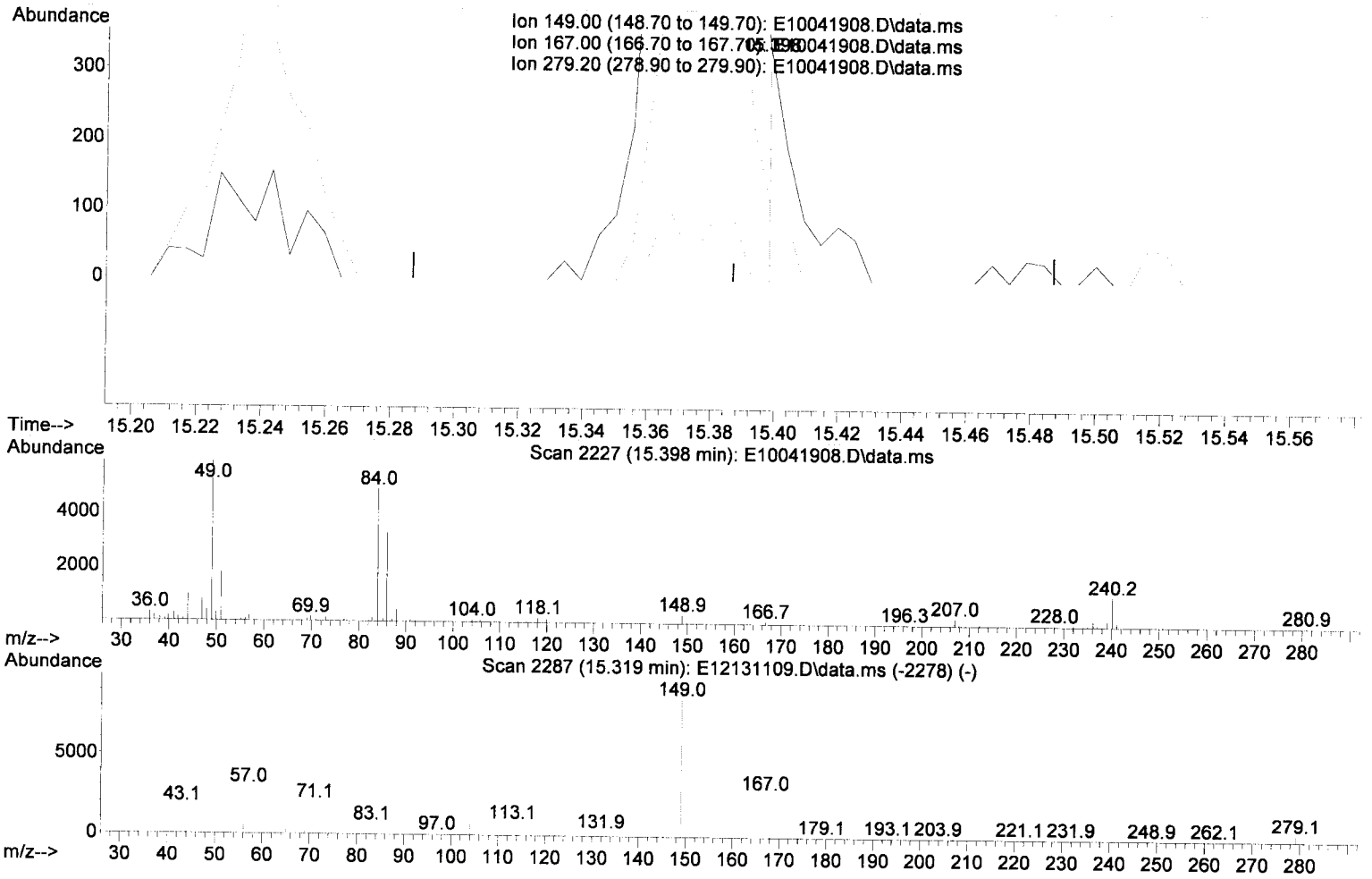


R = 1.64e-002 A*A + 7.56e-001 A - 2.21e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/1/(a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



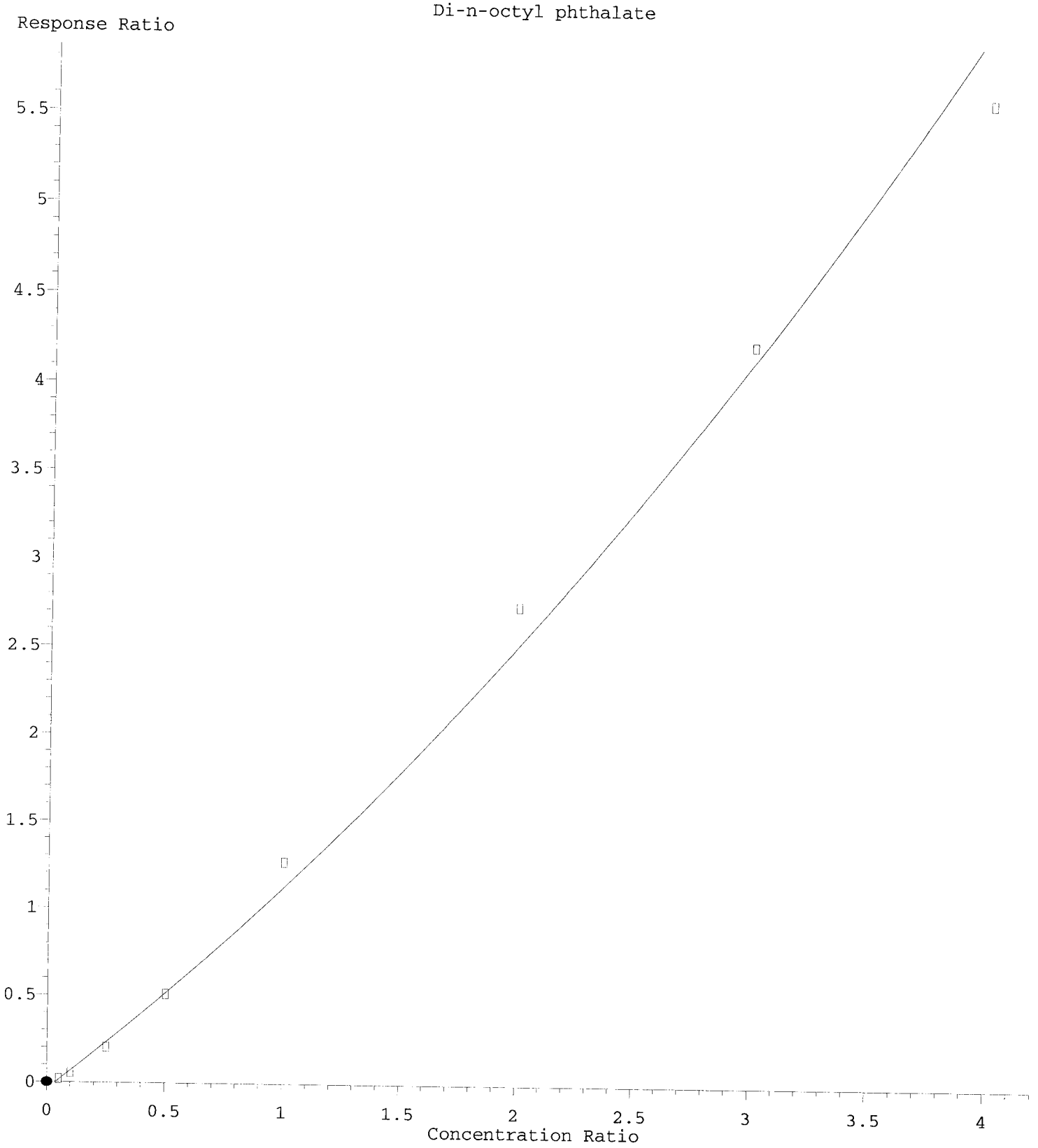
TIC: E10041908.D\data.ms

(85) Bis(2-ethylhexyl) phthalate (T)

15.398min (+ 0.011) 58.77 ng/ml m

response 151

Ion	Exp%	Act%
149.00	100.00	100.00
167.00	29.50	33.63
279.20	6.00	0.00
0.00	0.00	0.00

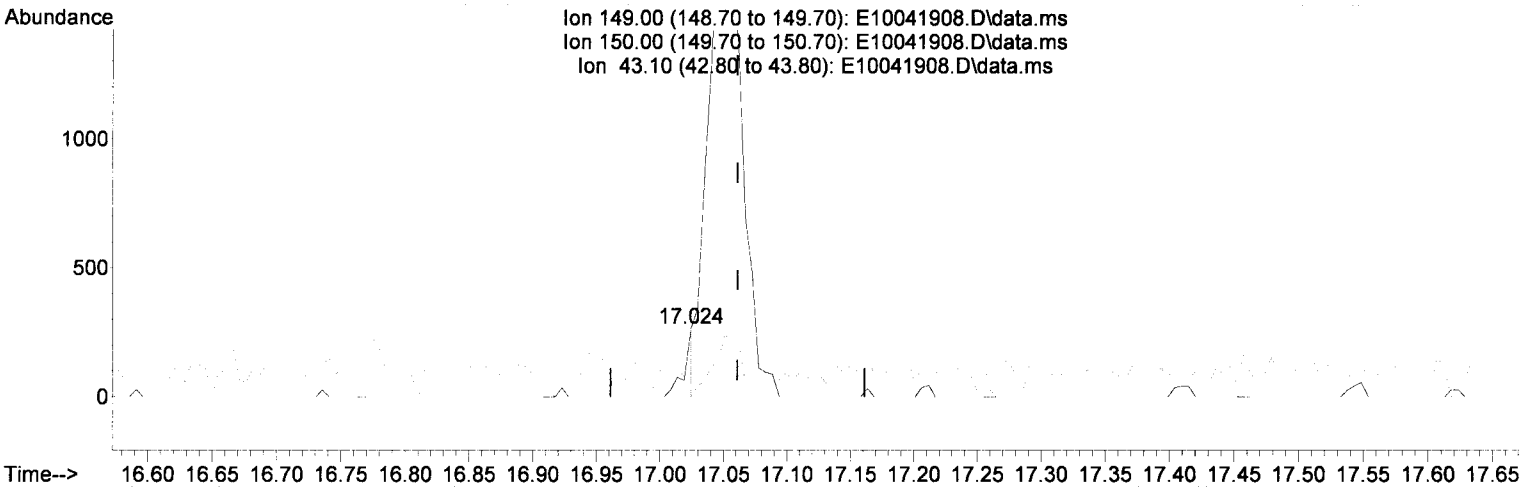


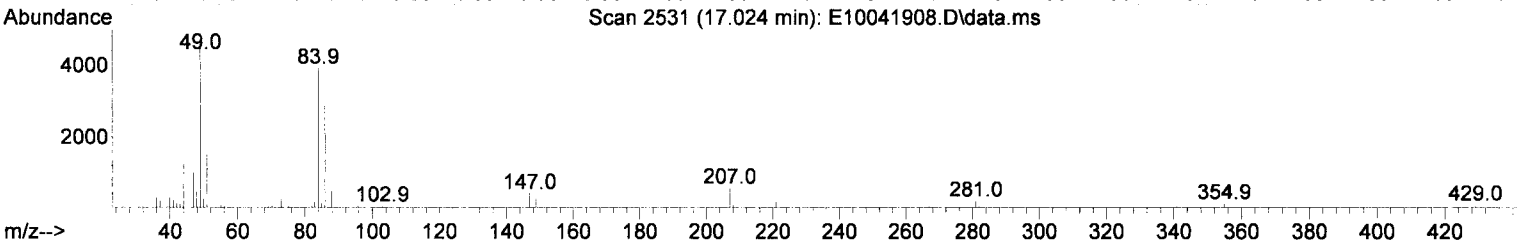
R = 1.14e-001 A*A + 1.05e+000 A - 3.91e-002
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

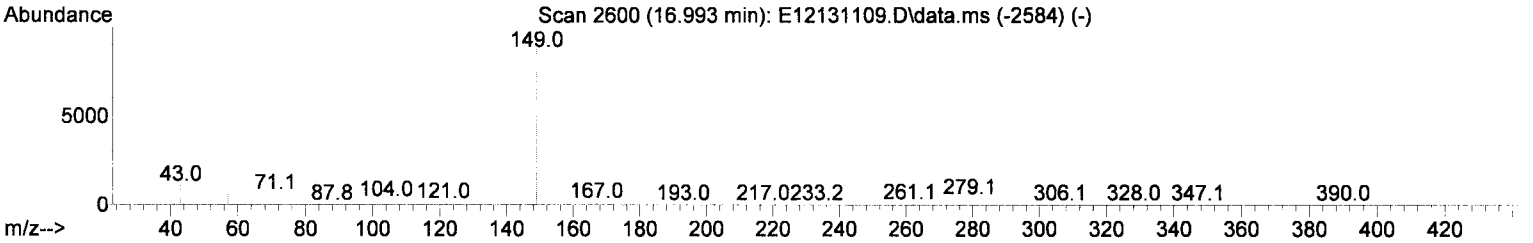
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







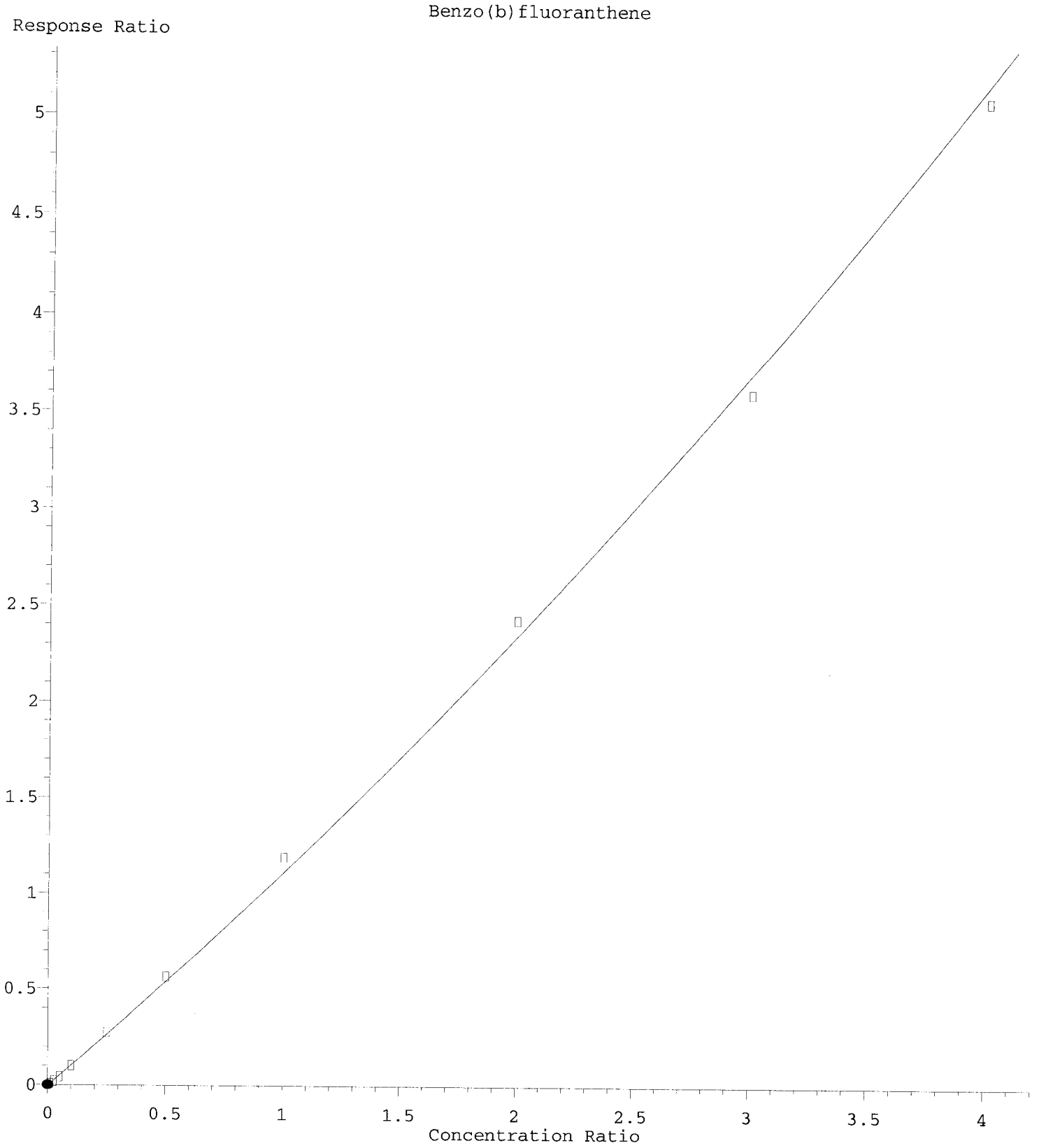
TIC: E10041908.D\data.ms

(87) Di-n-octyl phthalate (T)

17.024min (-0.037) 74.31 ng/ml m

response 139

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.90	0.00
43.10	7.70	45.49#
0.00	0.00	0.00

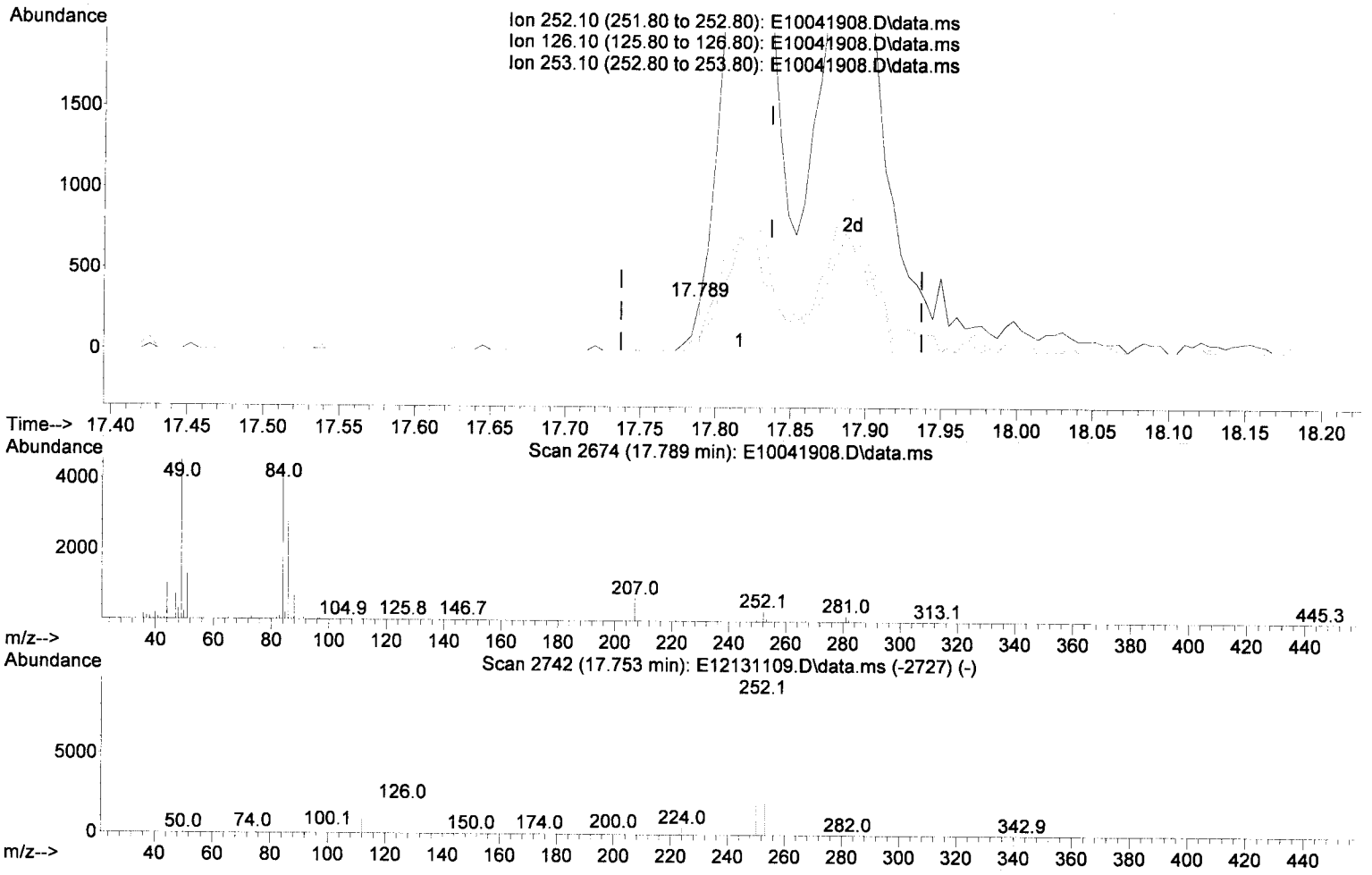


R = 5.89e-002 A*A + 1.06e+000 A - 5.32e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



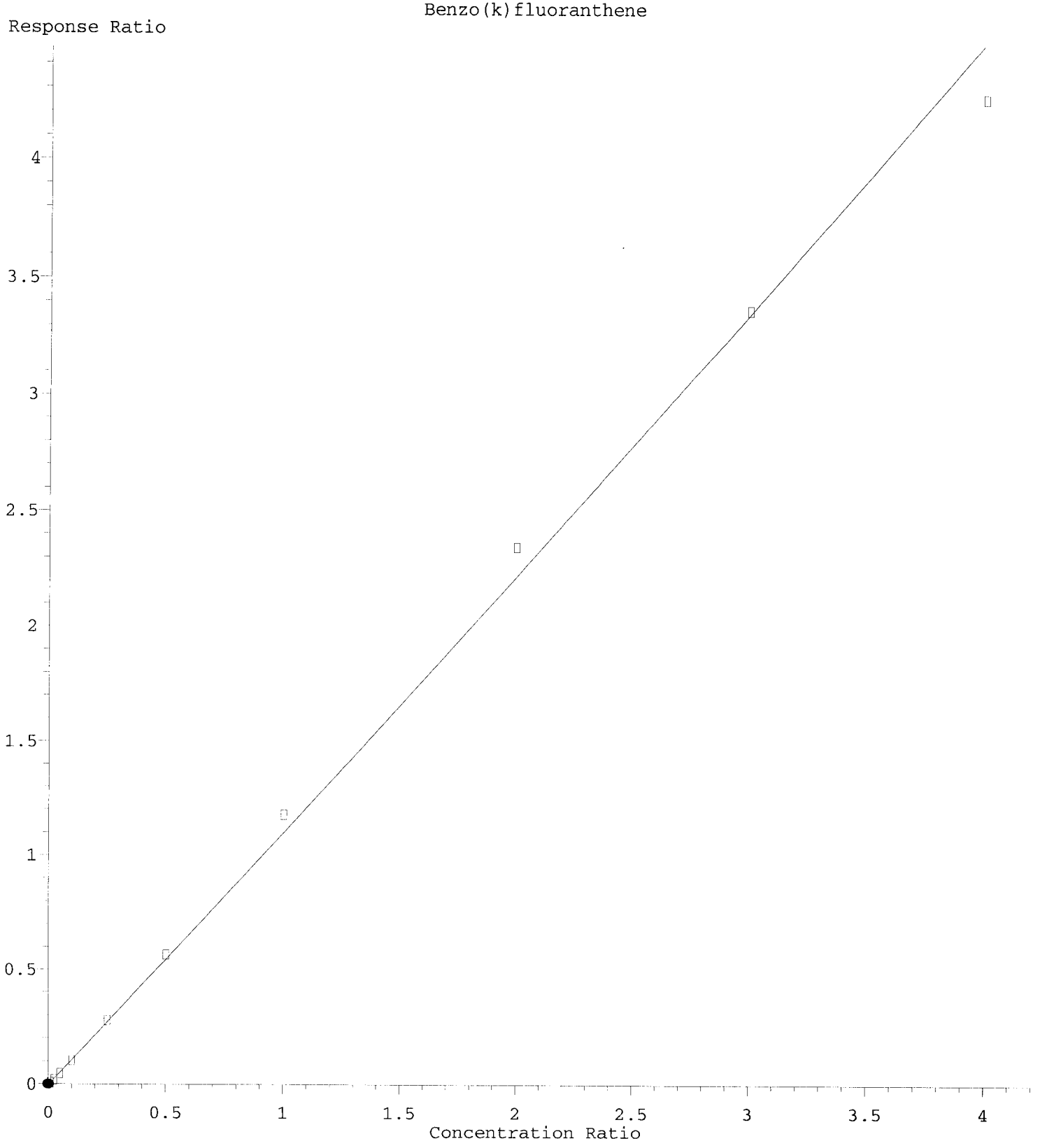
TIC: E10041908.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.789min (-0.048) 10.26 ng/ml m

response 144

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	17.48
253.10	21.80	31.72
0.00	0.00	0.00

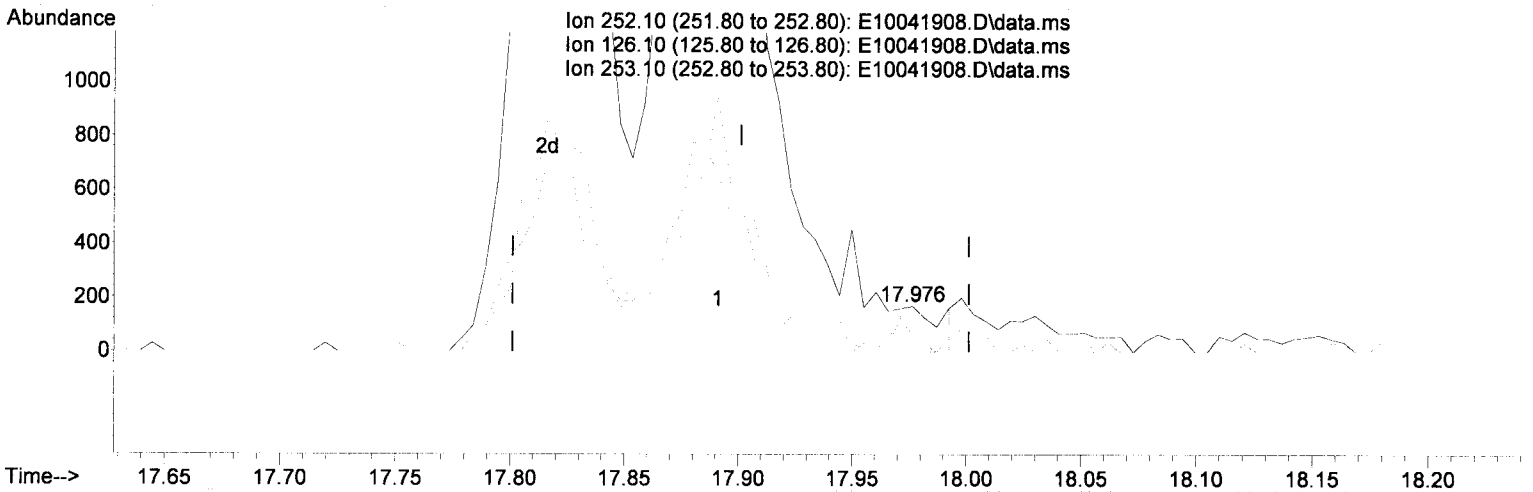


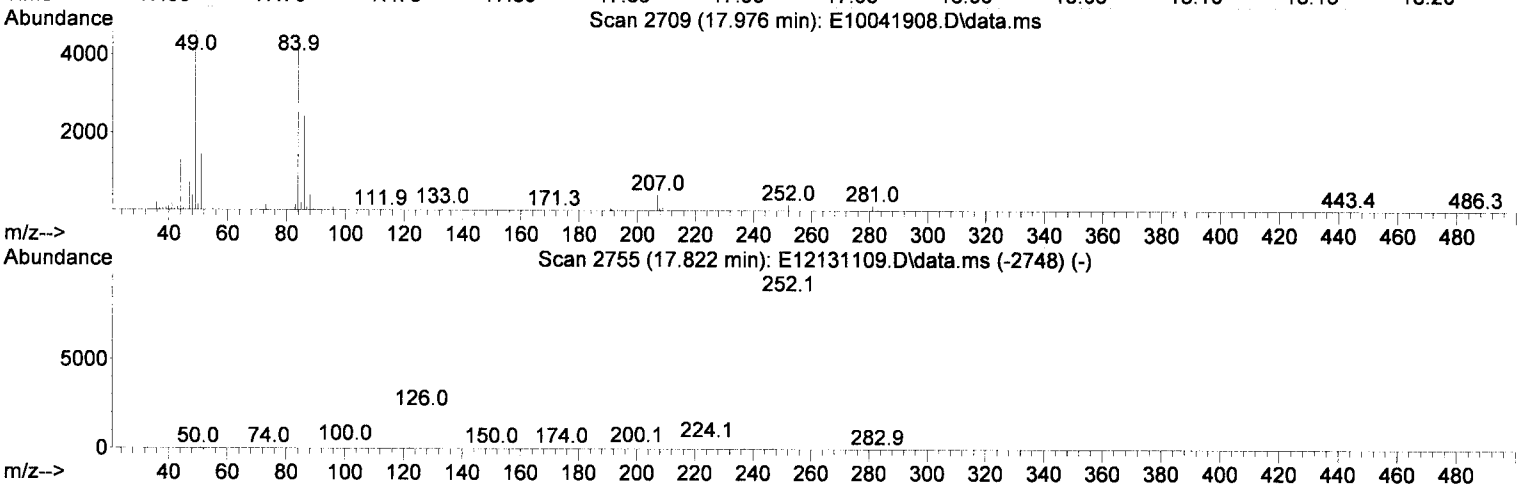
R = 6.35e-003 A*A + 1.10e+000 A - 5.87e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5





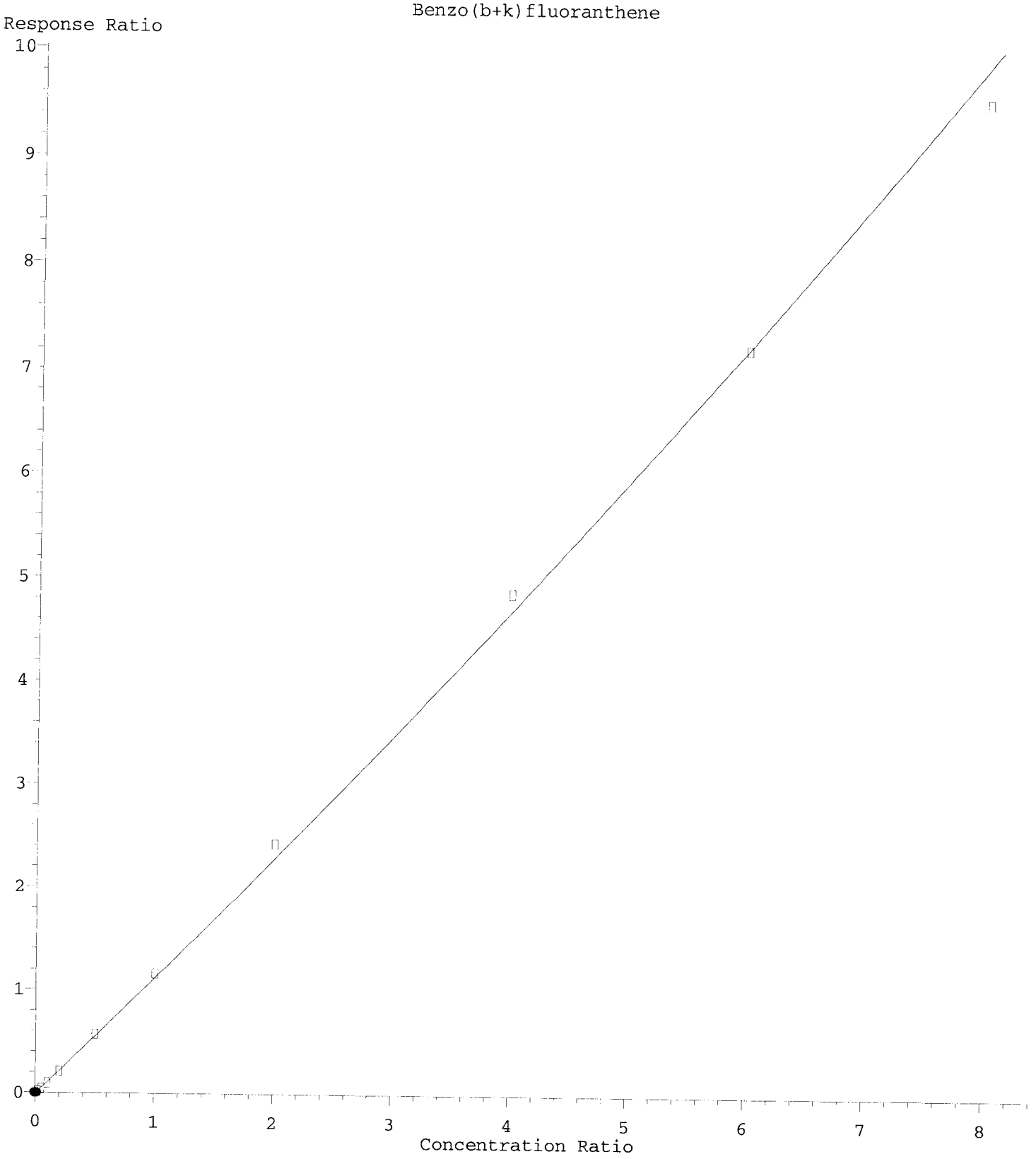
TIC: E10041908.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.976min (+ 0.075) 10.92 ng/ml m

response 175

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	21.30
253.10	22.00	0.00
0.00	0.00	0.00

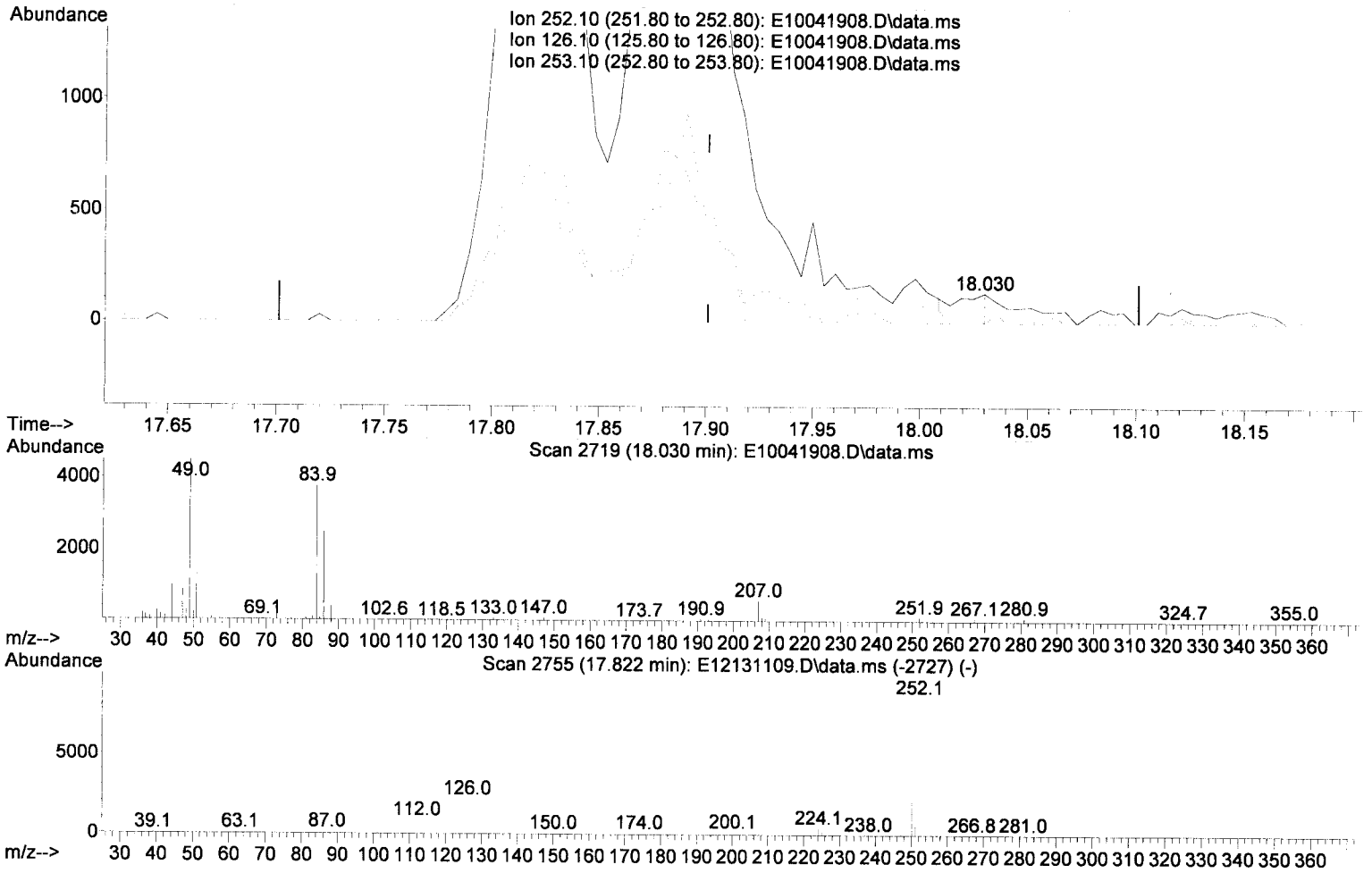


R = 1.54e-002 A*A + 1.11e+000 A - 1.06e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



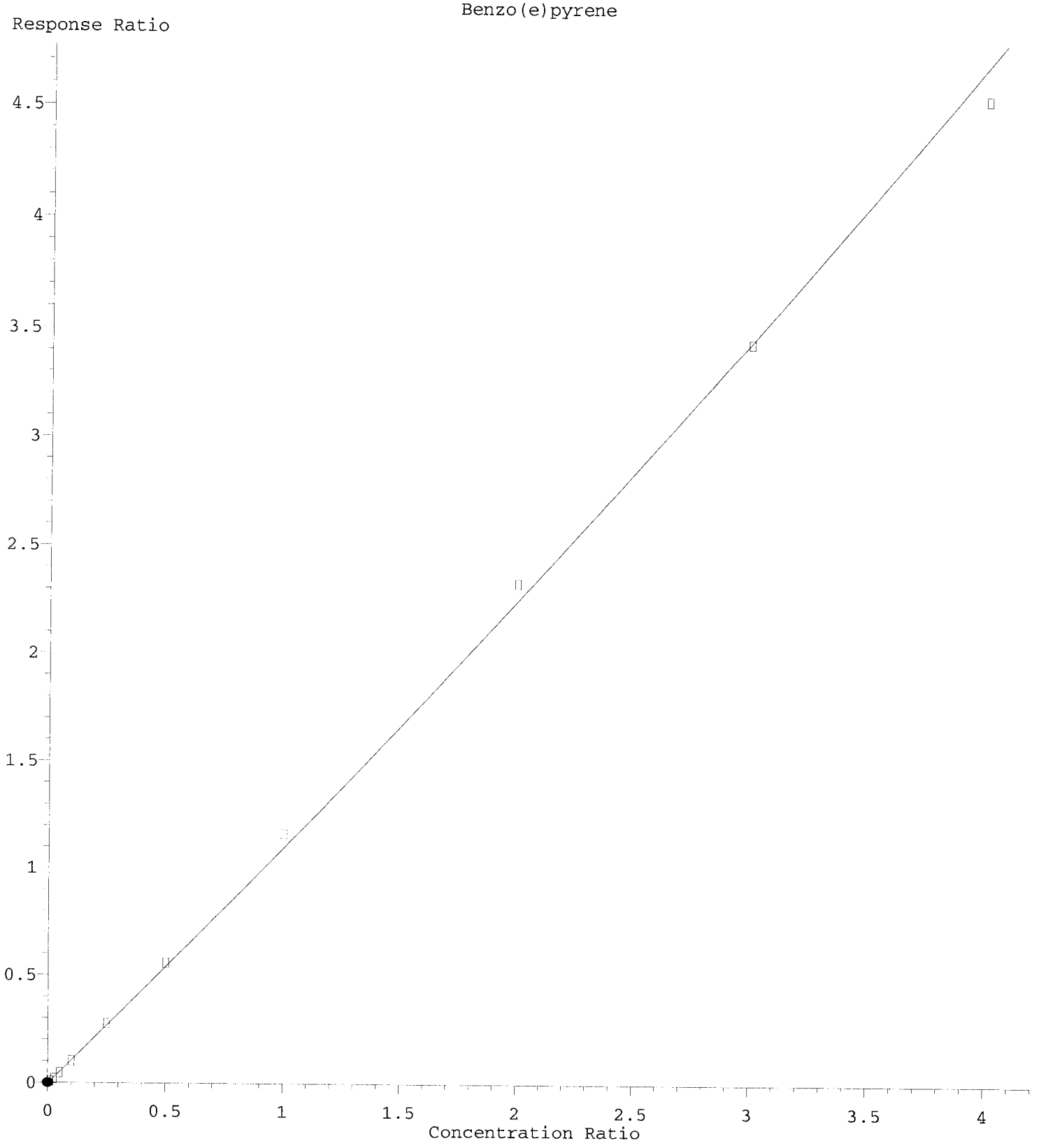
TIC: E10041908.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

18.030min (+ 0.129) 19.29 ng/ml m

response 141

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	20.90	0.00
253.10	22.00	0.00
0.00	0.00	0.00

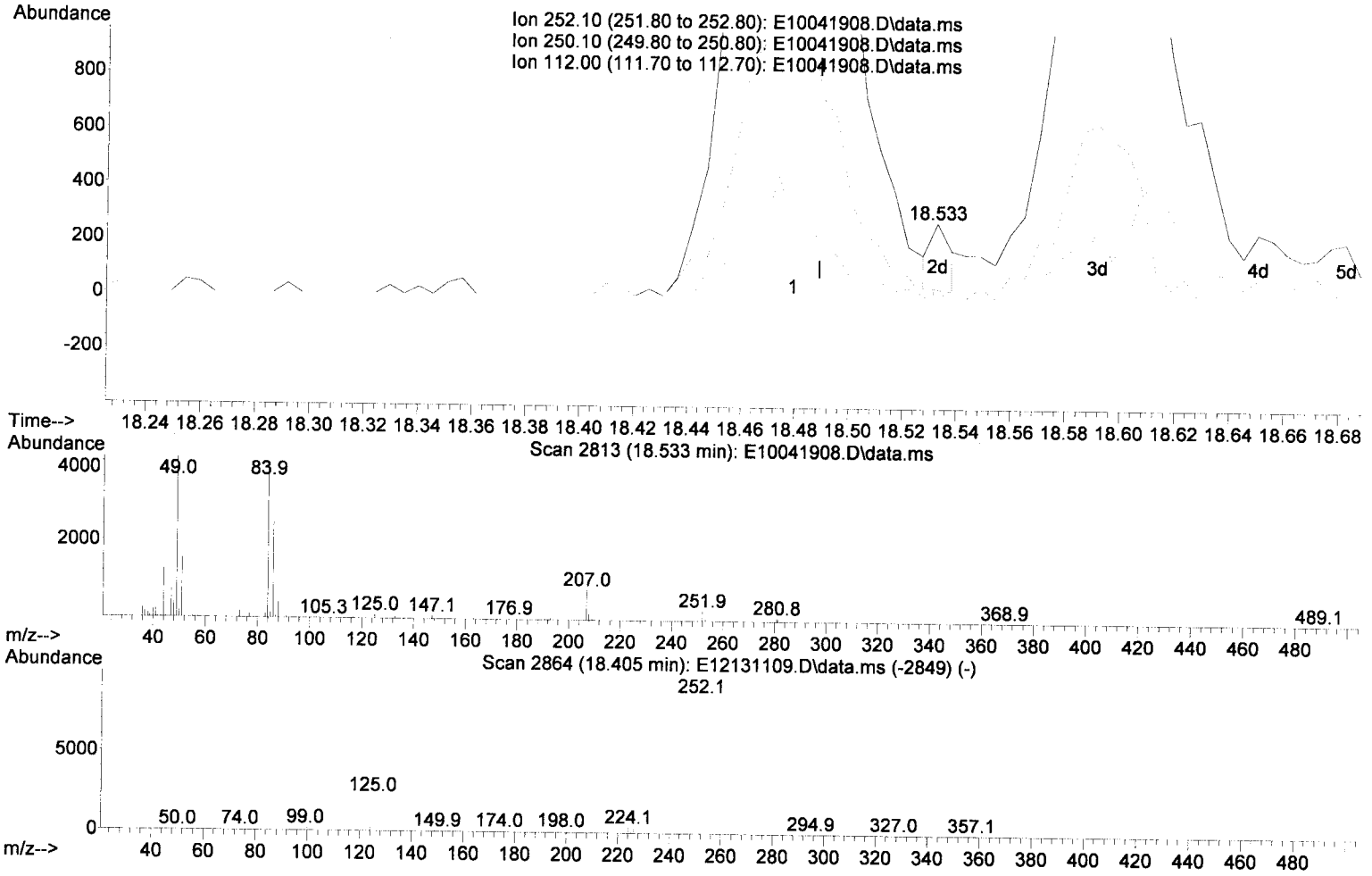


R = 2.39e-002 A*A + 1.08e+000 A - 4.52e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



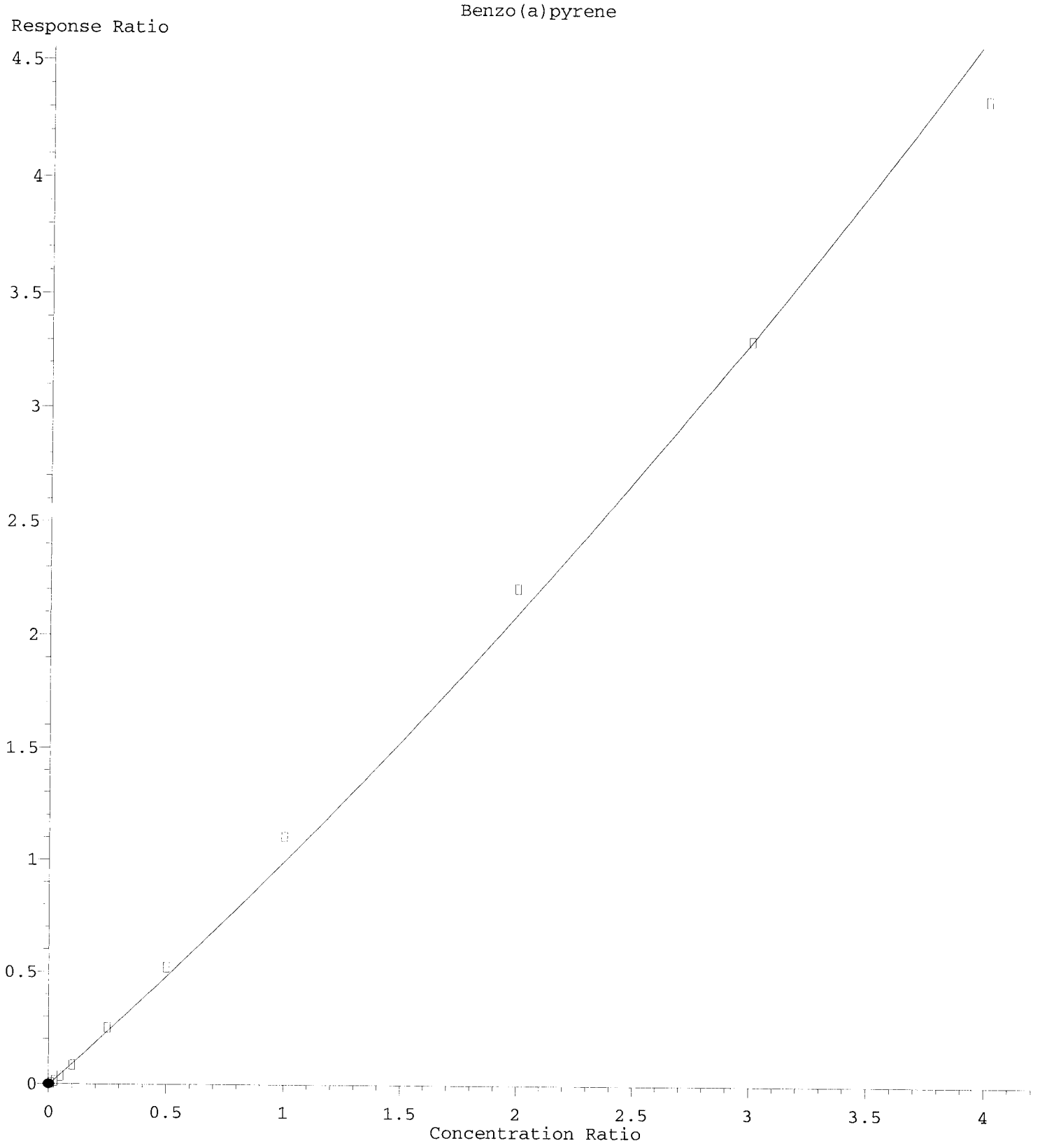
TIC: E10041908.D\data.ms

(91) Benzo(e)pyrene (T)

18.533min (+ 0.044) 8.55 ng/ml m J

response 122

Ion	Exp%	Act%
252.10	100.00	100.00
250.10	28.30	12.41
112.00	6.80	9.12
0.00	0.00	0.00

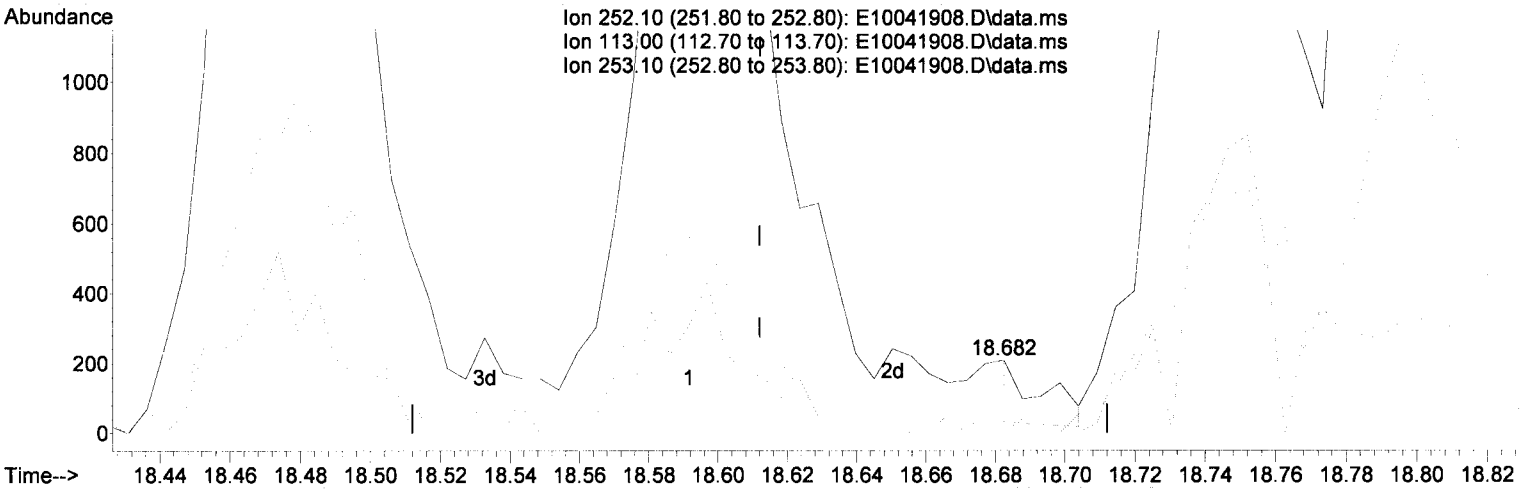


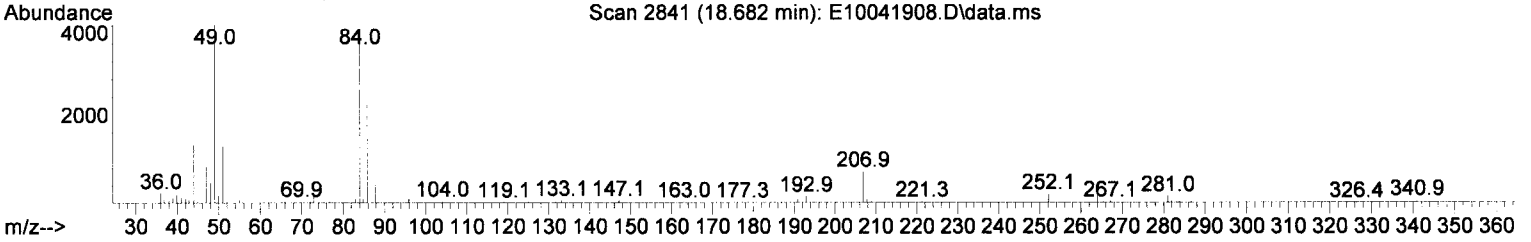
R = 5.17e-002 A*A + 9.47e-001 A - 6.25e-003
Coef of Det (r^2) = 0.989 Curve Fit: Quadratic w(1/x^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:30:11 2019

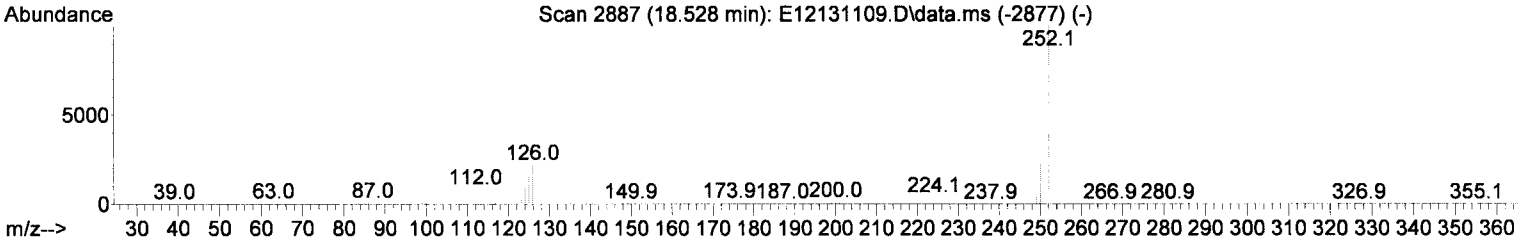
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\REQUANT\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 13:53:55 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E10041908.D\data.ms

(92) Benzo(a)pyrene (T)

18.682min (+ 0.070) 13.36 ng/ml m

response 105

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	0.00
253.10	21.70	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

10/7/19

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	102	0.00
2	T	N-Nitrosodimethylamine	1000.000	999.889	0.0	100	0.00
3	T	Pyridine	1000.000	818.279	18.2	82	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1008.288	-0.8	99	0.00
5	S	Phenol-d6(Surr)	1000.000	1026.332	-2.6	99	0.00
6	T	Phenol	1000.000	1023.047	-2.3	98	0.00
7	T	Aniline	1000.000	996.458	0.4	101	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	975.770	2.4	97	0.00
9	T	2-Chlorophenol	1000.000	1018.341	-1.8	98	0.00
10	T	1,3-Dichlorobenzene	1000.000	978.247	2.2	100	0.00
11	T	1,4-Dichlorobenzene	1000.000	984.049	1.6	100	0.00
12	T	Benzyl alcohol	1000.000	944.828	5.5	90	0.00
13	T	1,2-Dichlorobenzene	1000.000	980.790	1.9	100	0.00
14	T	2-Methylphenol	1000.000	996.249	0.4	95	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	937.438	6.3	94	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1020.493	-2.0	96	0.00
17	T	3+4-Methylphenol	1000.000	1053.883	-5.4	96	0.00
18	T	Hexachloroethane	1000.000	984.689	1.5	99	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1067.391	-6.7	102	0.00
20	T	Nitrobenzene	1000.000	1044.926	-4.5	100	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	100	0.00
22	T	Isophorone	1000.000	1030.495	-3.0	97	0.00
23	T	2-Nitrophenol	1000.000	1080.552	-8.1	102	0.00
24	T	2,4-Dimethylphenol	1000.000	850.522	14.9	80	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1007.245	-0.7	98	0.00
26	T	Benzoic acid	2000.000	1853.733	7.3	96	0.00
27	T	2,4-Dichlorophenol	1000.000	997.995	0.2	93	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1005.342	-0.5	99	0.00
29	T	Naphthalene	1000.000	999.720	0.0	99	0.00
30	T	4-Chloroaniline	1000.000	941.027	5.9	97	0.00
31	T	Hexachlorobutadiene	1000.000	1009.538	-1.0	100	0.00
32	T	4-Chloro-3-methylphenol	1000.000	858.001	14.2	85	0.00
33	T	2-Methylnaphthalene	1000.000	1020.014	-2.0	98	0.00
34	T	1-Methylnaphthalene	1000.000	1015.145	-1.5	98	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	97	0.00
36	T	Hexachlorocyclopentadiene	1000.000	959.383	4.1	90	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1044.383	-4.4	95	0.00
38	T	2,4,5-Trichlorophenol	1000.000	956.703	4.3	90	0.00
39	T	1,1'-Biphenyl	1000.000	1016.147	-1.6	96	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1033.907	-3.4	99	0.00
41	T	2-Chloronaphthalene	1000.000	1007.973	-0.8	97	0.00
42	T	2-Nitroaniline	1000.000	1096.077	-9.6	103	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1032.535	-3.3	96	0.00
44	T	1,4-Dinitrobenzene	1000.000	1084.406	-8.4	108	0.00
45	T	Dimethyl phthalate	1000.000	1027.244	-2.7	96	0.00
46	T	1,3-Dinitrobenzene	1000.000	1054.517	-5.5	103	0.00
47	T	2,6-Dinitrotoluene	1000.000	1053.684	-5.4	101	0.00
48	T	1,2-Dinitrobenzene	1000.000	1068.291	-6.8	103	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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	1048.710	-4.9	96	0.00
50	T	3-Nitroaniline	1000.000	913.571	8.6	93	0.00
51	T	Acenaphthene	1000.000	1006.617	-0.7	96	0.00
52	T	2,4-Dinitrophenol	1000.000	1054.422	-5.4	114	0.00
53	T	4-Nitrophenol	1000.000	989.778	1.0	97	0.00
54	T	2,4-Dinitrotoluene	1000.000	1049.836	-5.0	104	0.00
55	T	Dibenzofuran	1000.000	1014.256	-1.4	98	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1033.740	-3.4	97	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	993.992	0.6	92	0.00
58	T	Diethyl phthalate	1000.000	1062.150	-6.2	97	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1033.241	-3.3	95	0.00
60	T	Fluorene	1000.000	1034.369	-3.4	96	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1034.786	-3.5	99	0.00
62	T	4-Nitroaniline	1000.000	991.722	0.8	103	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1182.030	-18.2	128	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	100	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1041.228	-4.1	98	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1051.114	-5.1	97	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	995.828	0.4	97	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1022.488	-2.2	100	0.00
69	T	Hexachlorobenzene	1000.000	999.526	0.0	99	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1009.317	-0.9	99	0.00
71	T	Phenanthrene	1000.000	1001.352	-0.1	98	0.00
72	T	Anthracene	1000.000	1047.924	-4.8	99	0.00
73	T	Carbazole	1000.000	1076.278	-7.6	101	0.00
74	T	Di-n-butyl phthalate	1000.000	1078.014	-7.8	100	0.00
75	T	Fluoranthene	1000.000	1078.532	-7.9	101	0.00
76	T	Benzidine	2000.000	1852.185	7.4	92	0.00
77	T	Pyrene	1000.000	1072.413	-7.2	101	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	101	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1045.707	-4.6	104	0.00
80	T	Butyl benzyl phthalate	1000.000	1006.064	-0.6	99	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	978.432	2.2	102	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1923.060	3.8	103	0.00
83	T	Benz(a)anthracene	1000.000	1052.567	-5.3	104	0.00
84	T	Chrysene	1000.000	992.999	0.7	99	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	992.150	0.8	102	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	100	0.01
87	T	Di-n-octyl phthalate	1000.000	995.038	0.5	101	0.00
88	T	Benzo(b)fluoranthene	1000.000	1011.042	-1.1	96	0.00
89	T	Benzo(k)fluoranthene	1000.000	1039.017	-3.9	100	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2038.057	-1.9	98	0.00
91	T	Benzo(e)pyrene	1000.000	998.552	0.1	97	0.00
92	T	Benzo(a)pyrene	1000.000	999.165	0.1	92	0.00
93	T	Perylene	1000.000	1212.556	-21.3	117	0.01
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	98	0.01

Evaluate Continuing Calibration Report

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

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	957.353	4.3	96	0.01
96 T	Dibenz(a,h)anthracene	1000.000	992.614	0.7	97	0.01
97 T	Benzo(g,h,i)perylene	1000.000	1044.631	-4.5	97	0.01

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 07 11:52:58 2019
Quant Method : Z:\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Oct 07 11:52:54 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.764	150	205905	2.00	ug/mL	0.00
2) Naphthalene-d8	8.021	136	491971	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.797	162	244382	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.310	188	411192	2.00	ug/mL	0.00
11) Chrysene-d12	15.092	240	356181	2.00	ug/mL	0.00
12) Perylene-d12	17.151	264	307288	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.467	292	214840	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.123	266	979405	42.44	ug/mL	88
6) DFTPP	11.594	442	1371000	41.30	ug/mL	70
7) Benzidine	12.803	184	5578195	38.13	ug/mL	96
8) 4,4-DDE	13.070	TIC	36407	No Calib		
9) 4,4-DDD	13.616	TIC	19885	No Calib		
10) 4,4-DDT	14.215	TIC	15972436	37.88	ug/mL	95

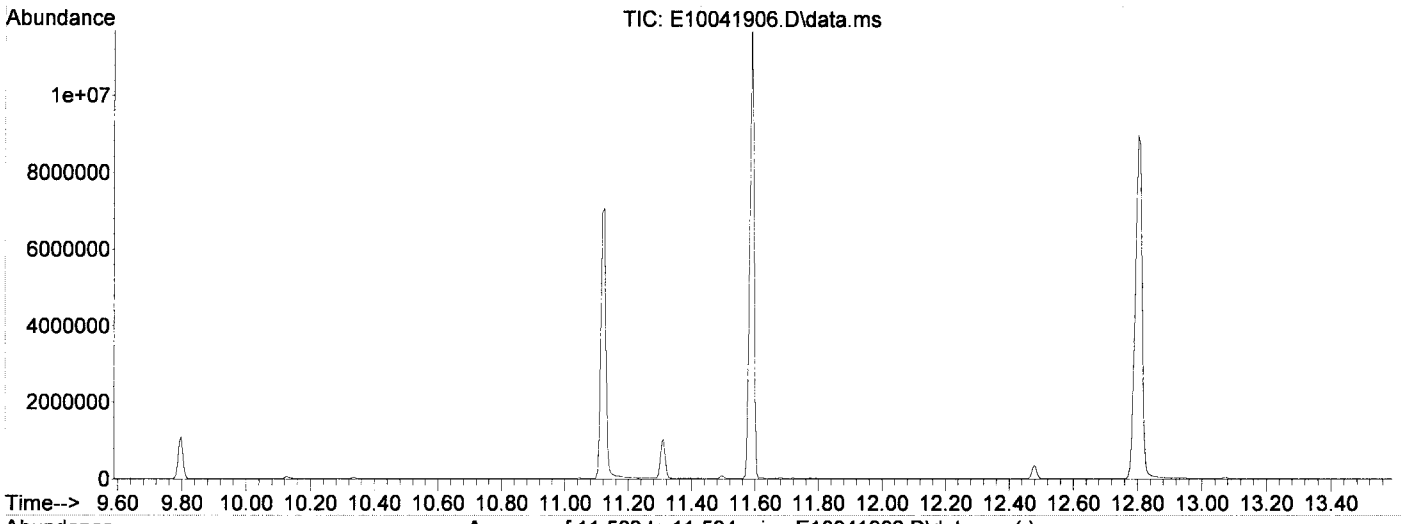
(#) = qualifier out of range (m) = manual integration (+) = signals summed

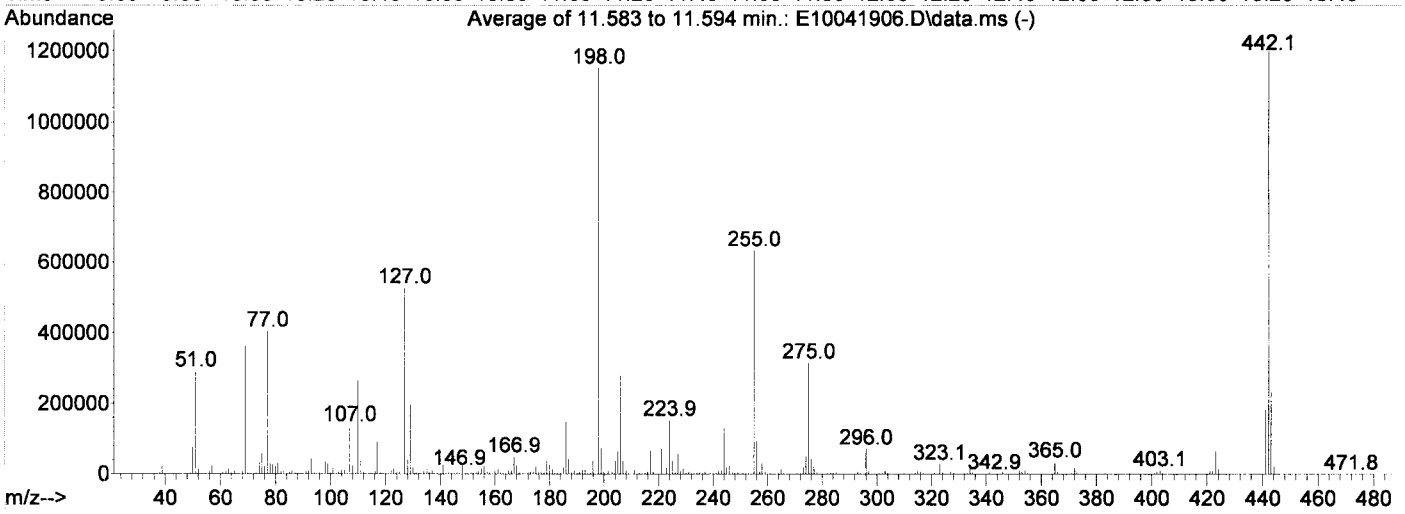
Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : Z:\METHODS\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Oct 07 11:52:54 2019

JK 10/7/19





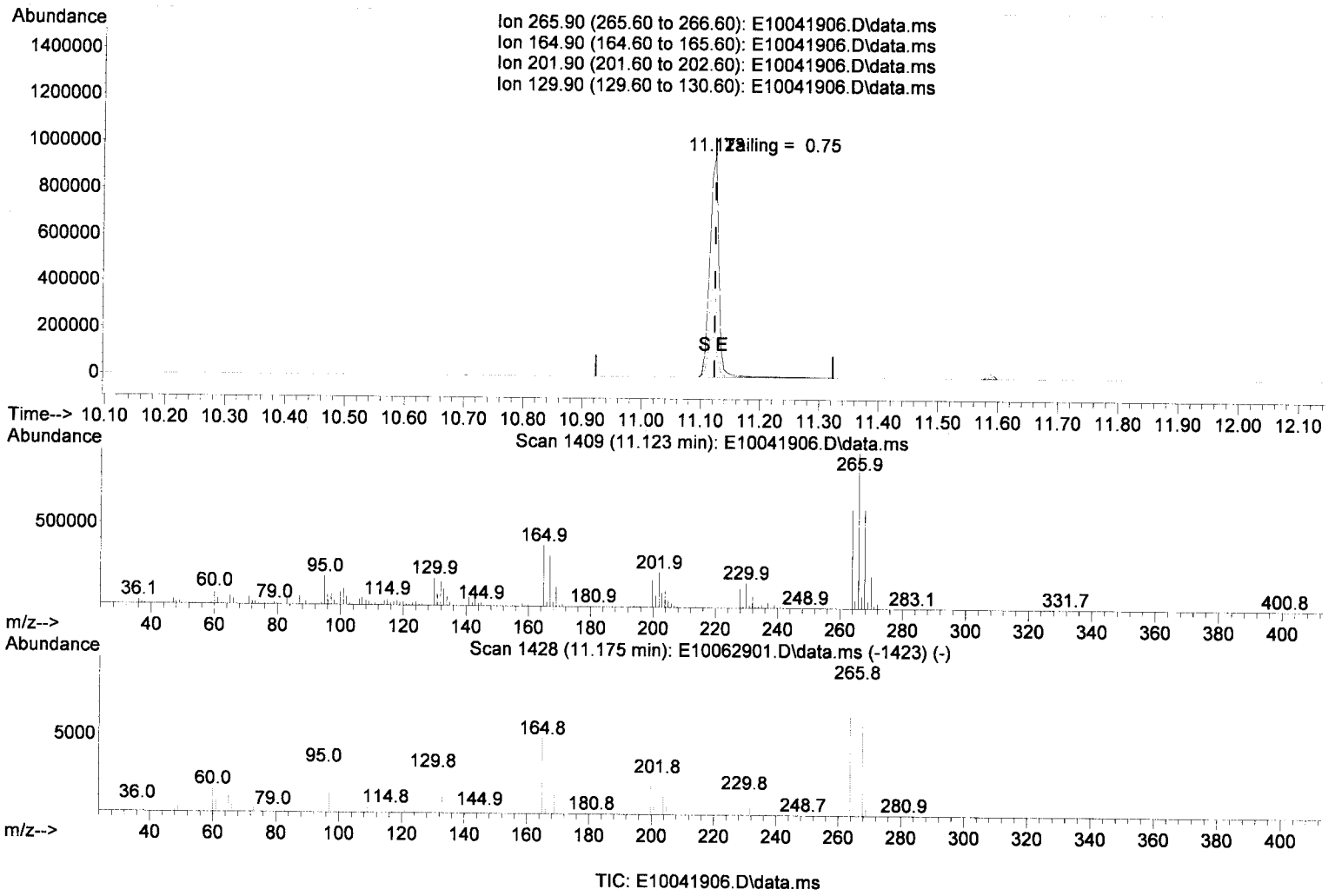
AutoFind: Scans 1495, 1496, 1497; Background Corrected with Scan 1490

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	2.0	7118	PASS
69	198	0.01	100	31.6	363699	PASS
70	69	0.00	2	0.5	1756	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	1150635	PASS
199	198	5	9	6.6	76312	PASS
365	198	1	100	3.0	34552	PASS
441	443	0.01	150	78.5	182669	PASS
442	198	0.10	200	104.1	1198101	PASS
443	442	15	24	19.4	232776	PASS

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 07 11:52:58 2019
Quant Method : Z:\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Oct 07 11:52:54 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041906.D\data.ms

(4) Pentachlorophenol

11.123min (0.000) 42.44 ug/mL

response 979405

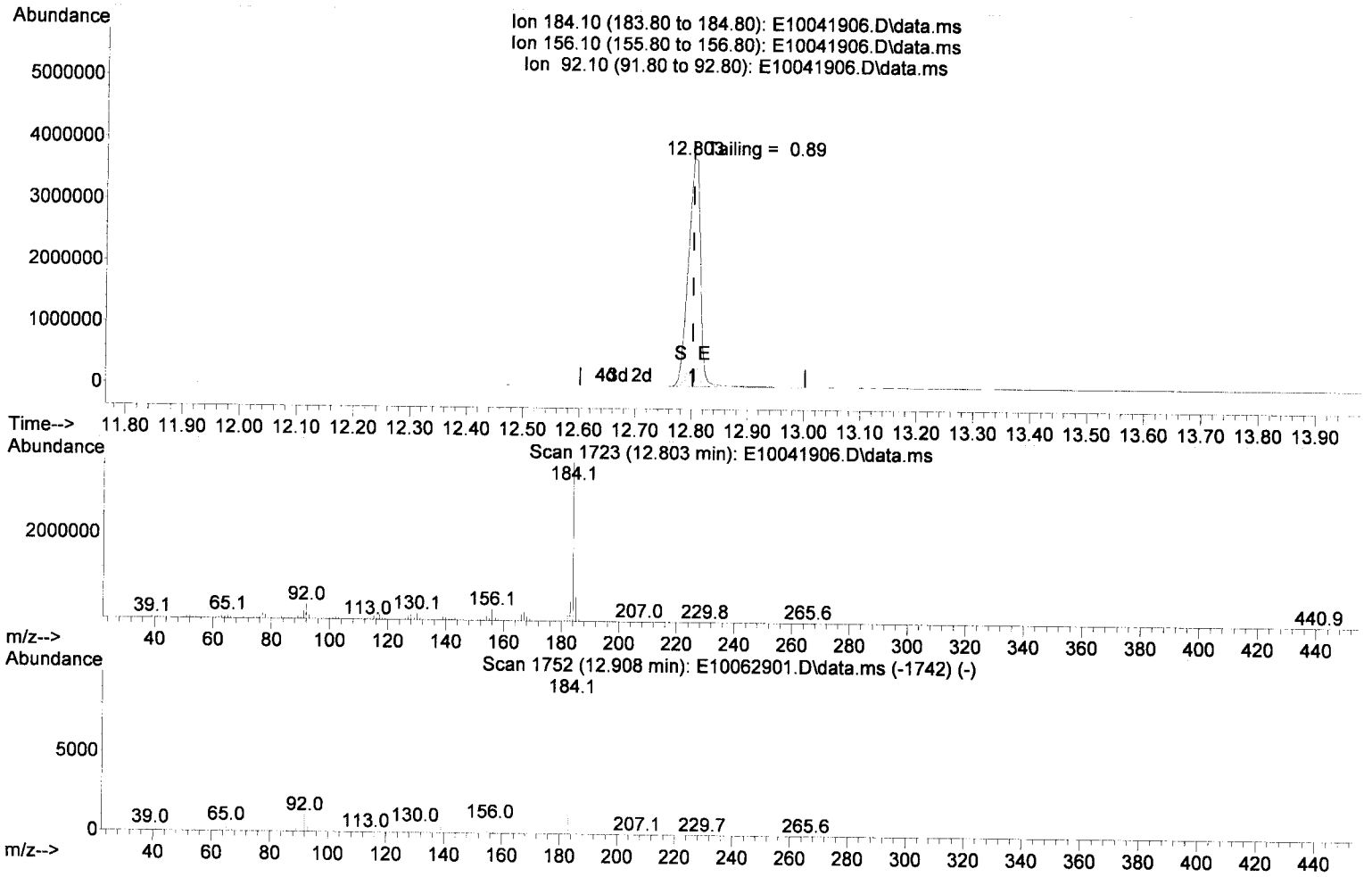
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	39.23
201.90	23.20	22.17
129.90	27.10	17.48

JK 10/7/19

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 07 11:52:58 2019
Quant Method : Z:\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Oct 07 11:52:54 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041906.D\data.ms

(7) Benzidine

12.803min (0.000) 38.13 ug/mL

response 5578195

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.08
92.10	8.20	9.32
0.00	0.00	0.00

10/7/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9J04044-TUN1
SV-GCMS5

First Column	Area Counts	Percent Breakdown	
DDE	36407		
DDD	19885		
DDT	15972436	**0.35**	**PASS**

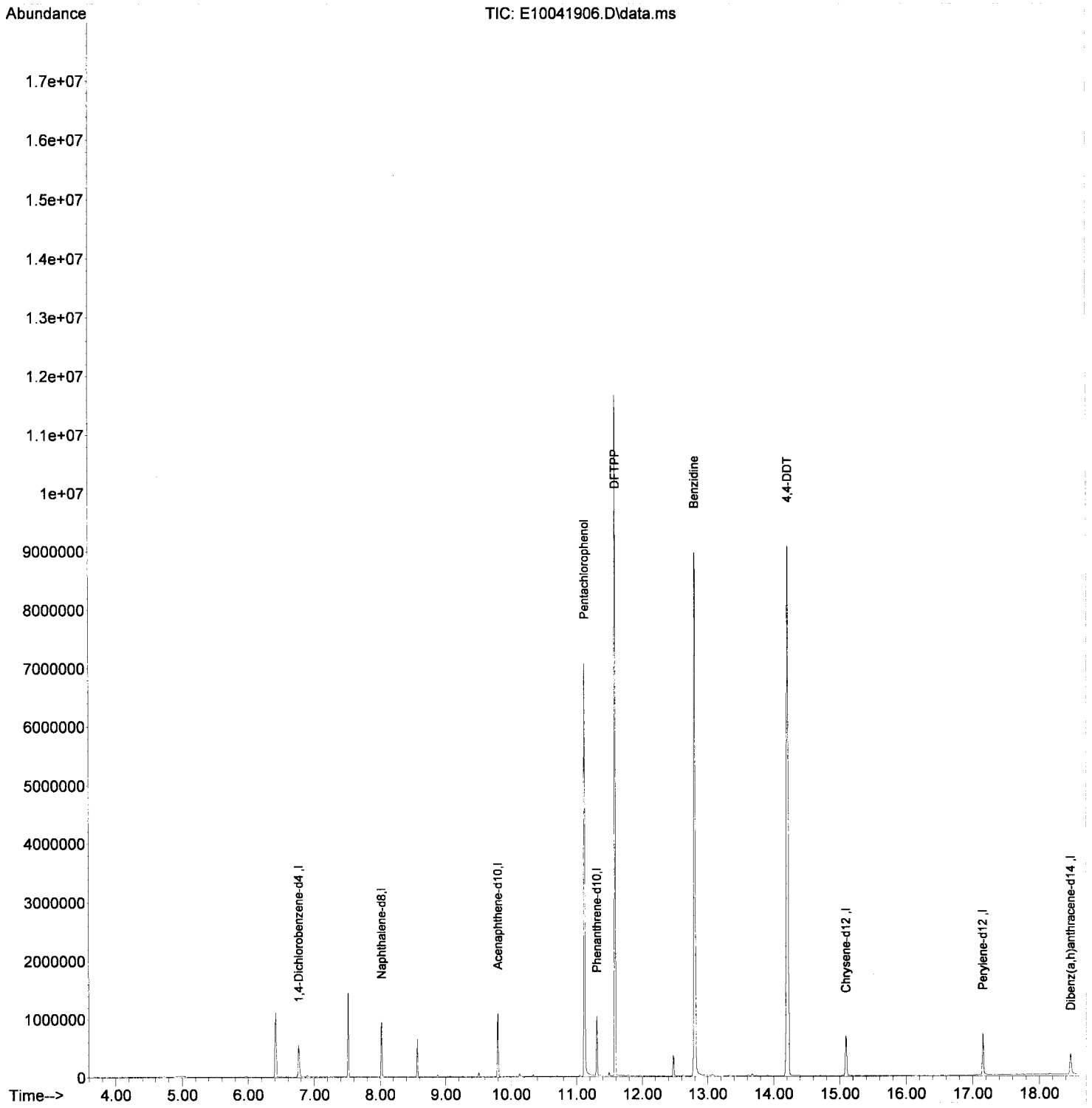
10/7/19

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 07 11:52:58 2019
Quant Method : Z:\METHODS\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Oct 07 11:52:54 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:56:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	484582	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1899670	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	940801	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1693361	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1400902	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.752	264	1249949	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	848651	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.568	112	63	0.21	ng/ml	0.01
5) Phenol-d6(Surr)	6.413	99	185	0.46	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.322	82	132	0.36	ng/ml	0.02
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	4.295	74	74	N.D.		
3) Pyridine	4.407	79	85	N.D.		
6) Phenol	6.423	94	321	N.D.		
7) Aniline	6.477	93	104	N.D.		
8) Bis(2-chloroethyl) ether	6.477	93	104	N.D.		
9) 2-Chlorophenol	6.579	128	74	N.D.		
10) 1,3-Dichlorobenzene	6.776	146	51	N.D.		
11) 1,4-Dichlorobenzene	6.776	146	51	N.D.		
12) Benzyl alcohol	6.910	108	877	4.37	ng/ml#	73
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	7.006	107	281	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	7.022	45	67	N.D.		
16) N-Nitrosodi-n-propylamine	7.156	70	194	N.D.		
17) 3+4-Methylphenol	7.151	107	237	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.327	77	89	N.D.		
22) Isophorone	7.568	82	211	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	7.670	122	347	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	7.798	105	66	398.08	ng/ml#	8
27) 2,4-Dichlorophenol	7.878	162	71	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.039	128	185	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.584	107	158	27.23	ng/ml#	1
33) 2-Methylnaphthalene	8.745	142	53	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	9.055	196	61	11.50	ng/ml#	12
38) 2,4,5-Trichlorophenol	9.055	196	61	11.72	ng/ml#	12
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 : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:56:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

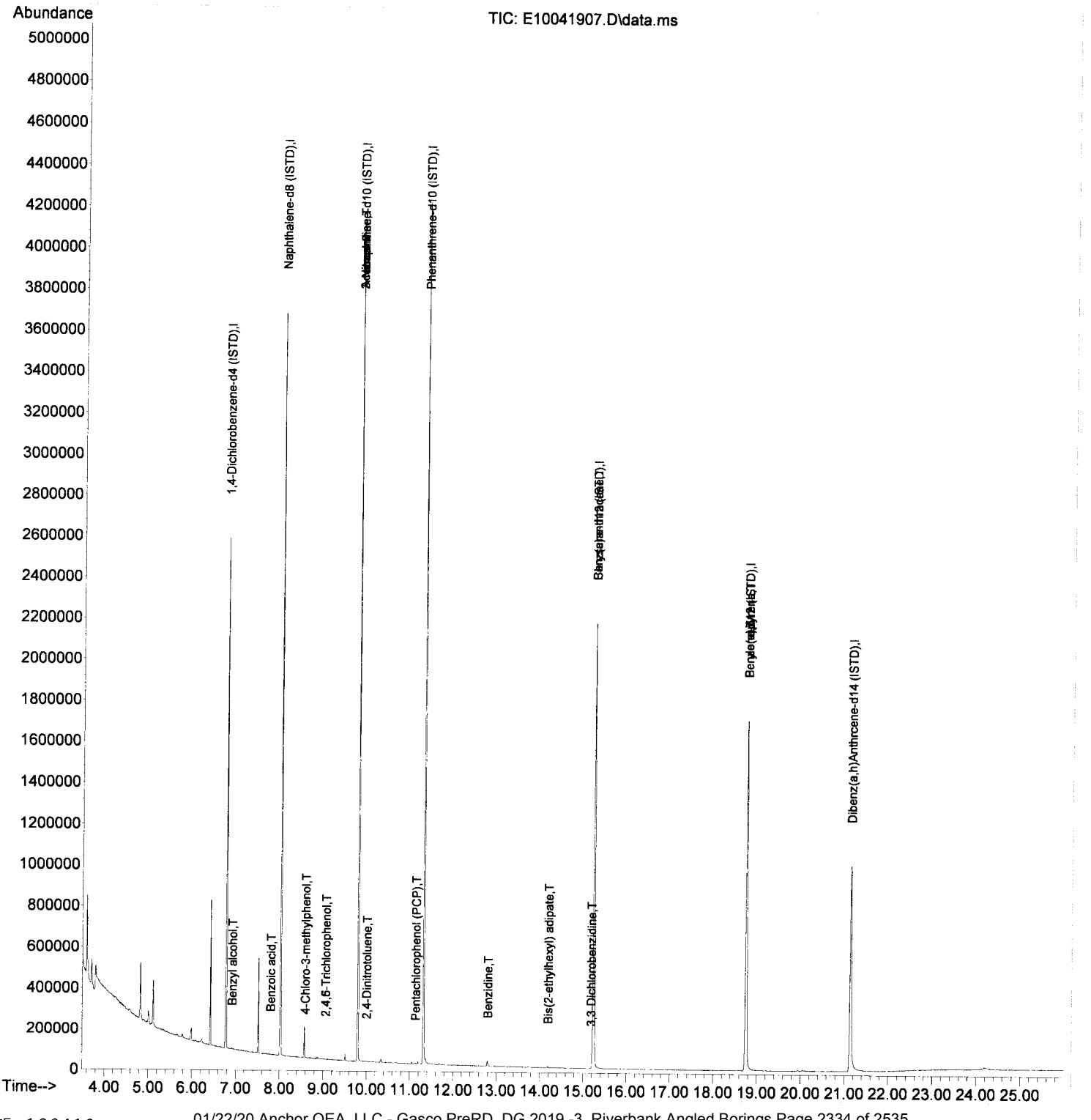
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.798	138	88	29.71 ng/ml#	1
51) Acenaphthene	9.804	153	200	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.996	165	54	61.34 ng/ml#	32
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	10.210	149	90	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.323	170	178	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	10.467	169	52	N.D.	
66) Azobenzene (1,2-DPH)	10.499	77	74	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	617	77.79 ng/ml	94
71) Phenanthrene	11.312	178	773	N.D.	
72) Anthracene	11.382	178	62	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.884	149	146	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.794	184	17549	114.86 ng/ml	100
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.190	129	1448	3.55 ng/ml	88
82) 3,3-Dichlorobenzidine	15.179	252	359	22.68 ng/ml	70
83) Benz(a)anthracene	15.238	228	3505	4.44 ng/ml	65
84) Chrysene	15.297	228	51	N.D.	
85) Bis(2-ethylhexyl) phth...	15.377	149	61	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	18.752	252	4216	6.29 ng/ml#	22
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.752	252	4216	6.15 ng/ml	67
95) Indeno(1,2,3-cd)pyrene	21.137	276	383	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	240	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 : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:56:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Final Requant

Quant Time: Oct 07 16:50:38 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.776	152	484582	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1899670	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	940801	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1693361	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1400902	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.752	264	1249949	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	848651	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.568	112	63	0.22 ng/ml	0.01
5) Phenol-d6(Surr)	6.413	99	185	0.53 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.322	82	132	0.47 ng/ml	0.02
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	4.295	74	74	N.D.	
3) Pyridine	4.407	79	85	N.D.	
6) Phenol	6.423	94	321	N.D.	
7) Aniline	6.477	93	104	N.D.	
8) Bis(2-chloroethyl) ether	6.477	93	104	N.D.	
9) 2-Chlorophenol	6.579	128	74	N.D.	
10) 1,3-Dichlorobenzene	6.776	146	51	N.D.	
11) 1,4-Dichlorobenzene	6.776	146	51	N.D.	
12) Benzyl alcohol	6.910	108	877	40.04 ng/ml	84
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.006	107	281	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.022	45	67	N.D.	
16) N-Nitrosodi-n-propylamine	7.156	70	194	N.D.	
17) 3+4-Methylphenol	7.151	107	237	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.327	77	89	N.D.	
22) Isophorone	7.568	82	211	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.670	122	347	11.67 ng/ml#	64
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.798	105	66	820.01 ng/ml#	10
27) 2,4-Dichlorophenol	7.878	162	71	7.52 ng/ml#	67
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.039	128	185	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.584	107	158	65.55 ng/ml#	1
33) 2-Methylnaphthalene	8.745	142	53	N.D.	
34) 1-Methylnaphthalene	0.000		0	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.055	196	61	11.90 ng/ml#	12
38) 2,4,5-Trichlorophenol	9.055	196	61	29.06 ng/ml#	12
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 : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:38 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

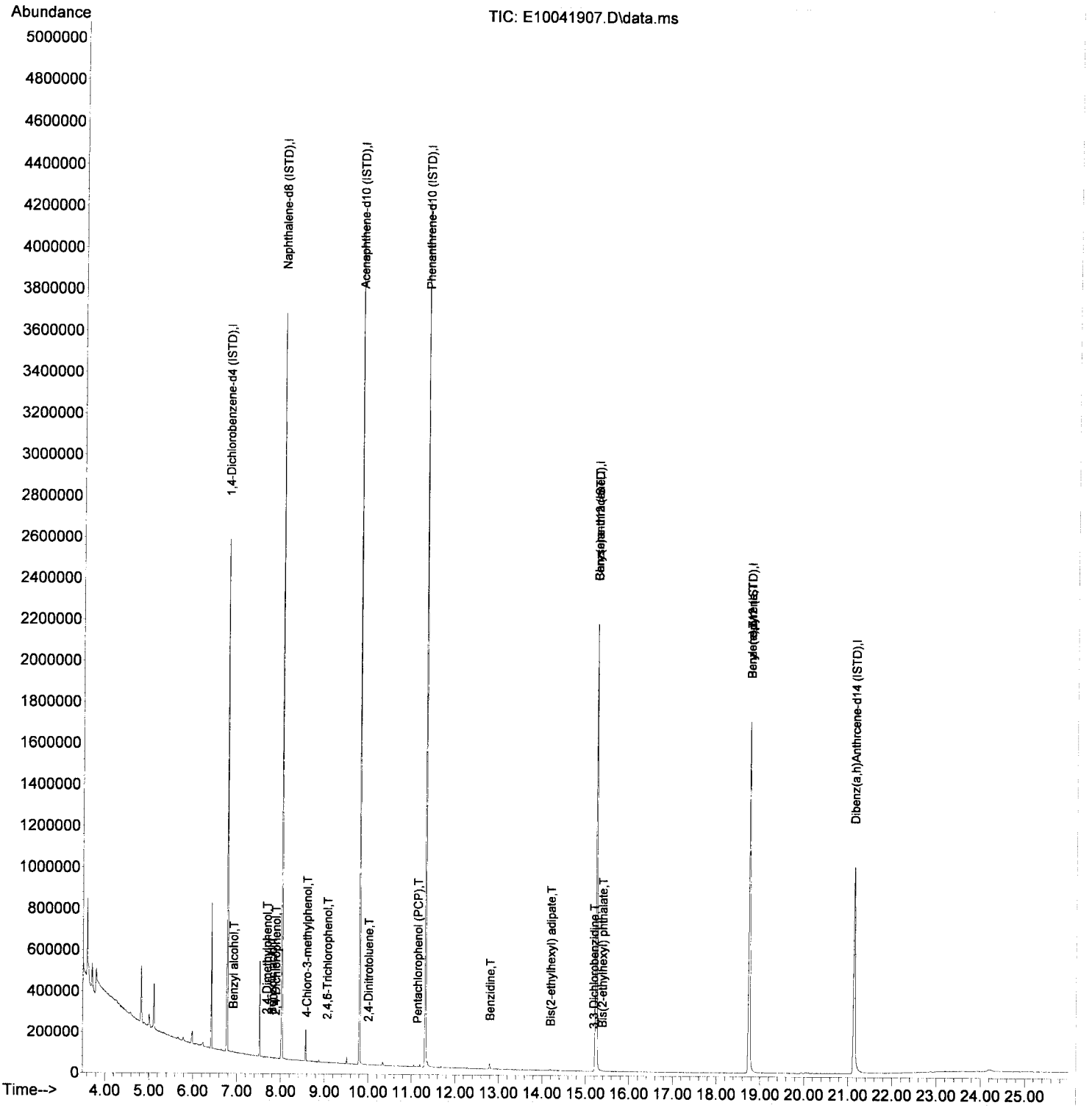
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.798	138	88	N.D.	
51) Acenaphthene	9.804	153	200	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.996	165	54	61.00 ng/ml#	22
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	10.210	149	90	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.323	170	178	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	10.467	169	52	N.D.	
66) Azobenzene (1,2-DPH)	10.499	77	74	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	617	68.84 ng/ml	94
71) Phenanthrene	11.312	178	773	N.D.	
72) Anthracene	11.382	178	62	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.884	149	146	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.794	184	17549	193.76 ng/ml	98
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.190	129	1448	57.89 ng/ml	89
82) 3,3-Dichlorobenzidine	15.179	252	359	26.85 ng/ml	70
83) Benz(a)anthracene	15.238	228	3505	4.65 ng/ml	66
84) Chrysene	15.297	228	51	N.D.	
85) Bis(2-ethylhexyl) phth...	15.377	149	61	58.62 ng/ml	51
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	18.752	252	4216	14.64 ng/ml#	26
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.752	252	4216	7.07 ng/ml	69
95) Indeno(1,2,3-cd)pyrene	21.137	276	383	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	240	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 : Z:\DATA\2019-10\9J04044\
Data File : E10041907.D
Acq On : 4 Oct 2019 5:14 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:38 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 12:21:10 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	501898	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1954223	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	981607	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1794978	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1533726	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.747	264	1395539	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.137	292	965193	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	4573	14.62	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	5678	13.57	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	4429	11.80	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	14167	19.41	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.606	330	583	23.83	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	11670	16.29	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.321	74	3228	13.63	ng/ml#	72
3) Pyridine	4.257	79	62	N.D.		
6) Phenol	6.423	94	5992	13.66	ng/ml	90
7) Aniline	6.461	93	3294	5.76	ng/ml	92
8) Bis(2-chloroethyl) ether	6.514	93	6412	17.89	ng/ml	90
9) 2-Chlorophenol	6.578	128	5037	15.34	ng/ml	88
10) 1,3-Dichlorobenzene	6.728	146	7719	20.56	ng/ml	95
11) 1,4-Dichlorobenzene	6.792	146	7740	20.41	ng/ml	89
12) Benzyl alcohol	6.899	108	2745	13.20	ng/ml	90
13) 1,2-Dichlorobenzene	6.942	146	6999	19.48	ng/ml	97
14) 2-Methylphenol	6.996	107	4057	14.85	ng/ml	94
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	7822	13.76	ng/ml	76
16) N-Nitrosodi-n-propylamine	7.156	70	3426	12.75	ng/ml	97
17) 3+4-Methylphenol	7.145	107	4662	13.51	ng/ml	78
18) Hexachloroethane	7.274	117	2518	17.98	ng/ml#	77
20) Nitrobenzene	7.327	77	4857	13.40	ng/ml	89
22) Isophorone	7.557	82	9174	13.76	ng/ml	96
23) 2-Nitrophenol	7.643	139	1264	32.94	ng/ml	72
24) 2,4-Dimethylphenol	7.670	122	2975	10.17	ng/ml	88
25) Bis(2-chloroethoxy) me...	7.760	93	7132	17.00	ng/ml	91
26) Benzoic acid	7.825	105	65	398.05	ng/ml#	39
27) 2,4-Dichlorophenol	7.873	162	2874	12.68	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.964	180	5608	20.66	ng/ml	98
29) Naphthalene	8.044	128	21175	20.31	ng/ml	100
30) 4-Chloroaniline	8.092	127	3531	9.83	ng/ml	88
31) Hexachlorobutadiene	8.172	225	2770	20.89	ng/ml	95
32) 4-Chloro-3-methylphenol	8.568	107	825	29.89	ng/ml#	1
33) 2-Methylnaphthalene	8.739	142	13253	20.21	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	12582	20.04	ng/ml	89
36) Hexachlorocyclopentadiene	8.905	237	2011	15.97	ng/ml	99
37) 2,4,6-Trichlorophenol	9.023	196	1576	22.08	ng/ml	86
38) 2,4,5-Trichlorophenol	9.055	196	1472	21.09	ng/ml	94
39) 1,1'-Biphenyl	9.205	154	16246	19.35	ng/ml	99
41) 2-Chloronaphthalene	9.231	162	12304	20.29	ng/ml	94
42) 2-Nitroaniline	9.322	138	1432	61.72	ng/ml#	65
43) 2,6-Dimethylnaphthalene	9.370	156	10754	18.33	ng/ml	92

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 12:21:10 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.451	168	488	77.58	ng/ml	93
45) Dimethyl phthalate	9.504	163	11559	18.35	ng/ml	96
46) 1,3-Dinitrobenzene	9.536	168	515	72.64	ng/ml	85
47) 2,6-Dinitrotoluene	9.563	165	1050	39.36	ng/ml	88
48) 1,2-Dinitrobenzene	9.622	168	402	41.42	ng/ml#	25
49) Acenaphthylene	9.654	152	15828	16.55	ng/ml	96
50) 3-Nitroaniline	9.739	138	1265	37.13	ng/ml#	61
51) Acenaphthene	9.830	153	12853	19.82	ng/ml	95
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.905	139	187	67.12	ng/ml#	22
54) 2,4-Dinitrotoluene	9.975	165	1067	66.89	ng/ml	90
55) Dibenzofuran	10.002	168	16807	19.94	ng/ml#	59
56) 2,3,5,6-Tetrachlorophenol	10.087	232	530	40.66	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.130	232	796	29.60	ng/ml	97
58) Diethyl phthalate	10.216	149	11322	17.98	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.216	170	9938	19.00	ng/ml	92
60) Fluorene	10.355	166	12708	18.83	ng/ml	94
61) 4-Chlorophenyl phenyl ...	10.344	204	6469	21.65	ng/ml	79
62) 4-Nitroaniline	10.360	138	1342	7.53	ng/ml#	61
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.462	169	9310	16.42	ng/ml	96
66) Azobenzene (1,2-DPH)	10.504	77	9652	12.46	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.847	248	3151	18.97	ng/ml	86
69) Hexachlorobenzene	10.927	284	3927	23.51	ng/ml	91
70) Pentachlorophenol (PCP)	11.119	266	1514	88.06	ng/ml	90
71) Phenanthrene	11.333	178	20603	20.91	ng/ml	96
72) Anthracene	11.387	178	17466	17.28	ng/ml	99
73) Carbazole	11.542	167	12904	13.63	ng/ml	98
74) Di-n-butyl phthalate	11.884	149	13938	11.77	ng/ml	97
75) Fluoranthene	12.633	202	16250	15.90	ng/ml	96
76) Benzidine	12.794	184	9217	76.49	ng/ml	93
77) Pyrene	12.943	202	16894	16.27	ng/ml	98
80) Butyl benzyl phthalate	14.008	149	2870	6.40	ng/ml	92
81) Bis(2-ethylhexyl) adipate	14.184	129	4248	9.52	ng/ml	96
82) 3,3-Dichlorobenzidine	15.174	252	3305	34.44	ng/ml	97
83) Benz(a)anthracene	15.216	228	15725	18.18	ng/ml	93
84) Chrysene	15.291	228	15391	18.68	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.377	149	3234	5.04	ng/ml	91
87) Di-n-octyl phthalate	17.051	149	3685	34.70	ng/ml	92
88) Benzo(b)fluoranthene	17.816	252	8200	11.12	ng/ml	96
89) Benzo(k)fluoranthene	17.891	252	8001	11.04	ng/ml	92
90) Benzo(b+k)fluoranthene	17.891	252	17859	23.06	ng/ml	92
91) Benzo(e)pyrene	18.479	252	9472	12.65	ng/ml	96
92) Benzo(a)pyrene	18.591	252	5755	8.60	ng/ml	98
93) Perylene	18.800	252	11719	15.32	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.132	276	11018	20.83	ng/ml	70
96) Dibenz(a,h)anthracene	21.202	278	9459	19.52	ng/ml	93
97) Benzo(g,h,i)perylene	21.667	276	8611	16.53	ng/ml	80

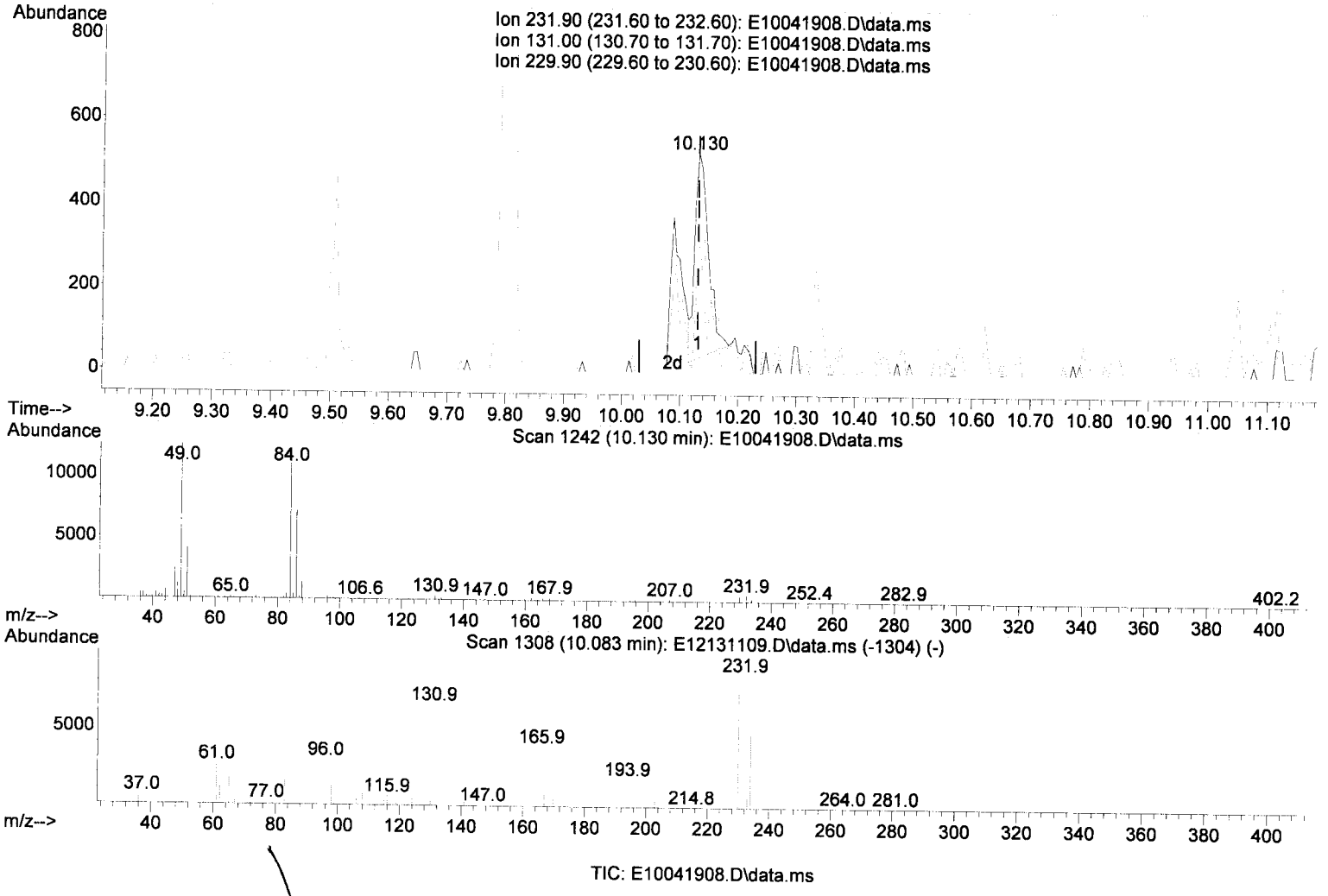
See MS

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

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:56:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041908.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.130min (+ 0.000) 29.60 ng/ml

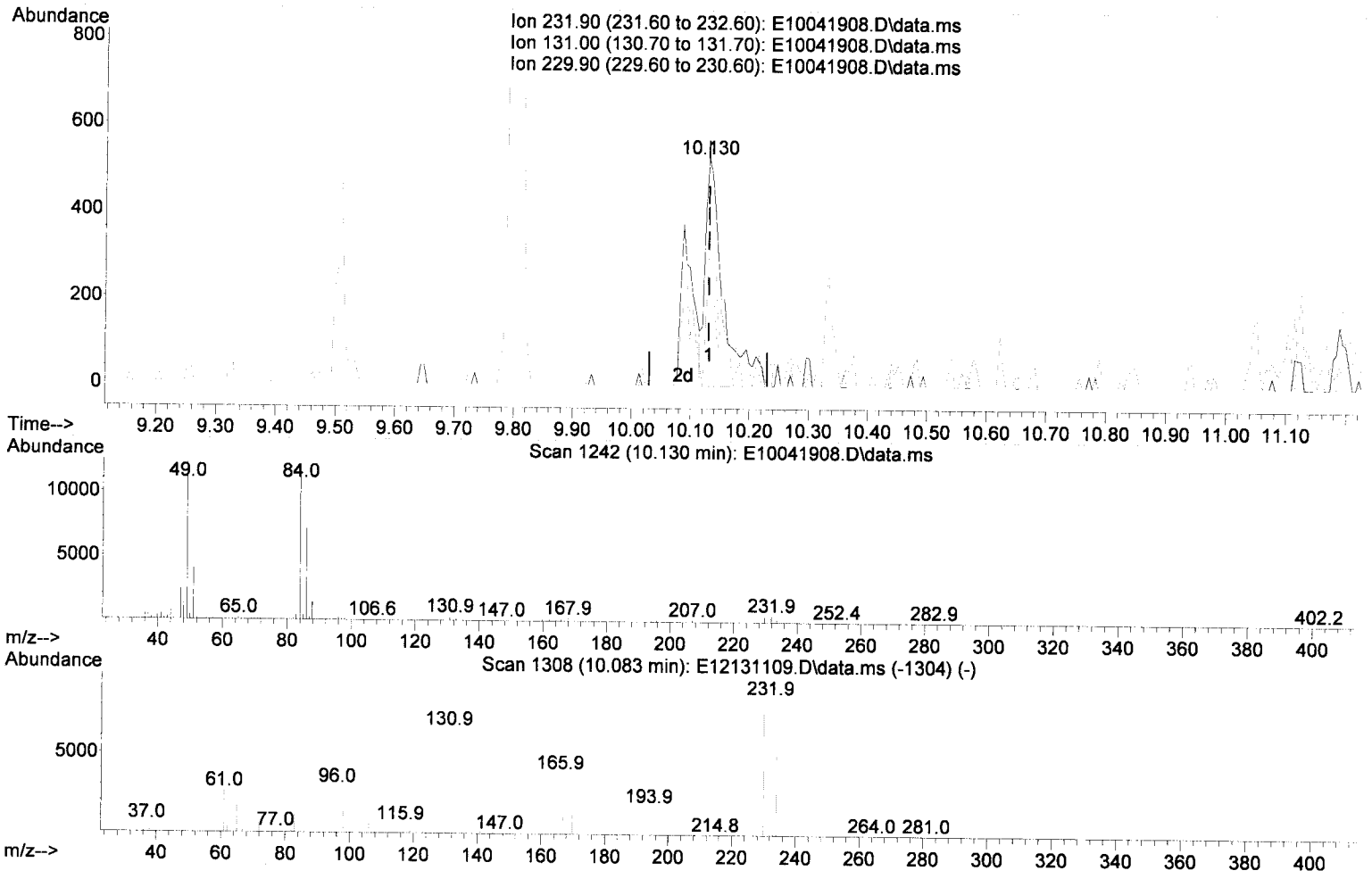
response 796

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	61.22
229.90	79.80	83.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:56:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041908.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.130min (+ 0.000) 32.20 ng/ml m

10/7/19

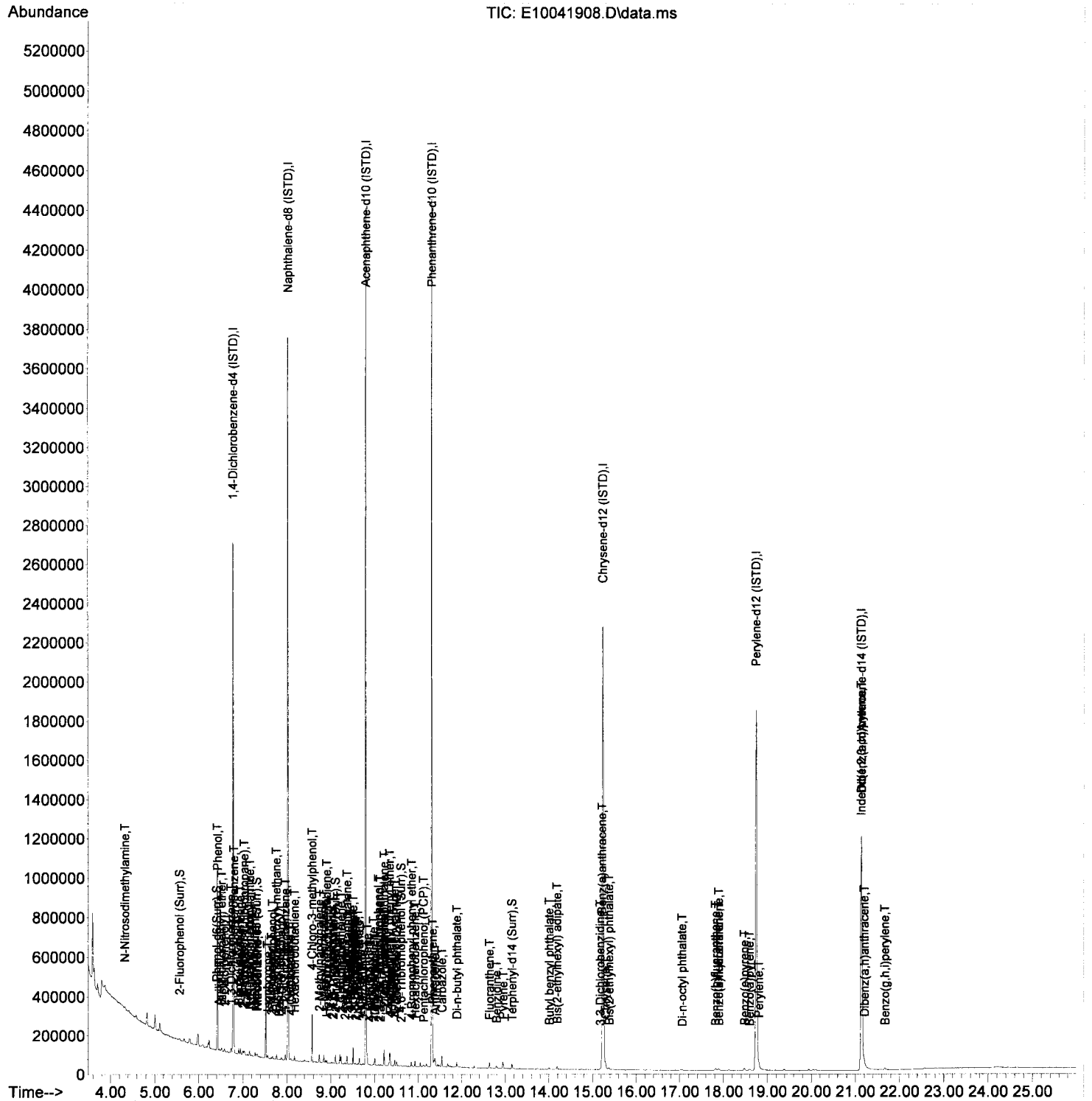
response 1127

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	61.22
229.90	79.80	83.46
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041908.D
Acq On : 4 Oct 2019 5:49 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 12:21:10 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	494451	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1934771	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	979273	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1770046	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1496661	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.747	264	1372143	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.137	292	939849	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	12531	40.65	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	15671	38.01	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	11673	31.57	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	37314	51.24	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	1964	46.40	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	31469	45.00	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.316	74	9166	39.28	ng/ml	96
3) Pyridine	4.353	79	12754	33.75	ng/ml#	64
6) Phenol	6.418	94	16493	38.17	ng/ml	86
7) Aniline	6.461	93	20125	35.75	ng/ml	91
8) Bis(2-chloroethyl) ether	6.514	93	16981	48.09	ng/ml	85
9) 2-Chlorophenol	6.578	128	13569	41.94	ng/ml	90
10) 1,3-Dichlorobenzene	6.728	146	19165	51.82	ng/ml	95
11) 1,4-Dichlorobenzene	6.792	146	19639	52.56	ng/ml	94
12) Benzyl alcohol	6.899	108	3567	17.41	ng/ml#	75
13) 1,2-Dichlorobenzene	6.942	146	18970	53.59	ng/ml	95
14) 2-Methylphenol	7.001	107	10413	38.70	ng/ml	92
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	19732	35.24	ng/ml	77
16) N-Nitrosodi-n-propylamine	7.151	70	9766	36.90	ng/ml	89
17) 3+4-Methylphenol	7.145	107	12218	35.95	ng/ml	89
18) Hexachloroethane	7.274	117	6360	46.11	ng/ml#	75
20) Nitrobenzene	7.327	77	12939	36.24	ng/ml	84
22) Isophorone	7.552	82	25333	38.37	ng/ml	93
23) 2-Nitrophenol	7.643	139	3866	51.27	ng/ml	84
24) 2,4-Dimethylphenol	7.670	122	8310	28.70	ng/ml	90
25) Bis(2-chloroethoxy) me...	7.760	93	19669	47.34	ng/ml	97
26) Benzoic acid	7.739	105	99	398.40	ng/ml#	1
27) 2,4-Dichlorophenol	7.878	162	8546	38.09	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.964	180	15837	58.92	ng/ml	96
29) Naphthalene	8.044	128	53705	52.03	ng/ml	97
30) 4-Chloroaniline	8.087	127	16115	45.34	ng/ml	89
31) Hexachlorobutadiene	8.172	225	8020	61.09	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	2865	38.21	ng/ml#	1
33) 2-Methylnaphthalene	8.739	142	35116	54.09	ng/ml	93
34) 1-Methylnaphthalene	8.841	142	33386	53.70	ng/ml	95
36) Hexachlorocyclopentadiene	8.905	237	5522	43.96	ng/ml	93
37) 2,4,6-Trichlorophenol	9.023	196	5054	46.45	ng/ml	97
38) 2,4,5-Trichlorophenol	~~9.055~~	~~196~~	~~3461~~	~~34.36~~	~~ng/ml~~	~~88~~
39) 1,1'-Biphenyl	9.205	154	43676	52.13	ng/ml	98
41) 2-Chloronaphthalene	9.231	162	31794	52.56	ng/ml	95
42) 2-Nitroaniline	9.322	138	4227	76.57	ng/ml	81
43) 2,6-Dimethylnaphthalene	9.365	156	29943	51.16	ng/ml	94

see MT

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.451	168	1321	89.49	ng/ml#	76
45) Dimethyl phthalate	9.504	163	32085	51.05	ng/ml	98
46) 1,3-Dinitrobenzene	9.531	168	1725	85.63	ng/ml	82
47) 2,6-Dinitrotoluene	9.563	165	3393	56.43	ng/ml	85
48) 1,2-Dinitrobenzene	9.622	168	1367	57.19	ng/ml	83
49) Acenaphthylene	9.654	152	45072	47.25	ng/ml	99
50) 3-Nitroaniline	9.739	138	4069	54.90	ng/ml	85
51) Acenaphthene	9.830	153	34473	53.30	ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.900	139	1043	74.18	ng/ml	88
54) 2,4-Dinitrotoluene	9.975	165	3448	80.00	ng/ml	86
55) Dibenzofuran	10.002	168	45469	54.07	ng/ml	74
56) 2,3,5,6-Tetrachlorophenol	10.087	232	2043	54.30	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.130	232	3279	49.12	ng/ml	86
58) Diethyl phthalate	10.216	149	30343	48.31	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.216	170	27785	53.25	ng/ml	92
60) Fluorene	10.355	166	34375	51.06	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	16626	55.77	ng/ml	85
62) 4-Nitroaniline	10.355	138	3879	21.83	ng/ml#	70
63) 4,6-Dinitro-2-methylph...	10.408	198	89	161.04	ng/ml#	2
65) N-Nitrosodiphenylamine	10.462	169	25325	45.29	ng/ml	95
66) Azobenzene (1,2-DPH)	10.504	77	26865	35.16	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.847	248	8668	52.93	ng/ml	79
69) Hexachlorobenzene	10.922	284	10404	63.16	ng/ml	90
70) Pentachlorophenol (PCP)	11.119	266	1860	92.50	ng/ml	89
71) Phenanthrene	11.333	178	53303	54.87	ng/ml	98
72) Anthracene	11.387	178	46226	46.37	ng/ml	99
73) Carbazole	11.542	167	35904	38.47	ng/ml	98
74) Di-n-butyl phthalate	11.884	149	36535	31.29	ng/ml	99
75) Fluoranthene	12.633	202	44081	43.74	ng/ml	99
76) Benzidine	12.794	184	9983	80.22	ng/ml	94
77) Pyrene	12.938	202	46022	44.96	ng/ml	96
80) Butyl benzyl phthalate	14.002	149	7702	17.59	ng/ml	84
81) Bis(2-ethylhexyl) adipate	14.190	129	7820	17.95	ng/ml	98
82) 3,3-Dichlorobenzidine	15.174	252	10982	66.66	ng/ml	86
83) Benz(a)anthracene	15.216	228	36791	43.58	ng/ml	96
84) Chrysene	15.297	228	39759	49.44	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.377	149	9886	15.80	ng/ml	86
87) Di-n-octyl phthalate	17.051	149	9292	41.00	ng/ml	96
88) Benzo(b)fluoranthene	17.821	252	25289	34.88	ng/ml	94
89) Benzo(k)fluoranthene	17.885	252	25769	36.17	ng/ml	98
90) Benzo(b+k)fluoranthene	17.885	252	54676	71.82	ng/ml	98
91) Benzo(e)pyrene	18.479	252	27256	37.03	ng/ml	95
92) Benzo(a)pyrene	18.597	252	18335	27.86	ng/ml	98
93) Perylene	18.800	252	30740	40.86	ng/ml	97
95) Indeno(1,2,3-cd)pyrene	21.137	276	26678	51.79	ng/ml	93
96) Dibenz(a,h)anthracene	21.202	278	23771	50.39	ng/ml	95
97) Benzo(g,h,i)perylene	21.667	276	23434	46.21	ng/ml	80

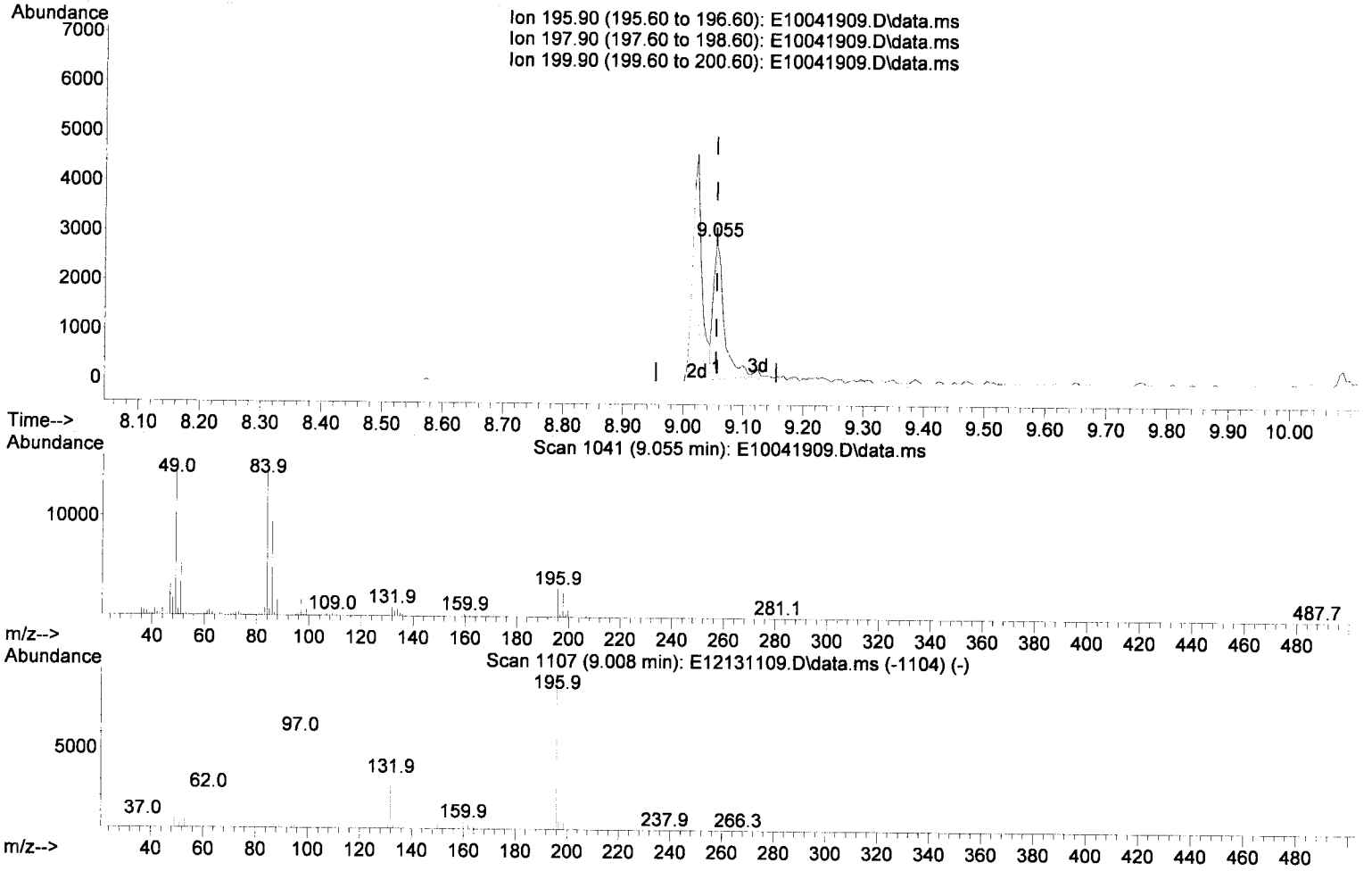
See MS

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

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041909.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.055min (+ 0.000) 34.36 ng/ml

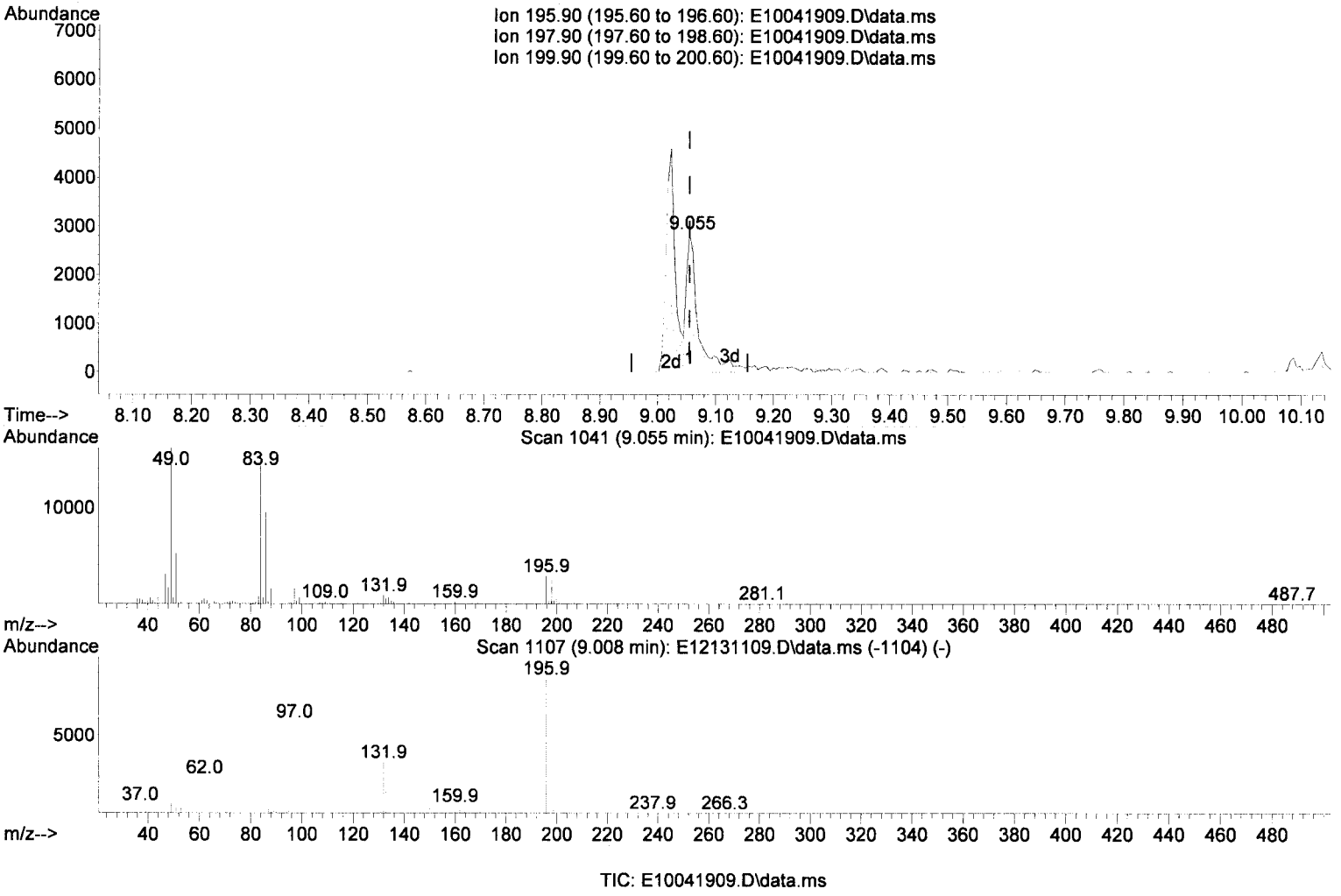
response 3461

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	84.97
199.90	32.40	25.43
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041909.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.055min (+ 0.000) 38.92 ng/ml m JK 10/7/19

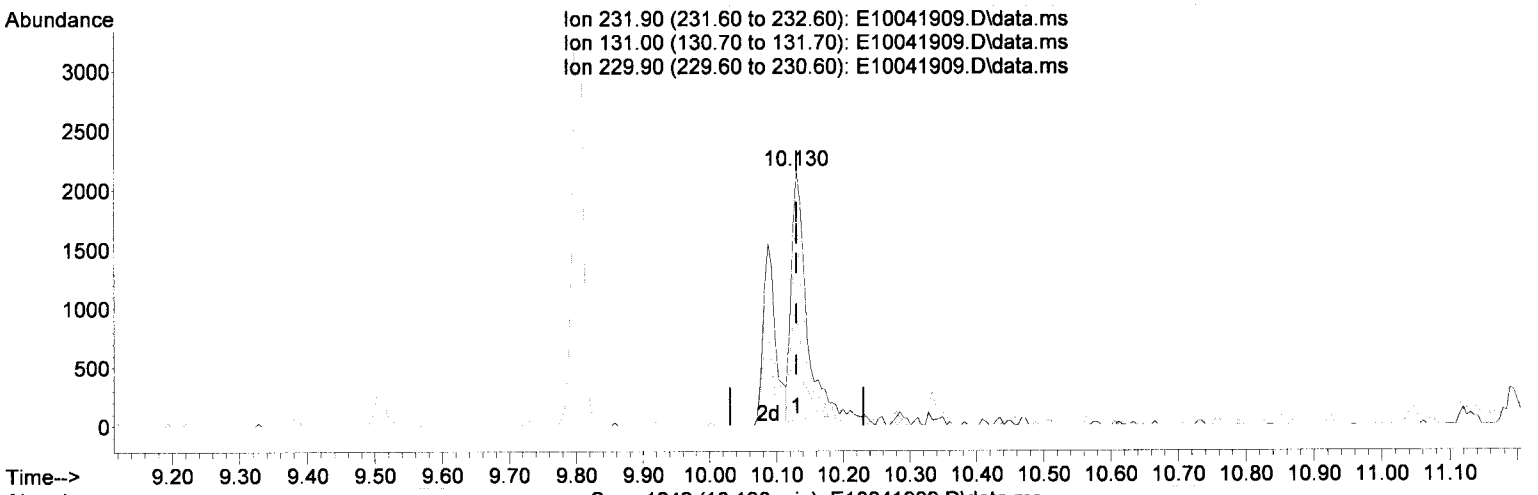
response 4145

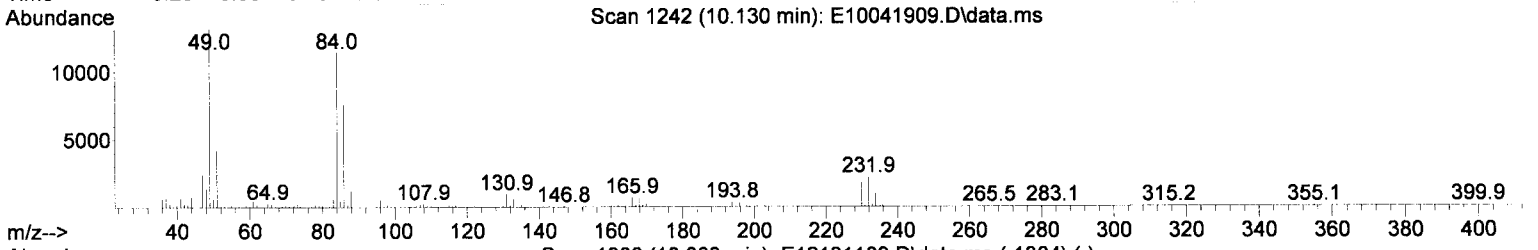
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	84.97
199.90	32.40	25.43
0.00	0.00	0.00

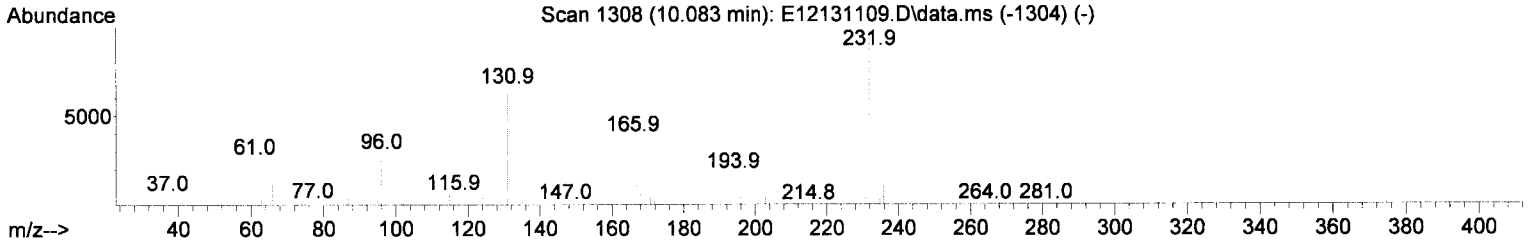
Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E10041909.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.130min (+ 0.000) 49.12 ng/ml

response 3279

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	42.82
229.90	79.80	84.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
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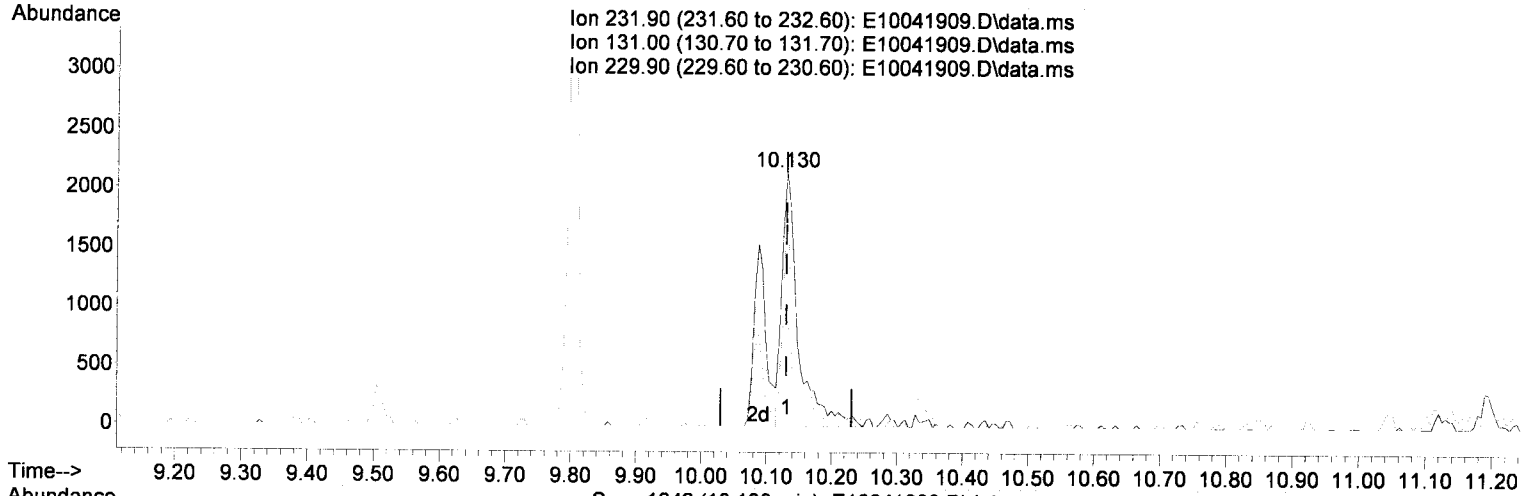
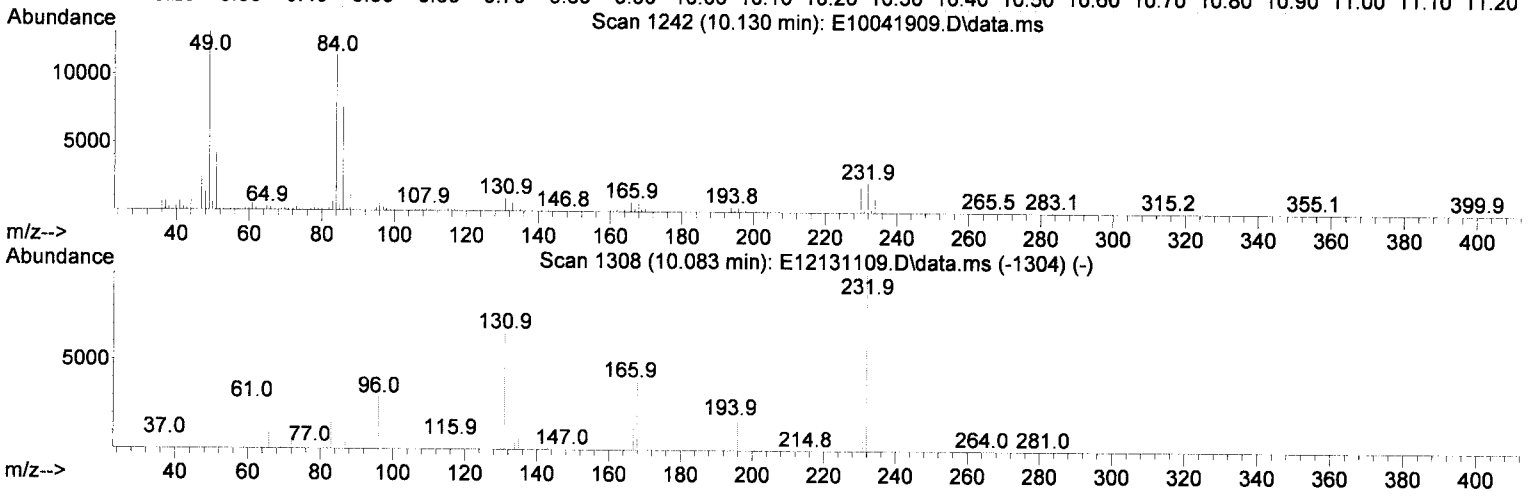




TIC: E10041909.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.130min (+ 0.000) 53.21 ng/ml m JK 10/7/19

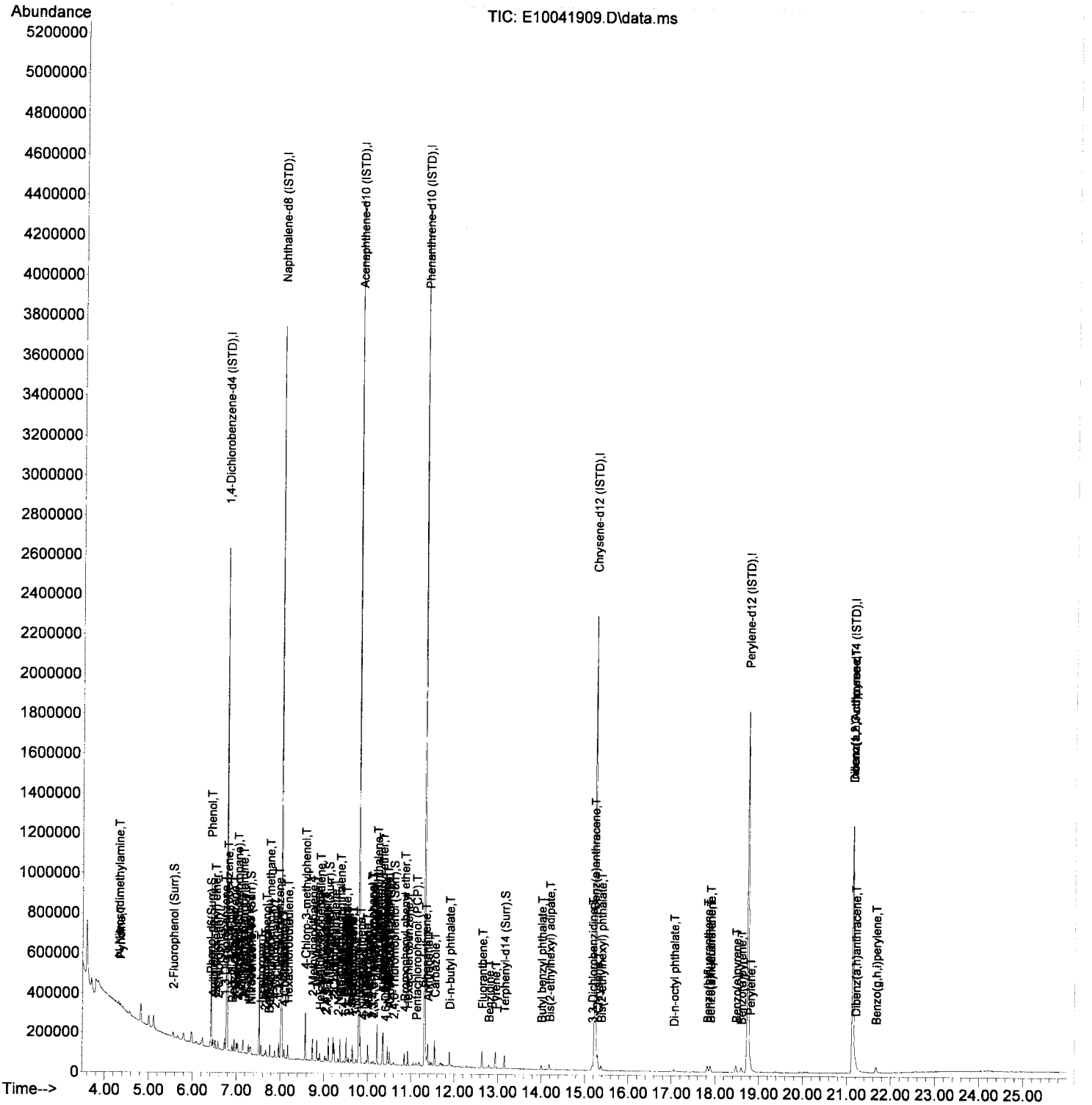
response 3800

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	42.82
229.90	79.80	84.34
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041909.D
Acq On : 4 Oct 2019 6:25 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:00 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041910.D
Acq On : 4 Oct 2019 7:01 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:06 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	511444	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	2017063	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	1023584	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1821812	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	1579497	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.752	264	1438219	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1002236	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	28046	87.96	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	35495	83.23	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	26887	70.31	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	81066	106.49	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	5164	95.79	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	71091	96.33	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.311	74	20557	85.18	ng/ml	87
3) Pyridine	4.343	79	30832	78.88	ng/ml	84
6) Phenol	6.418	94	37238	83.33	ng/ml	87
7) Aniline	6.461	93	45946	78.90	ng/ml	89
8) Bis(2-chloroethyl) ether	6.514	93	35827	98.08	ng/ml	87
9) 2-Chlorophenol	6.578	128	31578	94.36	ng/ml	91
10) 1,3-Dichlorobenzene	6.728	146	41378	108.17	ng/ml	93
11) 1,4-Dichlorobenzene	6.792	146	41829	108.22	ng/ml	97
12) Benzyl alcohol	6.899	108	8434	39.79	ng/ml	83
13) 1,2-Dichlorobenzene	6.942	146	40421	110.40	ng/ml	94
14) 2-Methylphenol	7.001	107	23055	82.84	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	43026	74.28	ng/ml	79
16) N-Nitrosodi-n-propylamine	7.151	70	21912	80.03	ng/ml	93
17) 3+4-Methylphenol	7.145	107	27949	79.50	ng/ml	92
18) Hexachloroethane	7.274	117	13649	95.66	ng/ml	85
20) Nitrobenzene	7.322	77	28798	77.98	ng/ml	85
22) Isophorone	7.552	82	57116	82.97	ng/ml	92
23) 2-Nitrophenol	7.643	139	9941	90.94	ng/ml	76
24) 2,4-Dimethylphenol	7.670	122	22605	74.89	ng/ml	90
25) Bis(2-chloroethoxy) me...	7.761	93	41515	95.85	ng/ml	99
26) Benzoic acid	7.734	105	152	398.88	ng/ml#	1
27) 2,4-Dichlorophenol	7.873	162	16620	71.06	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.964	180	33988	121.30	ng/ml	94
29) Naphthalene	8.044	128	113965	105.91	ng/ml	99
30) 4-Chloroaniline	8.087	127	35162	94.88	ng/ml	91
31) Hexachlorobutadiene	8.172	225	17073	124.75	ng/ml	98
32) 4-Chloro-3-methylphenol	8.563	107	9462	63.42	ng/ml#	13
33) 2-Methylnaphthalene	8.739	142	74750	110.44	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	71626	110.51	ng/ml	94
36) Hexachlorocyclopentadiene	8.905	237	12791	97.42	ng/ml	97
37) 2,4,6-Trichlorophenol	9.023	196	12211	92.73	ng/ml	98
38) 2,4,5-Trichlorophenol	9.055	196	10362	77.27	ng/ml	94
39) 1,1'-Biphenyl	9.205	154	91733	104.76	ng/ml	98
41) 2-Chloronaphthalene	9.231	162	68309	108.05	ng/ml	94
42) 2-Nitroaniline	9.322	138	10341	106.60	ng/ml	79
43) 2,6-Dimethylnaphthalene	9.365	156	64761	105.85	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041910.D
Acq On : 4 Oct 2019 7:01 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:06 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

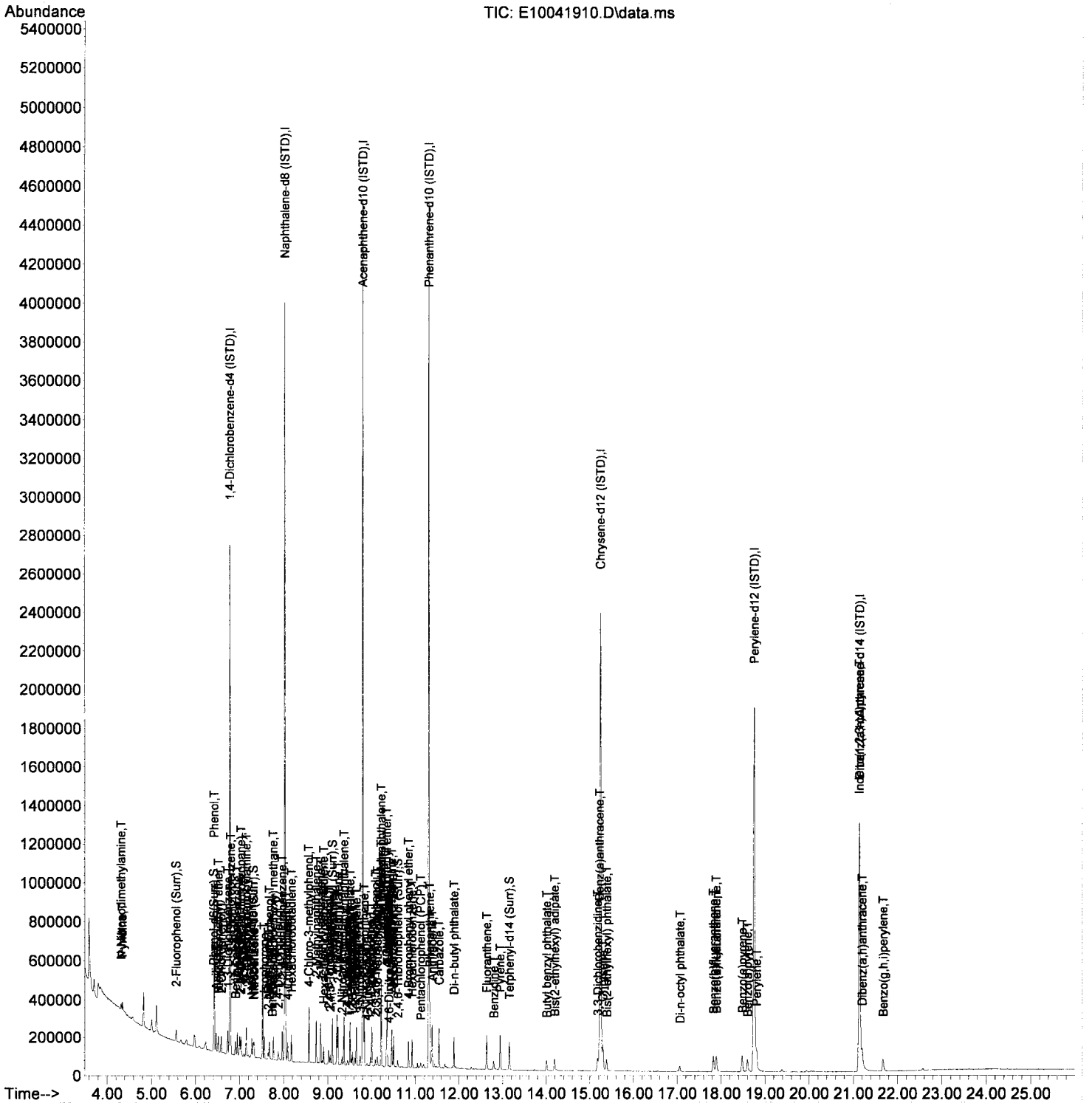
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.451	168	3408	117.10	ng/ml	95
45) Dimethyl phthalate	9.504	163	71145	108.30	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	4662	114.91	ng/ml	87
47) 2,6-Dinitrotoluene	9.563	165	9221	95.89	ng/ml	72
48) 1,2-Dinitrobenzene	9.622	168	3909	95.85	ng/ml#	69
49) Acenaphthylene	9.654	152	101020	101.32	ng/ml	99
50) 3-Nitroaniline	9.739	138	10432	92.27	ng/ml	87
51) Acenaphthene	9.830	153	71175	105.28	ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.895	139	2667	86.61	ng/ml	83
54) 2,4-Dinitrotoluene	9.975	165	8758	107.10	ng/ml	88
55) Dibenzofuran	10.002	168	94278	107.27	ng/ml	83
56) 2,3,5,6-Tetrachlorophenol	10.087	232	5917	86.79	ng/ml	88
57) 2,3,4,6-Tetrachlorophenol	10.130	232	8268	85.42	ng/ml	90
58) Diethyl phthalate	10.216	149	69029	105.14	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.216	170	60949	111.76	ng/ml	92
60) Fluorene	10.355	166	74915	106.45	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	34811	111.72	ng/ml	84
62) 4-Nitroaniline	10.355	138	9948	53.56	ng/ml#	73
63) 4,6-Dinitro-2-methylph...	10.397	198	789	171.37	ng/ml	98
65) N-Nitrosodiphenylamine	10.462	169	57306	99.57	ng/ml	97
66) Azobenzene (1,2-DPH)	10.504	77	61372	78.05	ng/ml	86
68) 4-Bromophenyl phenyl e...	10.841	248	18461	109.53	ng/ml	87
69) Hexachlorobenzene	10.922	284	22041	130.00	ng/ml	93
70) Pentachlorophenol (PCP)	11.119	266	3837	115.05	ng/ml	92
71) Phenanthrene	11.333	178	109865	109.87	ng/ml	99
72) Anthracene	11.387	178	99684	97.16	ng/ml	98
73) Carbazole	11.542	167	80889	84.21	ng/ml	96
74) Di-n-butyl phthalate	11.884	149	86172	71.69	ng/ml	99
75) Fluoranthene	12.633	202	95757	92.32	ng/ml	98
76) Benzidine	12.794	184	28892	154.66	ng/ml	98
77) Pyrene	12.938	202	99921	94.84	ng/ml	98
80) Butyl benzyl phthalate	14.008	149	20406	44.17	ng/ml	90
81) Bis(2-ethylhexyl) adipate	14.190	129	17948	39.04	ng/ml	96
82) 3,3-Dichlorobenzidine	15.174	252	29882	138.49	ng/ml	92
83) Benz(a)anthracene	15.217	228	78626	88.25	ng/ml	95
84) Chrysene	15.291	228	83415	98.28	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.382	149	27310	41.36	ng/ml	95
87) Di-n-octyl phthalate	17.056	149	25712	57.91	ng/ml	99
88) Benzo(b)fluoranthene	17.821	252	60853	80.09	ng/ml	97
89) Benzo(k)fluoranthene	17.885	252	64412	86.26	ng/ml	97
90) Benzo(b+k)fluoranthene	17.885	252	132577	166.14	ng/ml	97
91) Benzo(e)pyrene	18.479	252	66626	86.36	ng/ml	99
92) Benzo(a)pyrene	18.597	252	50160	72.71	ng/ml	97
93) Perylene	18.800	252	67790	85.97	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.132	276	57510	104.69	ng/ml	99
96) Dibenz(a,h)anthracene	21.196	278	53934	107.21	ng/ml	96
97) Benzo(g,h,i)perylene	21.672	276	55271	102.20	ng/ml	78

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041910.D
Acq On : 4 Oct 2019 7:01 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:06 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041911.D
Acq On : 4 Oct 2019 7:36 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:12 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	507831	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.022	136	1986664	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	996658	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1825037	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	1560035	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.752	264	1432505	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.137	292	986187	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	57278	180.92	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	73567	173.72	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	56736	149.42	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	159069	214.61	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.600	330	12498	209.56	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	142922	196.08	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.310	74	40134	167.48	ng/ml	78
3) Pyridine	4.343	79	62267	160.44	ng/ml	88
6) Phenol	6.418	94	78450	176.79	ng/ml	86
7) Aniline	6.461	93	91522	158.28	ng/ml	90
8) Bis(2-chloroethyl) ether	6.509	93	72477	199.83	ng/ml	87
9) 2-Chlorophenol	6.578	128	65081	195.86	ng/ml	89
10) 1,3-Dichlorobenzene	6.728	146	81926	215.69	ng/ml	93
11) 1,4-Dichlorobenzene	6.792	146	82460	214.86	ng/ml	97
12) Benzyl alcohol	6.899	108	23718	112.70	ng/ml	81
13) 1,2-Dichlorobenzene	6.942	146	79466	218.60	ng/ml	96
14) 2-Methylphenol	6.995	107	50332	182.14	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	83852	145.79	ng/ml	76
16) N-Nitrosodi-n-propylamine	7.151	70	44762	164.65	ng/ml	88
17) 3+4-Methylphenol	7.145	107	61100	175.04	ng/ml	93
18) Hexachloroethane	7.274	117	27779	196.07	ng/ml	81
20) Nitrobenzene	7.327	77	60655	165.40	ng/ml	85
22) Isophorone	7.552	82	120026	177.03	ng/ml	94
23) 2-Nitrophenol	7.643	139	22940	180.12	ng/ml	73
24) 2,4-Dimethylphenol	7.669	122	50095	168.51	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.760	93	83010	194.59	ng/ml	99
26) Benzoic acid	7.723	105	549	402.81	ng/ml#	71
27) 2,4-Dichlorophenol	7.878	162	36691	159.27	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.964	180	65463	237.20	ng/ml	95
29) Naphthalene	8.044	128	222558	210.00	ng/ml	98
30) 4-Chloroaniline	8.087	127	72252	197.96	ng/ml	91
31) Hexachlorobutadiene	8.172	225	33835	251.00	ng/ml	93
32) 4-Chloro-3-methylphenol	8.563	107	29264	142.03	ng/ml	80
33) 2-Methylnaphthalene	8.739	142	149509	224.27	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	140701	220.40	ng/ml	94
36) Hexachlorocyclopentadiene	8.905	237	27324	213.72	ng/ml	97
37) 2,4,6-Trichlorophenol	9.017	196	28269	204.36	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	24777	172.79	ng/ml	98
39) 1,1'-Biphenyl	9.204	154	179867	210.95	ng/ml	99
41) 2-Chloronaphthalene	9.231	162	135490	220.10	ng/ml	94
42) 2-Nitroaniline	9.327	138	24260	180.23	ng/ml#	70
43) 2,6-Dimethylnaphthalene	9.365	156	129936	218.12	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041911.D
Acq On : 4 Oct 2019 7:36 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:12 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

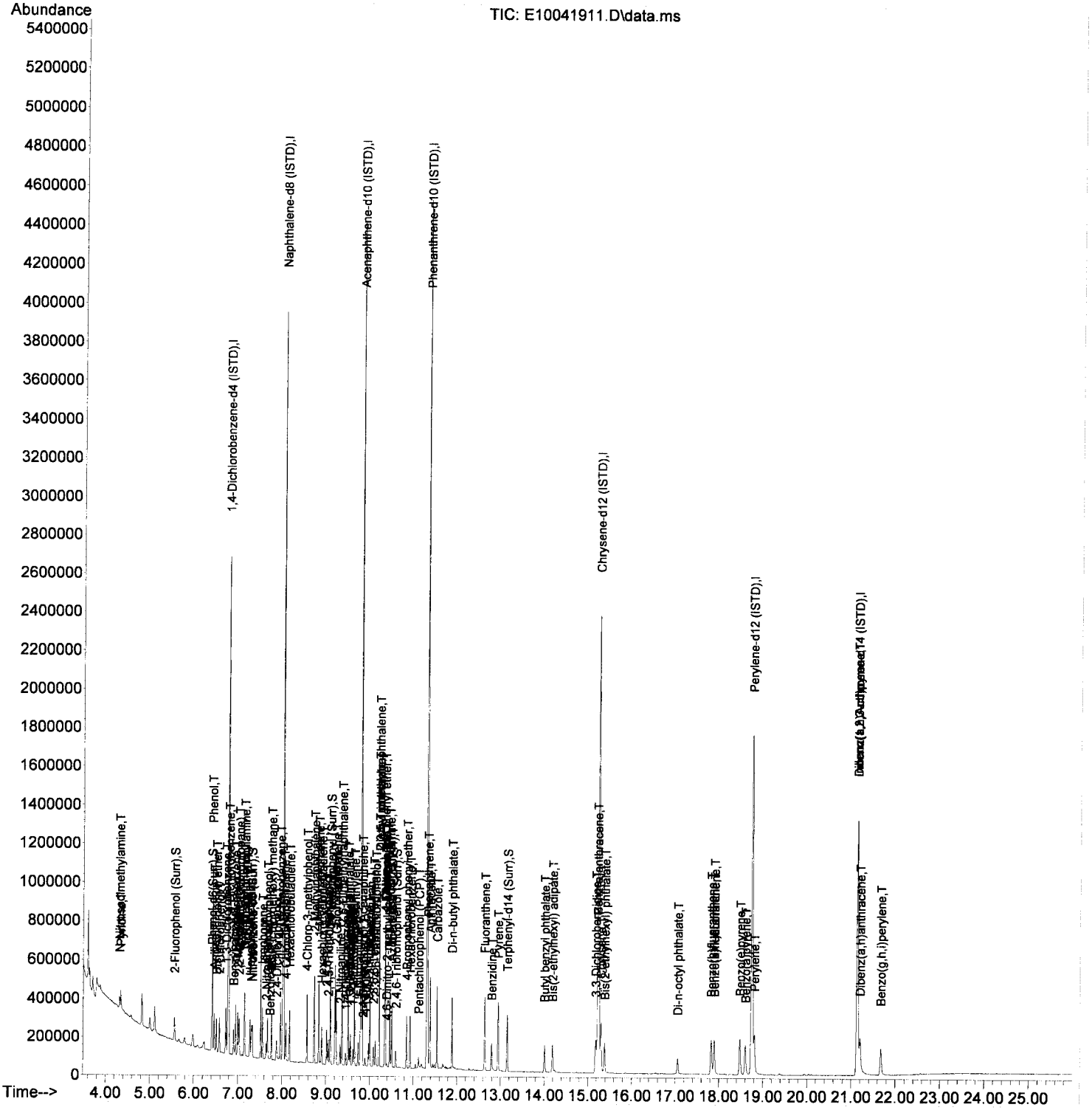
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.450	168	8401	187.65	ng/ml#	78
45) Dimethyl phthalate	9.504	163	143218	223.90	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	12358	196.76	ng/ml	82
47) 2,6-Dinitrotoluene	9.563	165	23552	199.62	ng/ml	72
48) 1,2-Dinitrobenzene	9.622	168	9733	190.23	ng/ml#	56
49) Acenaphthylene	9.654	152	203065	209.17	ng/ml	99
50) 3-Nitroaniline	9.739	138	25298	185.92	ng/ml	91
51) Acenaphthene	9.830	153	140818	213.92	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	899	202.90	ng/ml	83
53) 4-Nitrophenol	9.894	139	9294	140.64	ng/ml	81
54) 2,4-Dinitrotoluene	9.975	165	23349	186.90	ng/ml	84
55) Dibenzofuran	10.007	168	186970	218.48	ng/ml	85
56) 2,3,5,6-Tetrachlorophenol	10.087	232	16706	182.66	ng/ml	84
57) 2,3,4,6-Tetrachlorophenol	10.130	232	22228	194.03	ng/ml	88
58) Diethyl phthalate	10.215	149	142210	222.46	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.215	170	122364	230.44	ng/ml	91
60) Fluorene	10.354	166	151801	221.53	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.344	204	70469	232.26	ng/ml	84
62) 4-Nitroaniline	10.354	138	24143	133.49	ng/ml#	73
63) 4,6-Dinitro-2-methylph...	10.392	198	2993	205.11	ng/ml	83
65) N-Nitrosodiphenylamine	10.461	169	121105	210.05	ng/ml	97
66) Azobenzene (1,2-DPH)	10.504	77	130219	165.31	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.846	248	38061	225.42	ng/ml	83
69) Hexachlorobenzene	10.927	284	42868	252.39	ng/ml	89
70) Pentachlorophenol (PCP)	11.119	266	9274	178.33	ng/ml	99
71) Phenanthrene	11.333	178	220411	220.04	ng/ml	99
72) Anthracene	11.387	178	208541	202.91	ng/ml	98
73) Carbazole	11.542	167	172186	178.93	ng/ml	96
74) Di-n-butyl phthalate	11.884	149	195518	162.38	ng/ml	98
75) Fluoranthene	12.633	202	202844	195.22	ng/ml	99
76) Benzidine	12.793	184	86407	373.34	ng/ml	95
77) Pyrene	12.938	202	213905	202.66	ng/ml	98
80) Butyl benzyl phthalate	14.007	149	50677	111.06	ng/ml	88
81) Bis(2-ethylhexyl) adipate	14.189	129	44367	97.71	ng/ml	99
82) 3,3-Dichlorobenzidine	15.179	252	74543	316.58	ng/ml	94
83) Benz(a)anthracene	15.216	228	164883	187.38	ng/ml	97
84) Chrysene	15.297	228	167475	199.78	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.382	149	74532	114.29	ng/ml	93
87) Di-n-octyl phthalate	17.056	149	76592	111.98	ng/ml	95
88) Benzo(b)fluoranthene	17.821	252	143516	189.63	ng/ml	96
89) Benzo(k)fluoranthene	17.891	252	145408	195.50	ng/ml	99
90) Benzo(b+k)fluoranthene	17.891	252	301065	378.79	ng/ml	99
91) Benzo(e)pyrene	18.479	252	145534	189.40	ng/ml	97
92) Benzo(a)pyrene	18.602	252	120762	175.74	ng/ml	99
93) Perylene	18.805	252	136499	173.80	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.137	276	117055	216.55	ng/ml	96
96) Dibenz(a,h)anthracene	21.201	278	106912	215.97	ng/ml	99
97) Benzo(g,h,i)perylene	21.672	276	118110	221.94	ng/ml	78

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041911.D
Acq On : 4 Oct 2019 7:36 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:12 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041912.D
Acq On : 4 Oct 2019 8:12 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:19 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	527723	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.022	136	2042969	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	1038444	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1930632	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	1699410	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.757	264	1574860	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.148	292	1136524	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	160123	486.70	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	204774	465.32	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	162122	410.88	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	410324	531.31	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.600	330	41284	608.94	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	404342	509.24	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.310	74	108412	435.34	ng/ml	75
3) Pyridine	4.337	79	172844	428.57	ng/ml	86
6) Phenol	6.418	94	213183	462.32	ng/ml	86
7) Aniline	6.461	93	255241	424.77	ng/ml	90
8) Bis(2-chloroethyl) ether	6.509	93	186531	494.92	ng/ml	88
9) 2-Chlorophenol	6.578	128	183289	530.82	ng/ml	88
10) 1,3-Dichlorobenzene	6.728	146	213975	542.10	ng/ml	94
11) 1,4-Dichlorobenzene	6.792	146	215257	539.74	ng/ml	97
12) Benzyl alcohol	6.894	108	86813	396.96	ng/ml	84
13) 1,2-Dichlorobenzene	6.942	146	205542	544.09	ng/ml	96
14) 2-Methylphenol	6.995	107	139535	485.90	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	212748	355.96	ng/ml	76
16) N-Nitrosodi-n-propylamine	7.151	70	124566	440.93	ng/ml	88
17) 3+4-Methylphenol	7.145	107	176944	487.80	ng/ml	92
18) Hexachloroethane	7.274	117	72991	495.78	ng/ml	78
20) Nitrobenzene	7.327	77	167805	440.34	ng/ml	82
22) Isophorone	7.552	82	324343	465.19	ng/ml	93
23) 2-Nitrophenol	7.643	139	75675	518.53	ng/ml	73
24) 2,4-Dimethylphenol	7.669	122	138525	453.12	ng/ml	92
25) Bis(2-chloroethoxy) me...	7.760	93	215124	490.39	ng/ml	99
26) Benzoic acid	7.728	105	26893	648.94	ng/ml	84
27) 2,4-Dichlorophenol	7.878	162	111455	470.48	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.964	180	171276	603.51	ng/ml	93
29) Naphthalene	8.044	128	572938	525.71	ng/ml	100
30) 4-Chloroaniline	8.087	127	197823	527.06	ng/ml	91
31) Hexachlorobutadiene	8.172	225	85940	619.97	ng/ml	98
32) 4-Chloro-3-methylphenol	8.563	107	104626	424.95	ng/ml	96
33) 2-Methylnaphthalene	8.739	142	387564	565.35	ng/ml	96
34) 1-Methylnaphthalene	8.841	142	369273	562.50	ng/ml	96
36) Hexachlorocyclopentadiene	8.905	237	78041	585.86	ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	86866	572.81	ng/ml	97
38) 2,4,5-Trichlorophenol	9.055	196	82320	520.29	ng/ml	99
39) 1,1'-Biphenyl	9.204	154	470721	529.85	ng/ml	99
41) 2-Chloronaphthalene	9.231	162	347723	542.13	ng/ml	95
42) 2-Nitroaniline	9.322	138	87140	484.27	ng/ml#	76
43) 2,6-Dimethylnaphthalene	9.365	156	345848	557.21	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041912.D
Acq On : 4 Oct 2019 8:12 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:19 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

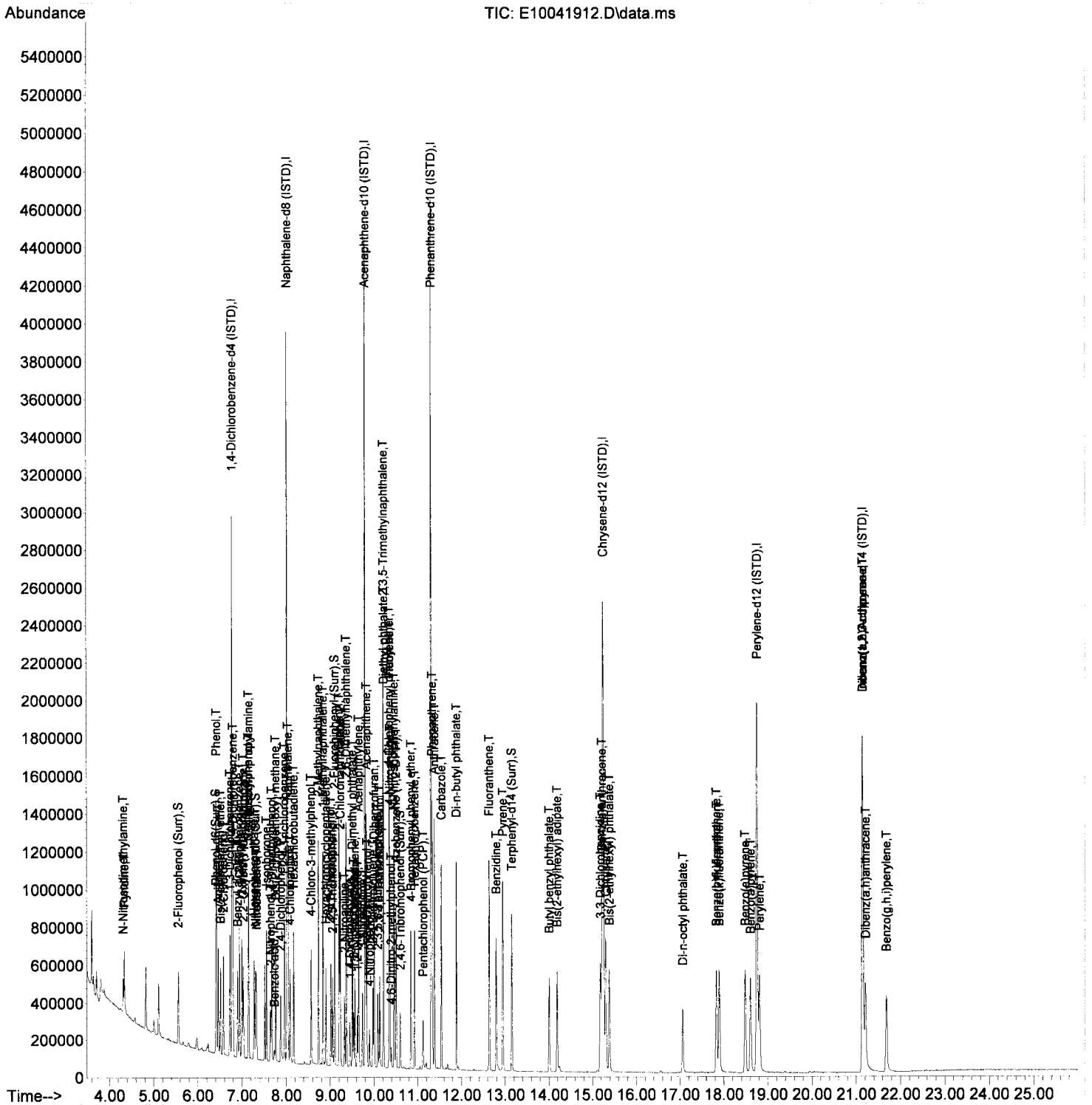
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.450	168	32734	497.87	ng/ml#	73
45) Dimethyl phthalate	9.504	163	380642	571.13	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	43939	503.72	ng/ml	83
47) 2,6-Dinitrotoluene	9.563	165	75915	545.54	ng/ml	75
48) 1,2-Dinitrobenzene	9.622	168	33137	535.66	ng/ml#	50
49) Acenaphthylene	9.654	152	547668	541.44	ng/ml	100
50) 3-Nitroaniline	9.739	138	78931	494.01	ng/ml	88
51) Acenaphthene	9.830	153	365966	533.58	ng/ml	100
52) 2,4-Dinitrophenol	9.841	184	7326	364.98	ng/ml	82
53) 4-Nitrophenol	9.894	139	43213	396.51	ng/ml	78
54) 2,4-Dinitrotoluene	9.975	165	85712	500.66	ng/ml	79
55) Dibenzofuran	10.007	168	489166	548.60	ng/ml	87
56) 2,3,5,6-Tetrachlorophenol	10.087	232	63643	561.09	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.130	232	72617	551.59	ng/ml	91
58) Diethyl phthalate	10.221	149	382550	574.34	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.215	170	323191	584.15	ng/ml	92
60) Fluorene	10.354	166	400731	561.28	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	185269	586.07	ng/ml	86
62) 4-Nitroaniline	10.360	138	80498	427.18	ng/ml#	70
63) 4,6-Dinitro-2-methylph...	10.392	198	17343	406.90	ng/ml	83
65) N-Nitrosodiphenylamine	10.461	169	329585	540.38	ng/ml	97
66) Azobenzene (1,2-DPH)	10.504	77	350688	420.83	ng/ml	89
68) 4-Bromophenyl phenyl e...	10.846	248	103922	581.83	ng/ml	83
69) Hexachlorobenzene	10.927	284	112908	628.40	ng/ml	87
70) Pentachlorophenol (PCP)	11.119	266	36572	467.31	ng/ml	99
71) Phenanthrene	11.333	178	584015	551.14	ng/ml	98
72) Anthracene	11.387	178	573617	527.59	ng/ml	98
73) Carbazole	11.542	167	489778	481.12	ng/ml	97
74) Di-n-butyl phthalate	11.884	149	583123	457.80	ng/ml	98
75) Fluoranthene	12.633	202	583303	530.68	ng/ml	98
76) Benzidine	12.793	184	391330	1287.86	ng/ml	97
77) Pyrene	12.943	202	601284	538.52	ng/ml	98
80) Butyl benzyl phthalate	14.008	149	189612	381.46	ng/ml	87
81) Bis(2-ethylhexyl) adipate	14.189	129	164582	332.73	ng/ml	99
82) 3,3-Dichlorobenzidine	15.179	252	254873	936.71	ng/ml	98
83) Benz(a)anthracene	15.216	228	478454	499.13	ng/ml	98
84) Chrysene	15.302	228	469901	514.58	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.382	149	277740	390.98	ng/ml	94
87) Di-n-octyl phthalate	17.062	149	317229	334.61	ng/ml	94
88) Benzo(b)fluoranthene	17.832	252	431745	518.90	ng/ml	95
89) Benzo(k)fluoranthene	17.891	252	437349	534.85	ng/ml	99
90) Benzo(b+k)fluoranthene	17.832	252	897169	1026.74	ng/ml	96
91) Benzo(e)pyrene	18.484	252	432984	512.56	ng/ml	97
92) Benzo(a)pyrene	18.607	252	392632	519.73	ng/ml	98
93) Perylene	18.811	252	381970	442.39	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.148	276	341703	548.53	ng/ml	98
96) Dibenz(a,h)anthracene	21.212	278	321382	563.35	ng/ml	97
97) Benzo(g,h,i)perylene	21.683	276	362385	590.88	ng/ml	79

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041912.D
Acq On : 4 Oct 2019 8:12 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:19 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041913.D
Acq On : 4 Oct 2019 8:47 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:25 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	506660	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.028	136	1967039	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.804	162	1014623	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1837465	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.248	240	1661969	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.757	264	1540594	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.148	292	1155569	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	307497	973.50	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	388281	919.00	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	311795	823.07	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	773027	1024.45	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	85478	1258.75	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	764312	984.28	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.305	74	202035	845.03	ng/ml	74
3) Pyridine	4.332	79	329582	851.17	ng/ml	85
6) Phenol	6.423	94	405185	915.23	ng/ml	85
7) Aniline	6.461	93	488538	846.82	ng/ml	90
8) Bis(2-chloroethyl) ether	6.514	93	345648	955.22	ng/ml	87
9) 2-Chlorophenol	6.578	128	346787	1046.07	ng/ml	88
10) 1,3-Dichlorobenzene	6.728	146	392859	1036.67	ng/ml	95
11) 1,4-Dichlorobenzene	6.792	146	399413	1043.13	ng/ml	98
12) Benzyl alcohol	6.899	108	184747	879.90	ng/ml	81
13) 1,2-Dichlorobenzene	6.942	146	379862	1047.34	ng/ml	96
14) 2-Methylphenol	7.001	107	267181	969.08	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	391014	681.43	ng/ml	75
16) N-Nitrosodi-n-propylamine	7.151	70	234779	865.61	ng/ml	88
17) 3+4-Methylphenol	7.145	107	343545	986.46	ng/ml	90
18) Hexachloroethane	7.274	117	137591	973.41	ng/ml	81
20) Nitrobenzene	7.327	77	319057	872.06	ng/ml	81
22) Isophorone	7.557	82	621683	926.08	ng/ml	89
23) 2-Nitrophenol	7.643	139	162997	1107.64	ng/ml	73
24) 2,4-Dimethylphenol	7.669	122	280775	953.88	ng/ml	92
25) Bis(2-chloroethoxy) me...	7.760	93	402923	953.94	ng/ml	99
26) Benzoic acid	7.755	105	136359	1608.46	ng/ml	87
27) 2,4-Dichlorophenol	7.878	162	233887	1025.42	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.969	180	318153	1164.31	ng/ml	94
29) Naphthalene	8.044	128	1059258	1009.45	ng/ml	98
30) 4-Chloroaniline	8.092	127	378701	1047.91	ng/ml	90
31) Hexachlorobutadiene	8.172	225	161397	1209.27	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	223278	898.55	ng/ml	91
33) 2-Methylnaphthalene	8.739	142	735677	1114.58	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	691132	1093.41	ng/ml	96
36) Hexachlorocyclopentadiene	8.905	237	155746	1196.64	ng/ml	99
37) 2,4,6-Trichlorophenol	9.023	196	177033	1156.27	ng/ml	100
38) 2,4,5-Trichlorophenol	9.055	196	174463	1094.54	ng/ml	99
39) 1,1'-Biphenyl	9.210	154	883007	1017.27	ng/ml	99
41) 2-Chloronaphthalene	9.231	162	656883	1048.18	ng/ml	96
42) 2-Nitroaniline	9.328	138	185496	975.61	ng/ml#	73
43) 2,6-Dimethylnaphthalene	9.370	156	651717	1074.66	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041913.D
Acq On : 4 Oct 2019 8:47 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:25 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

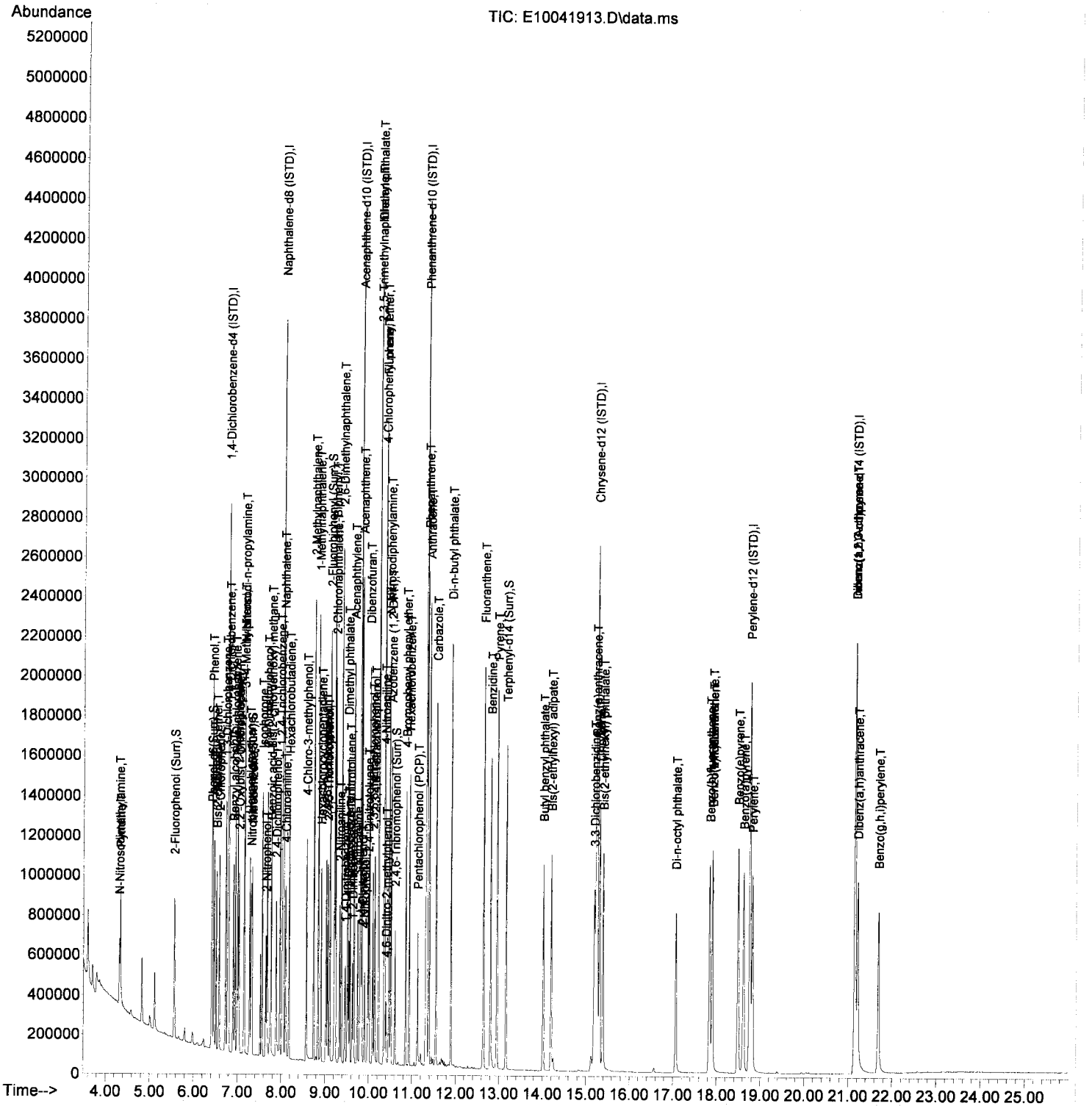
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	75456	1038.46	ng/ml#	66
45) Dimethyl phthalate	9.509	163	721638	1108.20	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	98229	1043.66	ng/ml	80
47) 2,6-Dinitrotoluene	9.568	165	155373	1091.03	ng/ml	68
48) 1,2-Dinitrobenzene	9.627	168	68481	1072.28	ng/ml#	45
49) Acenaphthylene	9.654	152	1041417	1053.74	ng/ml	99
50) 3-Nitroaniline	9.739	138	154242	945.66	ng/ml	87
51) Acenaphthene	9.836	153	685015	1022.21	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	24899	774.42	ng/ml	74
53) 4-Nitrophenol	9.900	139	101476	844.49	ng/ml	75
54) 2,4-Dinitrotoluene	9.980	165	183568	1011.32	ng/ml	75
55) Dibenzofuran	10.007	168	910158	1044.71	ng/ml	89
56) 2,3,5,6-Tetrachlorophenol	10.087	232	135406	1143.21	ng/ml	88
57) 2,3,4,6-Tetrachlorophenol	10.130	232	153454	1141.97	ng/ml	89
58) Diethyl phthalate	10.221	149	713712	1096.69	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.215	170	602745	1115.01	ng/ml	94
60) Fluorene	10.354	166	747764	1071.95	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.349	204	345601	1118.91	ng/ml	82
62) 4-Nitroaniline	10.365	138	153635	834.45	ng/ml#	69
63) 4,6-Dinitro-2-methylph...	10.397	198	52986	894.01	ng/ml	78
65) N-Nitrosodiphenylamine	10.467	169	612070	1054.42	ng/ml	97
66) Azobenzene (1,2-DPH)	10.510	77	647486	816.39	ng/ml	83
68) 4-Bromophenyl phenyl e...	10.847	248	193354	1137.42	ng/ml	85
69) Hexachlorobenzene	10.927	284	215409	1259.66	ng/ml	91
70) Pentachlorophenol (PCP)	11.119	266	86348	1025.50	ng/ml	96
71) Phenanthrene	11.339	178	1066036	1057.03	ng/ml	99
72) Anthracene	11.387	178	1057095	1021.58	ng/ml	99
73) Carbazole	11.547	167	875757	903.90	ng/ml	98
74) Di-n-butyl phthalate	11.884	149	1122901	926.27	ng/ml	99
75) Fluoranthene	12.638	202	1075278	1027.88	ng/ml	97
76) Benzidine	12.799	184	869800	2523.79	ng/ml	97
77) Pyrene	12.949	202	1098375	1033.60	ng/ml	98
80) Butyl benzyl phthalate	14.013	149	400707	824.29	ng/ml	83
81) Bis(2-ethylhexyl) adipate	14.195	129	341312	705.56	ng/ml	99
82) 3,3-Dichlorobenzidine	15.184	252	391978	1445.95	ng/ml	98
83) Benz(a)anthracene	15.222	228	913488	974.43	ng/ml	97
84) Chrysene	15.307	228	903520	1011.72	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.388	149	587540	845.73	ng/ml	95
87) Di-n-octyl phthalate	17.062	149	783965	786.59	ng/ml	94
88) Benzo(b)fluoranthene	17.837	252	869229	1067.94	ng/ml	96
89) Benzo(k)fluoranthene	17.901	252	872767	1091.09	ng/ml	99
90) Benzo(b+k)fluoranthene	17.901	252	1788418	2092.23	ng/ml	99
91) Benzo(e)pyrene	18.490	252	859150	1039.67	ng/ml	98
92) Benzo(a)pyrene	18.613	252	803083	1086.70	ng/ml	99
93) Perylene	18.811	252	763348	903.75	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.148	276	688131	1086.43	ng/ml	95
96) Dibenz(a,h)anthracene	21.212	278	652826	1125.47	ng/ml	97
97) Benzo(g,h,i)perylene	21.688	276	719140	1153.25	ng/ml	81

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041913.D
Acq On : 4 Oct 2019 8:47 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:25 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041914.D
Acq On : 4 Oct 2019 9:23 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:33 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	518143	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.028	136	2010994	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.804	162	1021934	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.317	188	1890550	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.254	240	1662177	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.763	264	1530598	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.159	292	1166509	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	657142	2034.34	ng/ml	0.00
5) Phenol-d6(Surr)	6.413	99	814521	1885.12	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.311	82	664083	1714.18	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.108	172	1571214	2067.35	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.606	330	190604	2525.75	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	1603082	2064.20	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.311	74	420896	1721.41	ng/ml	75
3) Pyridine	4.337	79	706761	1784.82	ng/ml	82
6) Phenol	6.429	94	826348	1825.19	ng/ml	86
7) Aniline	6.466	93	1062311	1800.58	ng/ml	90
8) Bis(2-chloroethyl) ether	6.514	93	699689	1890.79	ng/ml	87
9) 2-Chlorophenol	6.578	128	721205	2127.27	ng/ml	89
10) 1,3-Dichlorobenzene	6.728	146	809136	2087.81	ng/ml	95
11) 1,4-Dichlorobenzene	6.792	146	824470	2105.52	ng/ml	98
12) Benzyl alcohol	6.899	108	413335	1924.97	ng/ml	82
13) 1,2-Dichlorobenzene	6.947	146	787423	2122.94	ng/ml	95
14) 2-Methylphenol	7.001	107	556507	1973.74	ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	785609	1338.76	ng/ml	76
16) N-Nitrosodi-n-propylamine	7.156	70	474593	1711.00	ng/ml	86
17) 3+4-Methylphenol	7.151	107	711182	1996.85	ng/ml	93
18) Hexachloroethane	7.274	117	288591	1996.43	ng/ml	82
20) Nitrobenzene	7.327	77	667008	1782.68	ng/ml	82
22) Isophorone	7.557	82	1271667	1852.90	ng/ml	91
23) 2-Nitrophenol	7.643	139	346048	2193.06	ng/ml	75
24) 2,4-Dimethylphenol	7.675	122	589089	1957.57	ng/ml	91
25) Bis(2-chloroethoxy) me...	7.766	93	816477	1890.80	ng/ml	98
26) Benzoic acid	7.782	105	418226	3504.31	ng/ml	87
27) 2,4-Dichlorophenol	7.883	162	520983	2234.19	ng/ml	95
28) 1,2,4-Trichlorobenzene	7.969	180	653096	2337.83	ng/ml	94
29) Naphthalene	8.049	128	2160367	2013.79	ng/ml	99
30) 4-Chloroaniline	8.092	127	832115	2252.24	ng/ml	90
31) Hexachlorobutadiene	8.172	225	332394	2436.03	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	504006	1902.33	ng/ml	90
33) 2-Methylnaphthalene	8.739	142	1488788	2206.27	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	1413991	2188.12	ng/ml	96
36) Hexachlorocyclopentadiene	8.910	237	341473	2604.87	ng/ml	97
37) 2,4,6-Trichlorophenol	9.023	196	382753	2359.70	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	388199	2312.45	ng/ml	99
39) 1,1'-Biphenyl	9.210	154	1781512	2037.71	ng/ml	99
41) 2-Chloronaphthalene	9.237	162	1337046	2118.24	ng/ml	95
42) 2-Nitroaniline	9.328	138	417290	2040.37	ng/ml#	74
43) 2,6-Dimethylnaphthalene	9.370	156	1313186	2149.92	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041914.D
Acq On : 4 Oct 2019 9:23 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:33 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

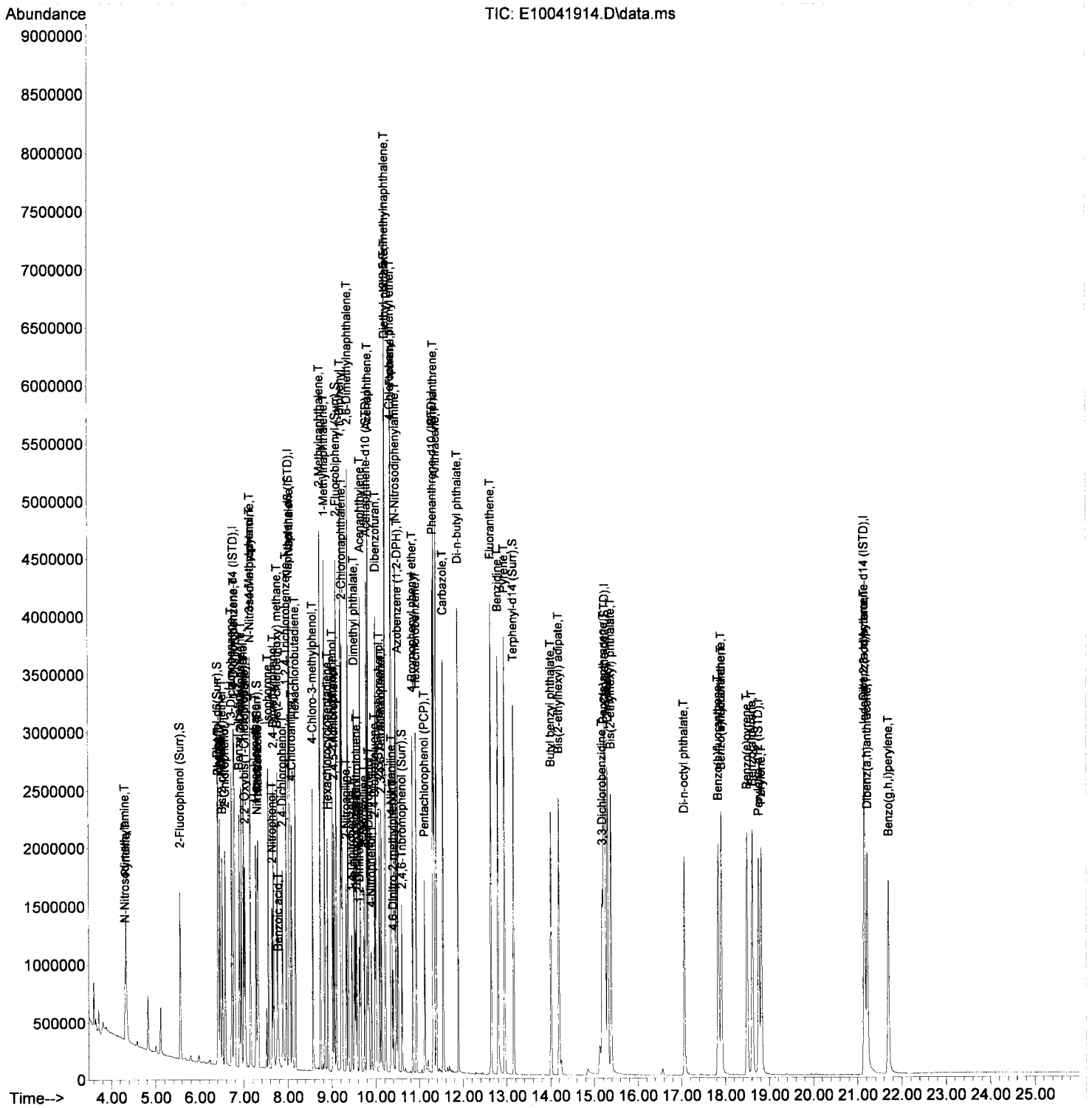
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	185665	2242.36	ng/ml#	71
45) Dimethyl phthalate	9.509	163	1472377	2244.91	ng/ml	99
46) 1,3-Dinitrobenzene	9.542	168	224382	2181.78	ng/ml	78
47) 2,6-Dinitrotoluene	9.574	165	337376	2241.83	ng/ml	65
48) 1,2-Dinitrobenzene	9.632	168	153669	2246.44	ng/ml#	44
49) Acenaphthylene	9.659	152	2118554	2128.28	ng/ml	100
50) 3-Nitroaniline	9.745	138	329679	1916.39	ng/ml	86
51) Acenaphthene	9.836	153	1387214	2055.25	ng/ml	100
52) 2,4-Dinitrophenol	9.846	184	83718	1821.65	ng/ml	76
53) 4-Nitrophenol	9.905	139	247731	1868.34	ng/ml	72
54) 2,4-Dinitrotoluene	9.980	165	418981	2149.93	ng/ml	77
55) Dibenzofuran	10.007	168	1864498	2124.83	ng/ml	90
56) 2,3,5,6-Tetrachlorophenol	10.087	232	315081	2426.73	ng/ml	89
57) 2,3,4,6-Tetrachlorophenol	10.135	232	331265	2324.57	ng/ml	87
58) Diethyl phthalate	10.226	149	1439136	2195.55	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.221	170	1225454	2250.74	ng/ml	93
60) Fluorene	10.360	166	1513373	2153.95	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.349	204	708720	2278.13	ng/ml	84
62) 4-Nitroaniline	10.371	138	342465	1846.75	ng/ml#	71
63) 4,6-Dinitro-2-methylph...	10.403	198	153756	2050.44	ng/ml	75
65) N-Nitrosodiphenylamine	10.467	169	1263750	2115.95	ng/ml	98
66) Azobenzene (1,2-DPH)	10.510	77	1314353	1610.68	ng/ml	84
68) 4-Bromophenyl phenyl e...	10.847	248	410206	2345.31	ng/ml	86
69) Hexachlorobenzene	10.927	284	444455	2526.09	ng/ml	93
70) Pentachlorophenol (PCP)	11.119	266	213263	2222.43	ng/ml	95
71) Phenanthrene	11.339	178	2170899	2092.12	ng/ml	99
72) Anthracene	11.392	178	2189904	2056.91	ng/ml	99
73) Carbazole	11.547	167	1730389	1735.84	ng/ml	98
74) Di-n-butyl phthalate	11.884	149	2351449	1885.22	ng/ml	98
75) Fluoranthene	12.638	202	2238787	2080.01	ng/ml	98
76) Benzidine	12.799	184	2039254	4580.88	ng/ml	98
77) Pyrene	12.949	202	2264877	2071.46	ng/ml	99
80) Butyl benzyl phthalate	14.013	149	916105	1884.28	ng/ml	83
81) Bis(2-ethylhexyl) adipate	14.195	129	797052	1647.47	ng/ml	99
82) 3,3-Dichlorobenzidine	15.190	252	711403	2549.48	ng/ml	97
83) Benz(a)anthracene	15.227	228	1882167	2007.49	ng/ml	97
84) Chrysene	15.313	228	1854667	2076.50	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.388	149	1327182	1910.16	ng/ml	93
87) Di-n-octyl phthalate	17.062	149	1939882	1847.21	ng/ml	94
88) Benzo(b)fluoranthene	17.843	252	1820276	2251.00	ng/ml	96
89) Benzo(k)fluoranthene	17.912	252	1801819	2267.25	ng/ml	98
90) Benzo(b+k)fluoranthene	17.912	252	3705765	4363.61	ng/ml	98
91) Benzo(e)pyrene	18.500	252	1776810	2164.18	ng/ml	98
92) Benzo(a)pyrene	18.618	252	1692741	2305.50	ng/ml	99
93) Perylene	18.821	252	1526620	1819.21	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.164	276	1413571	2210.84	ng/ml	97
96) Dibenz(a,h)anthracene	21.223	278	1423177	2430.55	ng/ml	98
97) Benzo(g,h,i)perylene	21.704	276	1489460	2366.18	ng/ml	79

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041914.D
Acq On : 4 Oct 2019 9:23 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:33 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041915.D
Acq On : 4 Oct 2019 9:58 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:39 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.782	152	560948	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.028	136	2200532	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.804	162	1137032	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.317	188	2095223	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.270	240	1882758	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.779	264	1751292	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.180	292	1392390	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	1451261	4149.89	ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	1764056	3771.16	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.316	82	1458731	3478.05	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.108	172	3327954	3935.55	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.611	330	451281	4791.97	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.168	244	3589937	4080.98	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.311	74	927621	3504.36	ng/ml	73
3) Pyridine	4.332	79	1559654	3638.12	ng/ml	83
6) Phenol	6.434	94	1807482	3687.62	ng/ml	87
7) Aniline	6.471	93	2329235	3646.70	ng/ml	89
8) Bis(2-chloroethyl) ether	6.520	93	1480188	3694.72	ng/ml	86
9) 2-Chlorophenol	6.584	128	1594926	4345.41	ng/ml	86
10) 1,3-Dichlorobenzene	6.728	146	1748864	4168.25	ng/ml	95
11) 1,4-Dichlorobenzene	6.798	146	1774145	4185.04	ng/ml	97
12) Benzyl alcohol	6.905	108	937894	4034.63	ng/ml	81
13) 1,2-Dichlorobenzene	6.947	146	1689391	4207.13	ng/ml	95
14) 2-Methylphenol	7.006	107	1212038	3970.67	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.033	45	1614902	2541.96	ng/ml	70
16) N-Nitrosodi-n-propylamine	7.167	70	996850	3319.60	ng/ml	84
17) 3+4-Methylphenol	7.156	107	1511738	3920.74	ng/ml	92
18) Hexachloroethane	7.274	117	622545	3978.05	ng/ml	81
20) Nitrobenzene	7.333	77	1420051	3505.70	ng/ml	81
22) Isophorone	7.568	82	2770059	3688.51	ng/ml	90
23) 2-Nitrophenol	7.648	139	809872	4352.51	ng/ml	73
24) 2,4-Dimethylphenol	7.680	122	1298270	3942.61	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.771	93	1730982	3663.34	ng/ml	99
26) Benzoic acid	7.680	105	42864	765.42	ng/ml#	1
27) 2,4-Dichlorophenol	7.889	162	1211553	4748.13	ng/ml	95
28) 1,2,4-Trichlorobenzene	7.969	180	1403311	4590.64	ng/ml	94
29) Naphthalene	8.049	128	4507073	3839.41	ng/ml	100
30) 4-Chloroaniline	8.097	127	1861865	4605.35	ng/ml	89
31) Hexachlorobutadiene	8.178	225	724343	4851.28	ng/ml	98
32) 4-Chloro-3-methylphenol	8.573	107	1165524	3806.22	ng/ml	88
33) 2-Methylnaphthalene	8.745	142	3109447	4211.06	ng/ml	96
34) 1-Methylnaphthalene	8.846	142	2960501	4186.70	ng/ml	96
36) Hexachlorocyclopentadiene	8.910	237	754777	5174.86	ng/ml	98
37) 2,4,6-Trichlorophenol	9.028	196	890869	4554.63	ng/ml	99
38) 2,4,5-Trichlorophenol	9.060	196	890092	4453.45	ng/ml	99
39) 1,1'-Biphenyl	9.215	154	3690641	3794.07	ng/ml	99
41) 2-Chloronaphthalene	9.242	162	2841238	4045.63	ng/ml	95
42) 2-Nitroaniline	9.338	138	979056	3990.71	ng/ml#	69
43) 2,6-Dimethylnaphthalene	9.376	156	2752650	4050.38	ng/ml	97

See NJ

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041915.D
Acq On : 4 Oct 2019 9:58 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:39 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

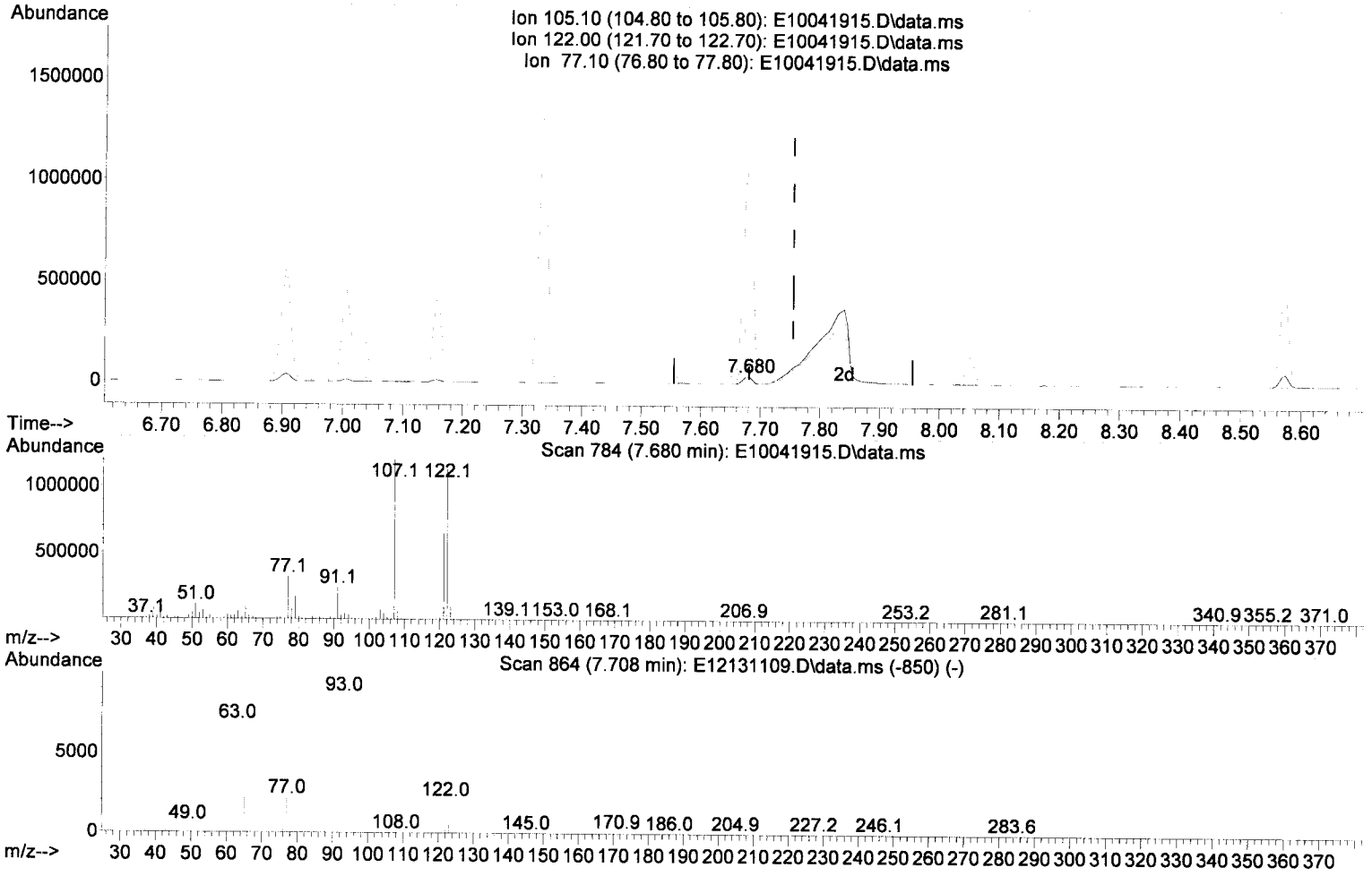
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.467	168	460062	4312.81	ng/ml#	62
45) Dimethyl phthalate	9.525	163	3162539	4333.76	ng/ml	100
46) 1,3-Dinitrobenzene	9.552	168	535847	4260.07	ng/ml	78
47) 2,6-Dinitrotoluene	9.579	165	771915	4325.93	ng/ml	68
48) 1,2-Dinitrobenzene	9.643	168	359718	4353.53	ng/ml#	42
49) Acenaphthylene	9.665	152	4515302	4076.87	ng/ml	98
50) 3-Nitroaniline	9.755	138	790431	3867.03	ng/ml	85
51) Acenaphthene	9.841	153	2913966	3880.22	ng/ml	99
52) 2,4-Dinitrophenol	9.857	184	299306	4036.48	ng/ml	71
53) 4-Nitrophenol	9.916	139	608117	3739.93	ng/ml	74
54) 2,4-Dinitrotoluene	9.996	165	980391	4226.40	ng/ml	72
55) Dibenzofuran	10.012	168	3964445	4060.64	ng/ml	91
56) 2,3,5,6-Tetrachlorophenol	10.092	232	746394	4615.30	ng/ml	88
57) 2,3,4,6-Tetrachlorophenol	10.135	232	788151	4592.34	ng/ml	90
58) Diethyl phthalate	10.232	149	2958940	4057.21	ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.226	170	2479787	4093.48	ng/ml	95
60) Fluorene	10.365	166	3137669	4013.73	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.355	204	1499613	4332.44	ng/ml	85
62) 4-Nitroaniline	10.387	138	810154	3926.53	ng/ml#	70
63) 4,6-Dinitro-2-methylph...	10.413	198	450040	4285.77	ng/ml	73
65) N-Nitrosodiphenylamine	10.478	169	2712874	4098.57	ng/ml	98
66) Azobenzene (1,2-DPH)	10.515	77	2753910	3045.13	ng/ml	83
68) 4-Bromophenyl phenyl e...	10.852	248	908392	4686.30	ng/ml	85
69) Hexachlorobenzene	10.938	284	984819	5050.52	ng/ml	89
70) Pentachlorophenol (PCP)	11.125	266	542808	4495.74	ng/ml	97
71) Phenanthrene	11.344	178	4579293	3982.02	ng/ml	99
72) Anthracene	11.398	178	4588417	3888.75	ng/ml	100
73) Carbazole	11.553	167	3941923	3568.06	ng/ml	98
74) Di-n-butyl phthalate	11.890	149	4944803	3577.12	ng/ml	99
75) Fluoranthene	12.649	202	4841071	4058.38	ng/ml	98
76) Benzidine	12.815	184	5203522	7941.56	ng/ml	98
77) Pyrene	12.959	202	4920310	4060.53	ng/ml	99
80) Butyl benzyl phthalate	14.029	149	2157635	3917.96	ng/ml	79
81) Bis(2-ethylhexyl) adipate	14.206	129	1882383	3434.96	ng/ml	99
82) 3,3-Dichlorobenzidine	15.216	252	2582773	7405.02	ng/ml	98
83) Benz(a)anthracene	15.249	228	4272477	4023.06	ng/ml	98
84) Chrysene	15.334	228	4165761	4117.59	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.398	149	3055779	3882.79	ng/ml	93
87) Di-n-octyl phthalate	17.078	149	4791540	3722.72	ng/ml	94
88) Benzo(b)fluoranthene	17.869	252	4246184	4589.23	ng/ml	96
89) Benzo(k)fluoranthene	17.939	252	4100039	4508.99	ng/ml	98
90) Benzo(b+k)fluoranthene	17.939	252	8511793	8759.76	ng/ml	98
91) Benzo(e)pyrene	18.527	252	4073261	4336.09	ng/ml	98
92) Benzo(a)pyrene	18.650	252	3867800	4604.06	ng/ml	99
93) Perylene	18.854	252	3461731	3605.36	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.196	276	3507297	4595.56	ng/ml	95
96) Dibenz(a,h)anthracene	21.255	278	3367743	4818.50	ng/ml	95
97) Benzo(g,h,i)perylene	21.736	276	3501663	4660.38	ng/ml	78

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

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041915.D
Acq On : 4 Oct 2019 9:58 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:39 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041915.D\data.ms

(26) Benzoic acid (T)

7.680min (-0.075) 765.42 ng/ml

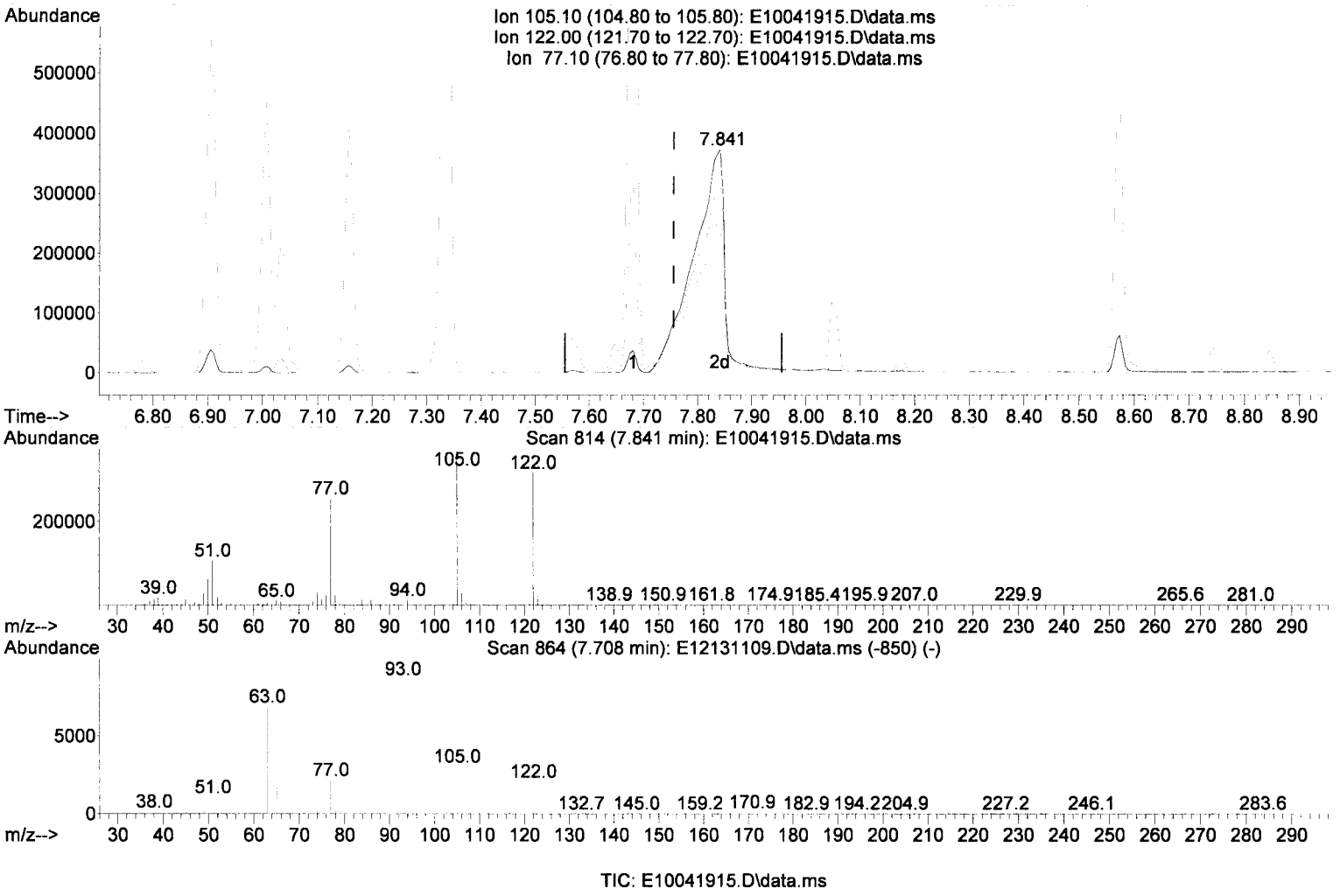
response 42864

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	3014.81#
77.10	85.50	868.38#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041915.D
Acq On : 4 Oct 2019 9:58 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:39 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041915.D\data.ms

(26) Benzoic acid (T)

7.841min (+ 0.086) 7970.30 ng/ml m

response 1496140

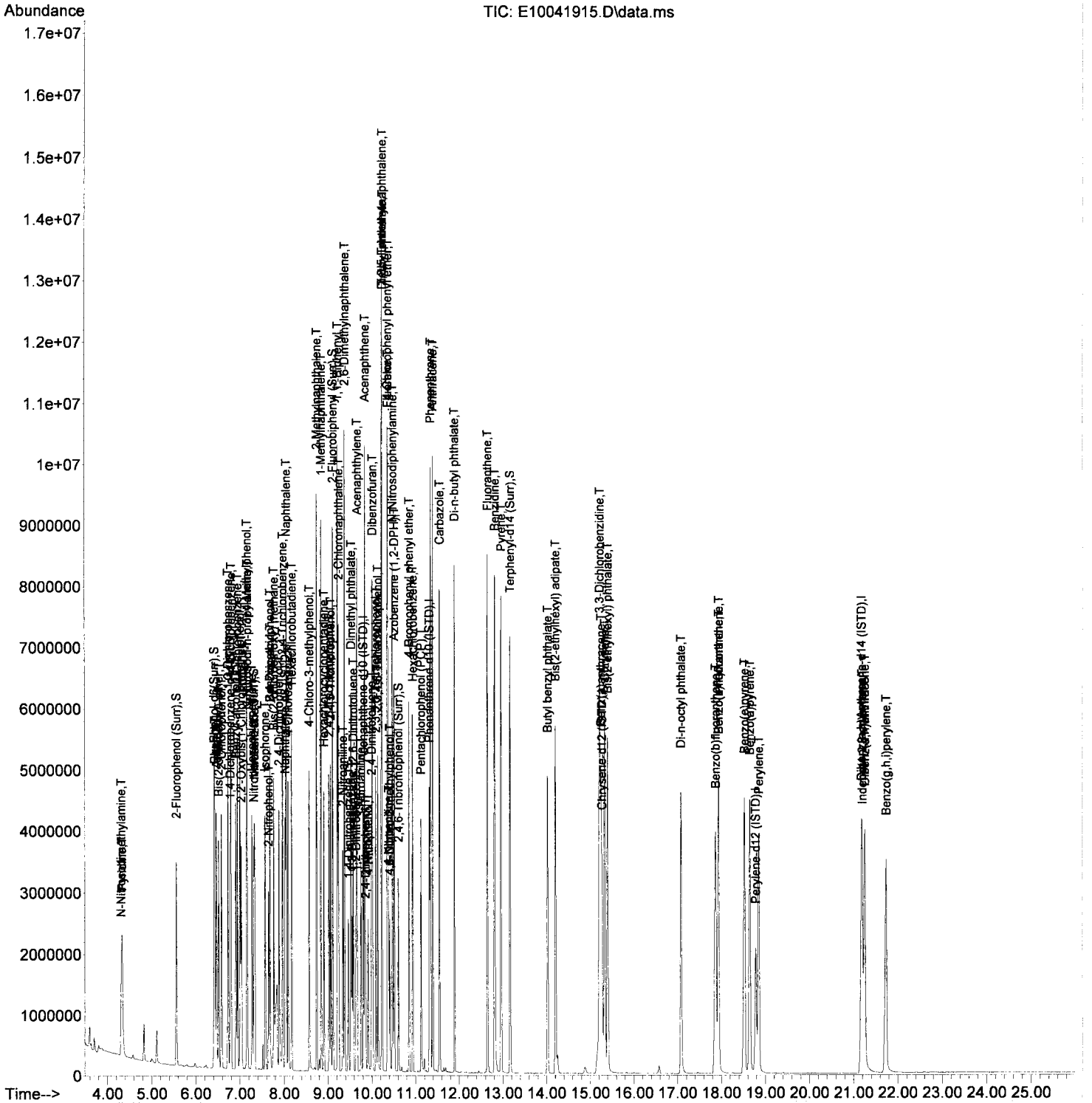
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	84.22
77.10	85.50	68.09
0.00	0.00	0.00

10/7/19

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041915.D
Acq On : 4 Oct 2019 9:58 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:39 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041916.D
Acq On : 4 Oct 2019 10:34 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.782	152	515459	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.033	136	2022063	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.809	162	1040520	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.317	188	1942776	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.275	240	1692898	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.784	264	1571994	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	21.185	292	1261895	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	1992416	6200.12	ng/ml	0.00
5) Phenol-d6(Surr)	6.423	99	2387986	5555.50	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.316	82	1960759	5087.61	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.114	172	4402576	5689.29	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.611	330	626471	6594.11	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.168	244	4717662	5964.42	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.316	74	1248946	5134.64	ng/ml	72
3) Pyridine	4.337	79	2136715	5424.05	ng/ml	83
6) Phenol	6.439	94	2436154	5408.86	ng/ml	89
7) Aniline	6.471	93	3211659	5471.98	ng/ml	90
8) Bis(2-chloroethyl) ether	6.525	93	1897268	5153.73	ng/ml	85
9) 2-Chlorophenol	6.584	128	2165580	6420.86	ng/ml	86
10) 1,3-Dichlorobenzene	6.728	146	2360155	6121.62	ng/ml	95
11) 1,4-Dichlorobenzene	6.798	146	2385066	6122.66	ng/ml	97
12) Benzyl alcohol	6.910	108	1255964	5879.70	ng/ml	81
13) 1,2-Dichlorobenzene	6.947	146	2258928	6121.91	ng/ml	96
14) 2-Methylphenol	7.012	107	1606957	5729.01	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.033	45	2103226	3602.78	ng/ml	69
16) N-Nitrosodi-n-propylamine	7.172	70	1325077	4802.04	ng/ml	82
17) 3+4-Methylphenol	7.161	107	1988333	5611.89	ng/ml	92
18) Hexachloroethane	7.279	117	842435	5858.20	ng/ml#	79
20) Nitrobenzene	7.338	77	1907412	5124.41	ng/ml	78
22) Isophorone	7.573	82	3752692	5437.99	ng/ml	89
23) 2-Nitrophenol	7.648	139	1126957	6220.18	ng/ml	74
24) 2,4-Dimethylphenol	7.685	122	1632461	5395.04	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.771	93	2295556	5286.95	ng/ml	99
26) Benzoic acid	7.685	105	57021	922.23	ng/ml#	1
27) 2,4-Dichlorophenol	7.889	162	1665684	7104.04	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.974	180	1887758	6720.46	ng/ml	94
29) Naphthalene	8.055	128	5893885	5463.93	ng/ml	100
30) 4-Chloroaniline	8.097	127	2487773	6696.65	ng/ml	90
31) Hexachlorobutadiene	8.178	225	988880	7207.57	ng/ml	98
32) 4-Chloro-3-methylphenol	8.573	107	1576804	5384.56	ng/ml	89
33) 2-Methylnaphthalene	8.745	142	4079274	6012.07	ng/ml	96
34) 1-Methylnaphthalene	8.846	142	3865478	5948.99	ng/ml	97
36) Hexachlorocyclopentadiene	8.910	237	1031740	7729.88	ng/ml	97
37) 2,4,6-Trichlorophenol	9.028	196	1201411	6323.97	ng/ml	99
38) 2,4,5-Trichlorophenol	9.065	196	1218504	6310.76	ng/ml	98
39) 1,1'-Biphenyl	9.215	154	4841602	5438.94	ng/ml	98
41) 2-Chloronaphthalene	9.242	162	3773961	5872.16	ng/ml	97
42) 2-Nitroaniline	9.344	138	1344772	5671.58	ng/ml#	67
43) 2,6-Dimethylnaphthalene	9.376	156	3628050	5833.66	ng/ml	97

see MJ

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041916.D
Acq On : 4 Oct 2019 10:34 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

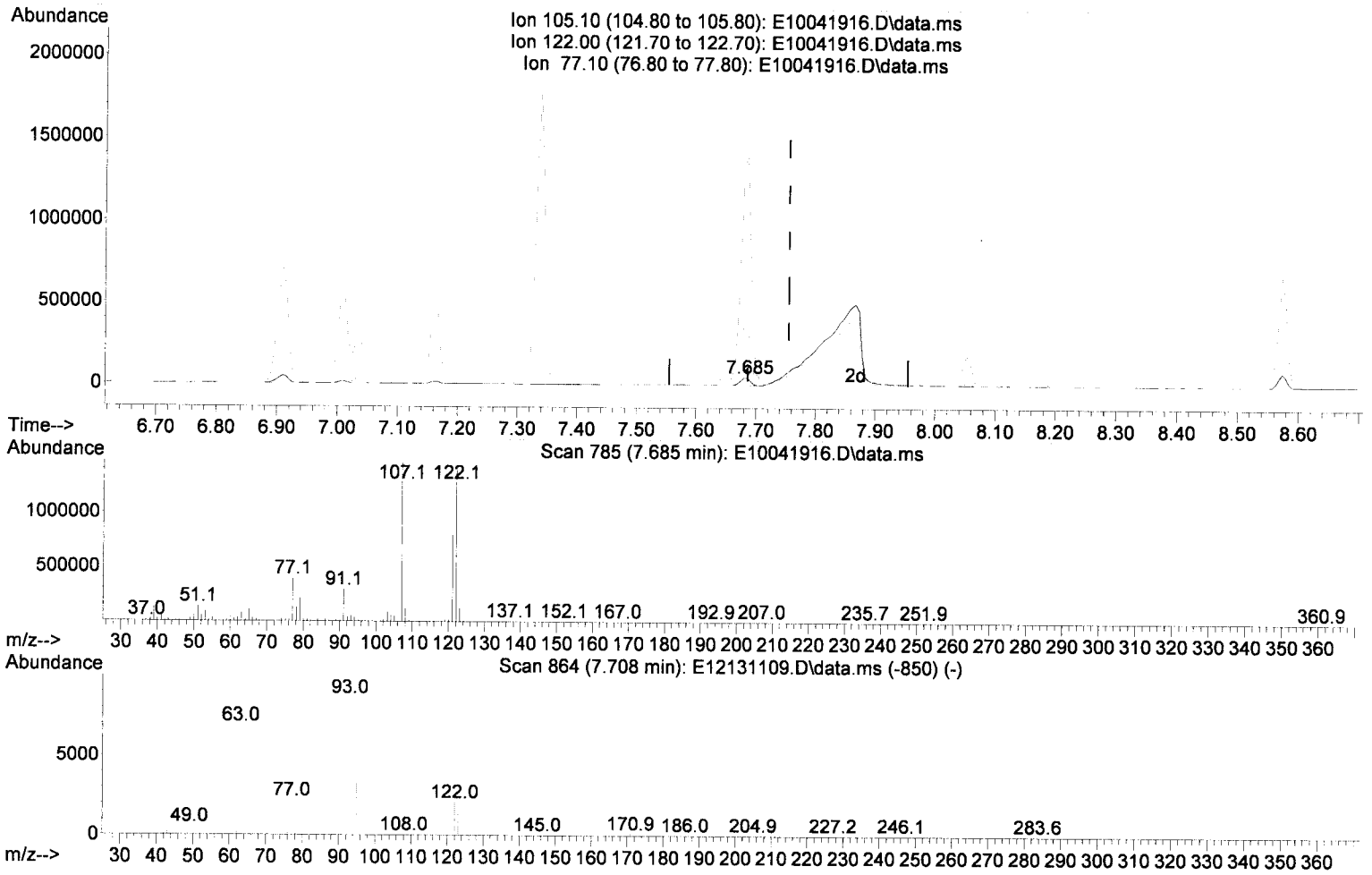
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.467	168	659408	6083.08	ng/ml#	66
45) Dimethyl phthalate	9.531	163	4213811	6309.96	ng/ml	99
46) 1,3-Dinitrobenzene	9.558	168	752865	6098.16	ng/ml	78
47) 2,6-Dinitrotoluene	9.584	165	1059908	6174.49	ng/ml	66
48) 1,2-Dinitrobenzene	9.648	168	495426	6157.81	ng/ml#	43
49) Acenaphthylene	9.664	152	5901815	5823.01	ng/ml	98
50) 3-Nitroaniline	9.761	138	1092459	5556.13	ng/ml	85
51) Acenaphthene	9.846	153	3821450	5560.61	ng/ml	100
52) 2,4-Dinitrophenol	9.862	184	470587	5694.57	ng/ml	71
53) 4-Nitrophenol	9.921	139	849774	5334.35	ng/ml	75
54) 2,4-Dinitrotoluene	10.001	165	1341937	6023.77	ng/ml	72
55) Dibenzofuran	10.018	168	5216202	5838.32	ng/ml	91
56) 2,3,5,6-Tetrachlorophenol	10.098	232	1036485	6446.56	ng/ml	86
57) 2,3,4,6-Tetrachlorophenol	10.141	232	1067964	6420.04	ng/ml	88
58) Diethyl phthalate	10.237	149	3872184	5801.89	ng/ml	93
59) 2,3,5-Trimethylnaphtha...	10.226	170	3206391	5783.84	ng/ml	98
60) Fluorene	10.371	166	4092225	5720.35	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.354	204	1993228	6292.64	ng/ml	86
62) 4-Nitroaniline	10.392	138	1122461	5944.76	ng/ml#	71
63) 4,6-Dinitro-2-methylph...	10.419	198	664883	6036.87	ng/ml	75
65) N-Nitrosodiphenylamine	10.477	169	3599585	5864.93	ng/ml	98
66) Azobenzene (1,2-DPH)	10.520	77	3582406	4272.07	ng/ml	76
68) 4-Bromophenyl phenyl e...	10.852	248	1234455	6868.15	ng/ml	86
69) Hexachlorobenzene	10.937	284	1332481	7369.67	ng/ml	91
70) Pentachlorophenol (PCP)	11.125	266	757280	6235.05	ng/ml	97
71) Phenanthrene	11.349	178	6004728	5631.26	ng/ml	98
72) Anthracene	11.403	178	6111558	5586.07	ng/ml	100
73) Carbazole	11.553	167	5301851	5175.58	ng/ml	99
74) Di-n-butyl phthalate	11.895	149	6445897	5028.93	ng/ml	98
75) Fluoranthene	12.649	202	6381366	5769.42	ng/ml	98
76) Benzidine	12.820	184	6970684	9981.53	ng/ml	97
77) Pyrene	12.965	202	6491682	5777.70	ng/ml	100
80) Butyl benzyl phthalate	14.029	149	2910270	5877.32	ng/ml	81
81) Bis(2-ethylhexyl) adipate	14.211	129	2534925	5144.49	ng/ml	98
82) 3,3-Dichlorobenzidine	15.227	252	3791453	11278.25	ng/ml	97
83) Benz(a)anthracene	15.248	228	5663935	5931.42	ng/ml	99
84) Chrysene	15.339	228	5501649	6047.92	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.404	149	4103652	5799.05	ng/ml	93
87) Di-n-octyl phthalate	17.083	149	6640912	5441.32	ng/ml	93
88) Benzo(b)fluoranthene	17.875	252	5649527	6802.38	ng/ml	96
89) Benzo(k)fluoranthene	17.944	252	5285053	6475.12	ng/ml	98
90) Benzo(b+k)fluoranthene	17.944	252	11345326	13007.55	ng/ml	98
91) Benzo(e)pyrene	18.538	252	5398892	6402.77	ng/ml	99
92) Benzo(a)pyrene	18.661	252	5190262	6882.94	ng/ml	98
93) Perylene	18.859	252	4675383	5424.75	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.207	276	4942026	7145.11	ng/ml	95
96) Dibenz(a,h)anthracene	21.266	278	4524104	7142.38	ng/ml	94
97) Benzo(g,h,i)perylene	21.747	276	4683978	6878.59	ng/ml	79

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

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041916.D
Acq On : 4 Oct 2019 10:34 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041916.D\data.ms

(26) Benzoic acid (T)

7.685min (-0.070) 922.23 ng/ml

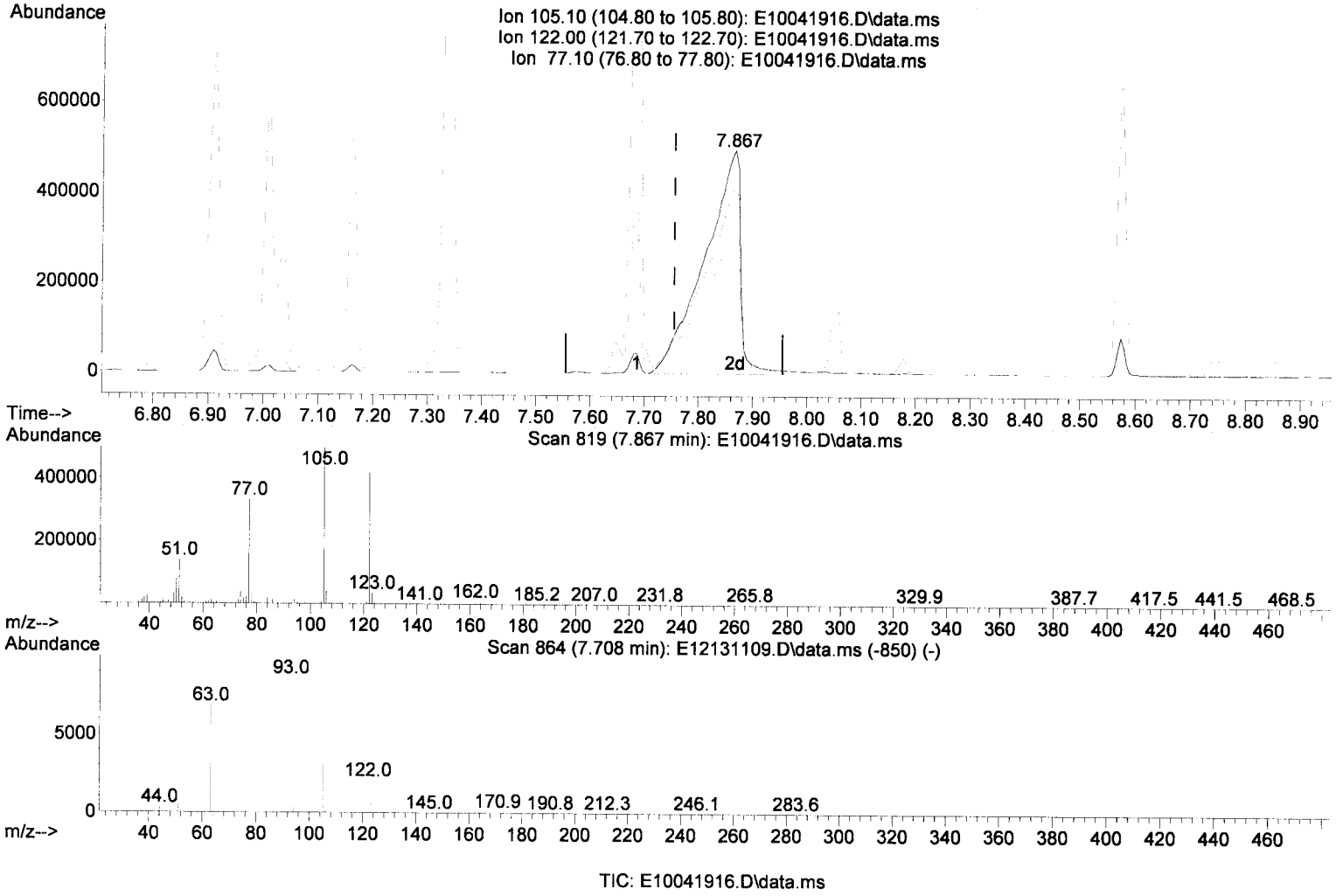
response 57021

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2966.95#
77.10	85.50	839.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041916.D
Acq On : 4 Oct 2019 10:34 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041916.D\data.ms

(26) Benzoic acid (T)

7.867min (+ 0.112) 11122.93 ng/ml m

10/7/19

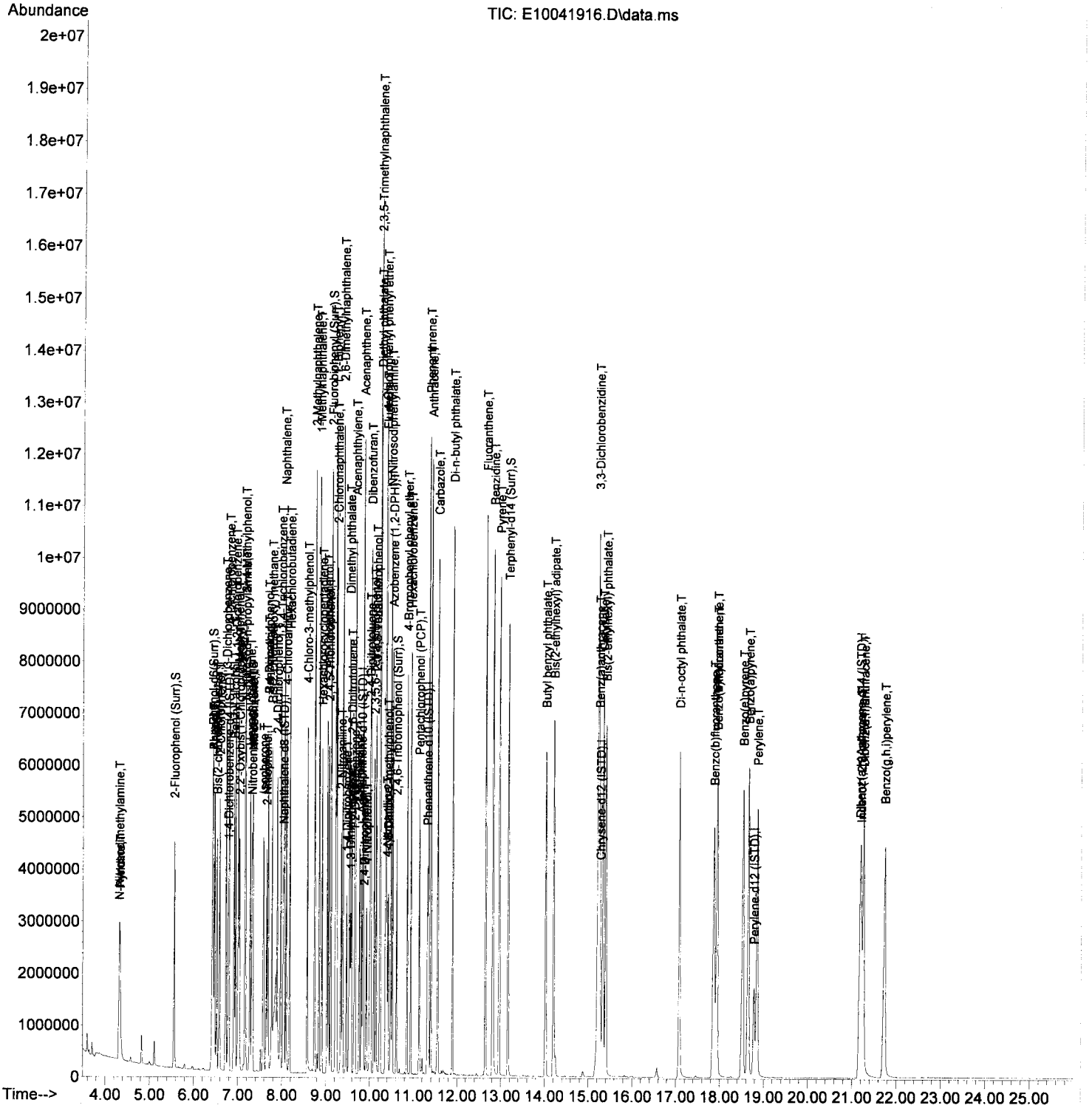
response 2296852

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	84.13
77.10	85.50	66.89
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041916.D
Acq On : 4 Oct 2019 10:34 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:45 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041917.D
Acq On : 4 Oct 2019 11:09 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.782	152	510365	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.033	136	2002472	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.809	162	1053563	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.323	188	1962865	2000.00	ng/ml	0.01
78) Chrysene-d12 (ISTD)	15.281	240	1734754	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.784	264	1607082	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	21.196	292	1298840	2000.00	ng/ml	0.05
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	2584089	8121.58	ng/ml	0.00
5) Phenol-d6(Surr)	6.429	99	3058317	7186.00	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.322	82	2566255	6725.16	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.114	172	5558681	7094.35	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.617	330	842257	8189.99	ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.173	244	6178755	7623.17	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.316	74	1619392	6724.06	ng/ml	72
3) Pyridine	4.337	79	2770930	7104.21	ng/ml	82
6) Phenol	6.445	94	3151523	7066.99	ng/ml	89
7) Aniline	6.471	93	4028188	6931.68	ng/ml	90
8) Bis(2-chloroethyl) ether	6.525	93	2517297	6906.23	ng/ml	85
9) 2-Chlorophenol	6.589	128	2815985	8432.62	ng/ml	84
10) 1,3-Dichlorobenzene	6.734	146	3027099	7929.86	ng/ml	95
11) 1,4-Dichlorobenzene	6.798	146	3034583	7867.77	ng/ml	97
12) Benzyl alcohol	6.915	108	1669239	7892.42	ng/ml	81
13) 1,2-Dichlorobenzene	6.947	146	2896971	7929.43	ng/ml	96
14) 2-Methylphenol	7.012	107	2044828	7362.84	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.033	45	2606906	4510.14	ng/ml	68
16) N-Nitrosodi-n-propylamine	7.177	70	1706045	6244.37	ng/ml	81
17) 3+4-Methylphenol	7.167	107	2516549	7173.62	ng/ml	92
18) Hexachloroethane	7.274	117	1078333	7573.45	ng/ml	81
20) Nitrobenzene	7.343	77	2439685	6619.82	ng/ml	75
22) Isophorone	7.579	82	4917383	7195.45	ng/ml	88
23) 2-Nitrophenol	7.648	139	1499349	7947.37	ng/ml	75
24) 2,4-Dimethylphenol	7.686	122	2072577	6916.57	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.777	93	2907157	6761.05	ng/ml	99
26) Benzoic acid	7.686	105	73902	1074.45	ng/ml#	1
27) 2,4-Dichlorophenol	7.894	162	2176527	9373.57	ng/ml	95
28) 1,2,4-Trichlorobenzene	7.974	180	2408441	8657.99	ng/ml	94
29) Naphthalene	8.055	128	7374669	6903.57	ng/ml	99
30) 4-Chloroaniline	8.103	127	3233056	8787.97	ng/ml	89
31) Hexachlorobutadiene	8.178	225	1276100	9392.01	ng/ml	98
32) 4-Chloro-3-methylphenol	8.573	107	2060771	6860.27	ng/ml	90
33) 2-Methylnaphthalene	8.745	142	5141613	7651.90	ng/ml	97
34) 1-Methylnaphthalene	8.846	142	4883333	7589.00	ng/ml	97
36) Hexachlorocyclopentadiene	8.910	237	1297946	9603.93	ng/ml	99
37) 2,4,6-Trichlorophenol	9.028	196	1621559	7995.07	ng/ml	98
38) 2,4,5-Trichlorophenol	9.066	196	1578821	7758.35	ng/ml	98
39) 1,1'-Biphenyl	9.221	154	6043027	6704.55	ng/ml	97
41) 2-Chloronaphthalene	9.242	162	4772658	7334.17	ng/ml	98
42) 2-Nitroaniline	9.344	138	1794599	7150.25	ng/ml#	69
43) 2,6-Dimethylnaphthalene	9.381	156	4586869	7284.06	ng/ml	98

See MI

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041917.D
Acq On : 4 Oct 2019 11:09 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

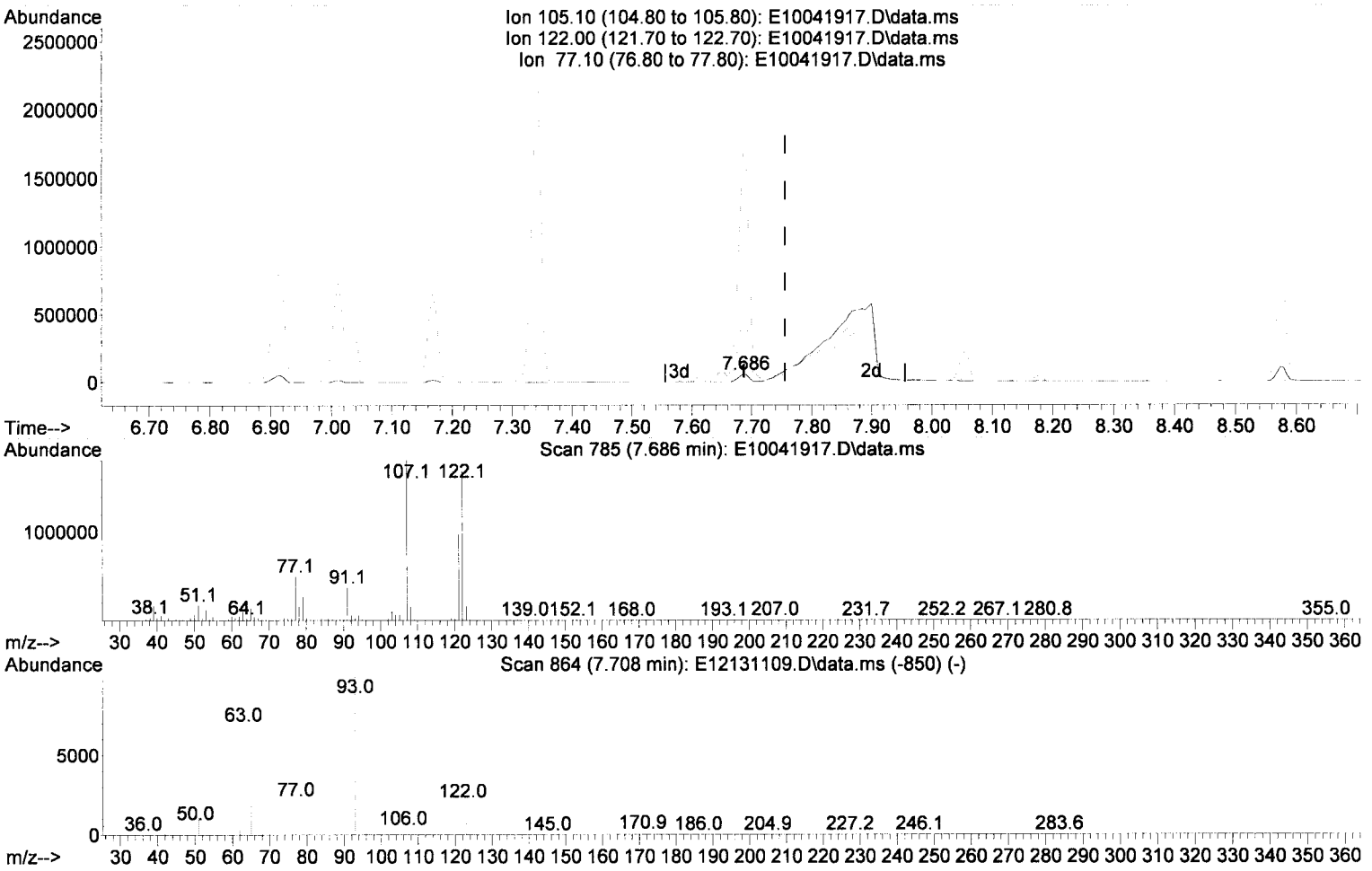
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.472	168	901550	7583.58	ng/ml#	62
45) Dimethyl phthalate	9.536	163	5499423	8133.14	ng/ml	99
46) 1,3-Dinitrobenzene	9.563	168	1015449	7685.54	ng/ml	79
47) 2,6-Dinitrotoluene	9.590	165	1394857	7716.65	ng/ml	66
48) 1,2-Dinitrobenzene	9.659	168	639989	7519.25	ng/ml#	44
49) Acenaphthylene	9.670	152	7402742	7213.48	ng/ml	97
50) 3-Nitroaniline	9.772	138	1461403	7043.99	ng/ml	80
51) Acenaphthene	9.846	153	4856643	6979.43	ng/ml	99
52) 2,4-Dinitrophenol	9.868	184	695772	7180.29	ng/ml	70
53) 4-Nitrophenol	9.932	139	1134724	6675.22	ng/ml	73
54) 2,4-Dinitrotoluene	10.007	165	1727496	7400.50	ng/ml	76
55) Dibenzofuran	10.018	168	6527980	7216.10	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.098	232	1382272	7968.60	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.146	232	1413440	8006.81	ng/ml	87
58) Diethyl phthalate	10.242	149	4903098	7255.62	ng/ml	93
59) 2,3,5-Trimethylnaphtha...	10.232	170	4058731	7230.70	ng/ml	98
60) Fluorene	10.371	166	5179594	7150.70	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.360	204	2540985	7922.60	ng/ml	84
62) 4-Nitroaniline	10.403	138	1493586	7812.38	ng/ml#	71
63) 4,6-Dinitro-2-methylph...	10.429	198	921019	7485.34	ng/ml	71
65) N-Nitrosodiphenylamine	10.483	169	4615884	7443.85	ng/ml	99
66) Azobenzene (1,2-DPH)	10.520	77	4517921	5332.54	ng/ml	78
68) 4-Bromophenyl phenyl e...	10.857	248	1644227	9054.38	ng/ml	84
69) Hexachlorobenzene	10.943	284	1754016	9601.80	ng/ml	89
70) Pentachlorophenol (PCP)	11.130	266	1010163	7723.75	ng/ml	97
71) Phenanthrene	11.349	178	7613187	7066.61	ng/ml	97
72) Anthracene	11.403	178	7665662	6934.84	ng/ml	98
73) Carbazole	11.558	167	6832440	6601.45	ng/ml	98
74) Di-n-butyl phthalate	11.895	149	8093368	6249.62	ng/ml	98
75) Fluoranthene	12.654	202	8264003	7395.05	ng/ml	97
76) Benzidine	12.826	184	9056858	11621.95	ng/ml	97
77) Pyrene	12.970	202	8395755	7395.87	ng/ml	99
80) Butyl benzyl phthalate	14.034	149	3917824	7721.18	ng/ml	79
81) Bis(2-ethylhexyl) adipate	14.211	129	3409359	6752.16	ng/ml	98
82) 3,3-Dichlorobenzidine	15.243	252	5395725	14773.68	ng/ml	97
83) Benz(a)anthracene	15.265	228	7562364	7728.43	ng/ml	99
84) Chrysene	15.350	228	7293341	7824.06	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.404	149	5441799	7504.49	ng/ml	92
87) Di-n-octyl phthalate	17.088	149	8962679	6881.47	ng/ml	93
88) Benzo(b)fluoranthene	17.891	252	8162888	9614.04	ng/ml	95
89) Benzo(k)fluoranthene	17.955	252	6834378	8190.50	ng/ml	98
90) Benzo(b+k)fluoranthene	17.955	252	15341714	17205.42	ng/ml	98
91) Benzo(e)pyrene	18.549	252	7287149	8453.45	ng/ml	98
92) Benzo(a)pyrene	18.677	252	6971686	9043.48	ng/ml	98
93) Perylene	18.870	252	6206644	7044.21	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.218	276	7211343	10129.49	ng/ml	95
96) Dibenz(a,h)anthracene	21.276	278	6086241	9335.28	ng/ml	96
97) Benzo(g,h,i)perylene	21.763	276	6275107	8953.10	ng/ml	77

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

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041917.D
Acq On : 4 Oct 2019 11:09 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041917.D\data.ms

(26) Benzoic acid (T)

7.686min (-0.069) 1074.45 ng/ml

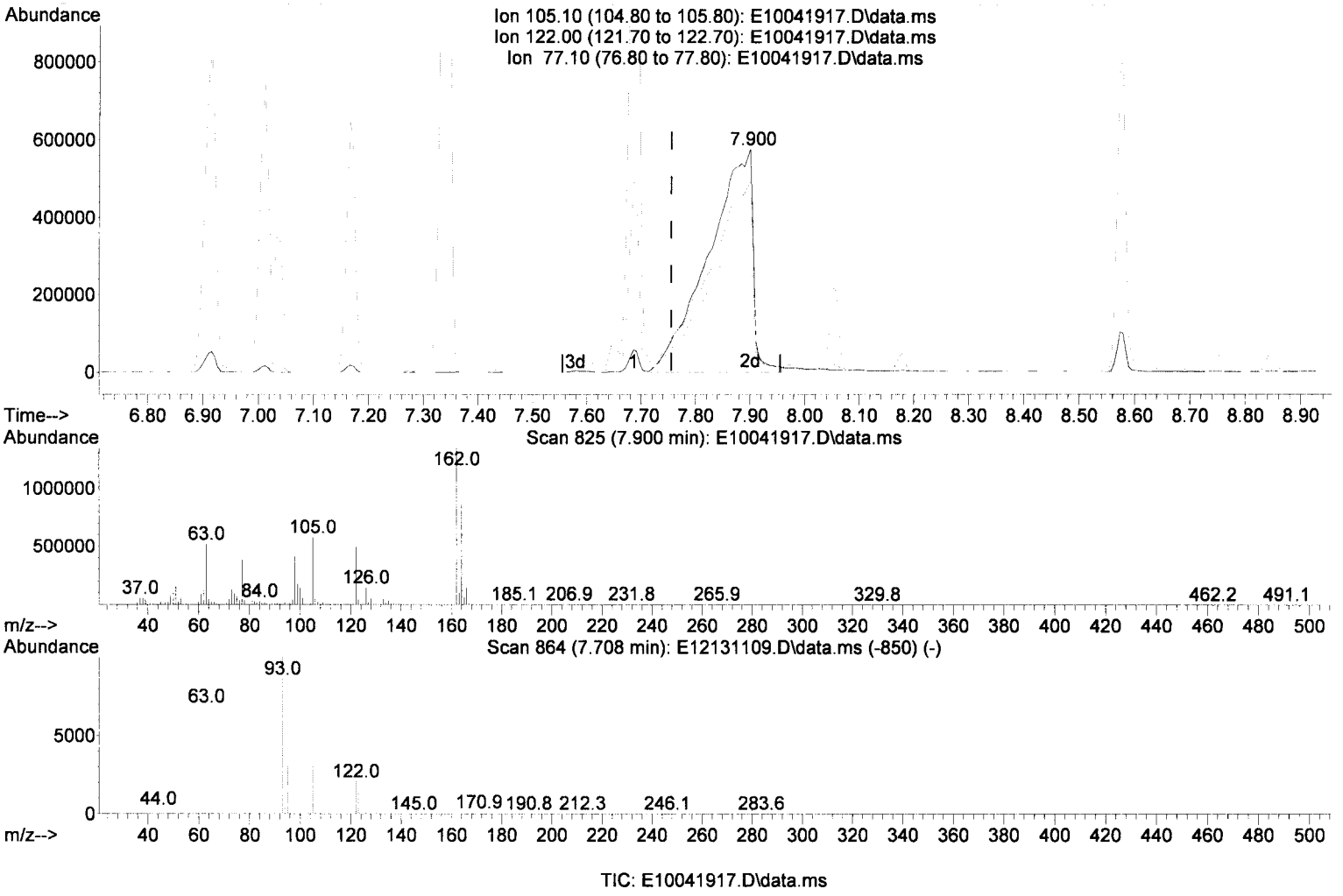
response 73902

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2869.36#
77.10	85.50	843.73#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041917.D
Acq On : 4 Oct 2019 11:09 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E10041917.D\data.ms

(26) Benzoic acid (T)

7.900min (+ 0.144) 13919.75 ng/ml m

10/7/19

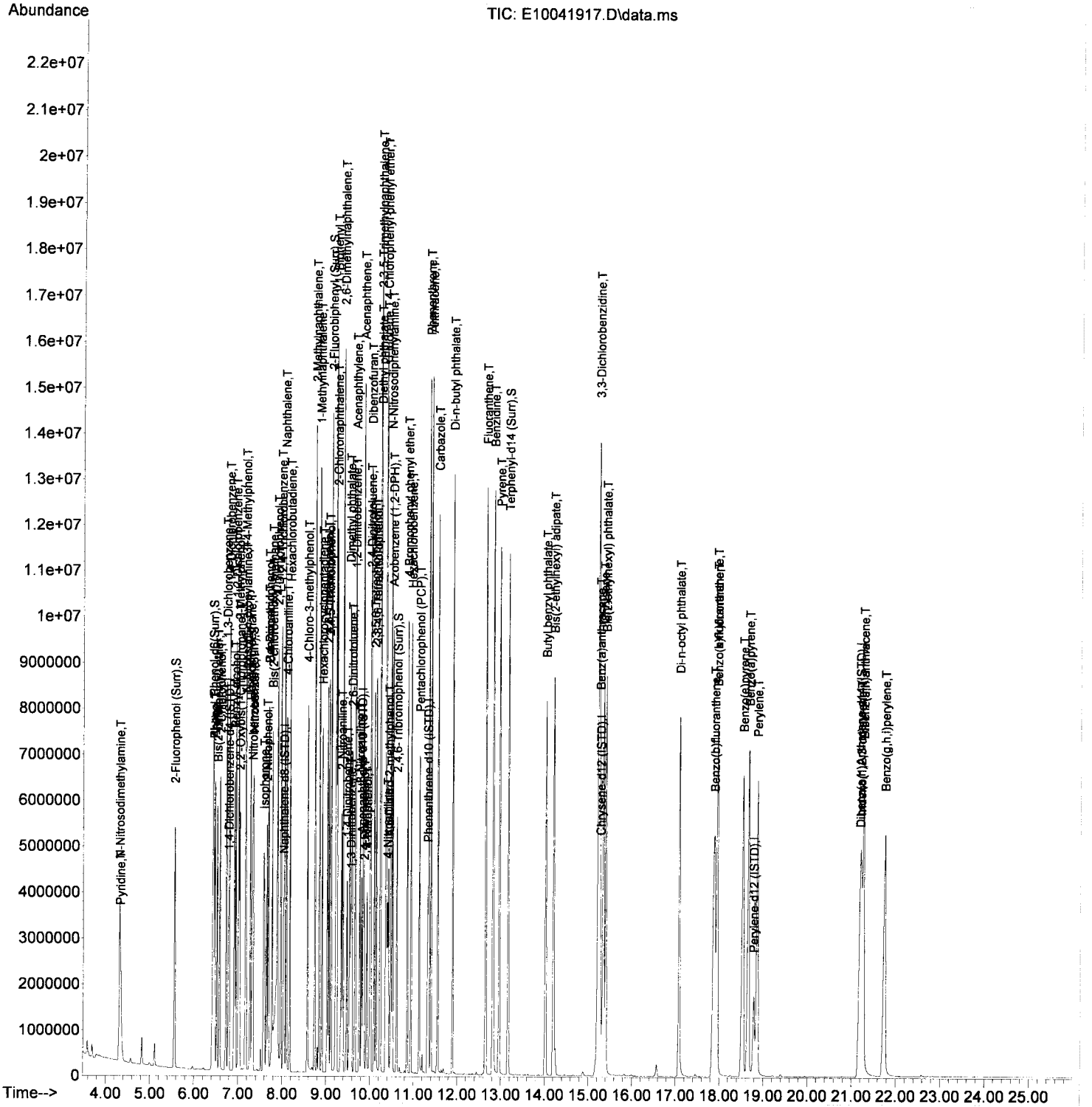
response 3255088

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	85.29
77.10	85.50	66.13
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041917.D
Acq On : 4 Oct 2019 11:09 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:57:52 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:58:11 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	515923	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1968589	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.804	162	986503	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1841513	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.254	240	1680659	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.768	264	1540429	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	21.159	292	1137766	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	304137	945.58	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	384087	892.75	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	318354	825.29	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	764047	1041.41	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	82566	1216.67	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	793230	1010.16	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.311	74	202172	830.42	ng/ml	74
3) Pyridine	4.337	79	271314	688.11	ng/ml	83
6) Phenol	6.423	94	397694	882.18	ng/ml	85
7) Aniline	6.461	93	493149	839.47	ng/ml	90
8) Bis(2-chloroethyl) ether	6.514	93	336978	914.54	ng/ml	87
9) 2-Chlorophenol	6.578	128	340693	1009.23	ng/ml	88
10) 1,3-Dichlorobenzene	6.728	146	394218	1021.58	ng/ml	95
11) 1,4-Dichlorobenzene	6.792	146	401079	1028.68	ng/ml	97
12) Benzyl alcohol	6.899	108	166000	776.42	ng/ml	81
13) 1,2-Dichlorobenzene	6.942	146	380456	1030.14	ng/ml	95
14) 2-Methylphenol	7.001	107	253163	901.75	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	368472	630.62	ng/ml	75
16) N-Nitrosodi-n-propylamine	7.151	70	225840	817.70	ng/ml	86
17) 3+4-Methylphenol	7.145	107	330291	931.38	ng/ml	92
18) Hexachloroethane	7.274	117	136613	949.14	ng/ml	81
20) Nitrobenzene	7.327	77	319363	857.22	ng/ml	80
22) Isophorone	7.557	82	600991	894.55	ng/ml	89
23) 2-Nitrophenol	7.643	139	165976	1125.89	ng/ml	73
24) 2,4-Dimethylphenol	7.670	122	224667	762.66	ng/ml	91
25) Bis(2-chloroethoxy) me...	7.761	93	393856	931.74	ng/ml	98
26) Benzoic acid	7.750	105	131103	1565.36	ng/ml	88
27) 2,4-Dichlorophenol	7.878	162	217189	951.46	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.969	180	316185	1156.20	ng/ml	95
29) Naphthalene	8.044	128	1046364	996.38	ng/ml	99
30) 4-Chloroaniline	8.087	127	366573	1013.55	ng/ml	91
31) Hexachlorobutadiene	8.172	225	162141	1213.89	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	190730	773.31	ng/ml	92
33) 2-Methylnaphthalene	8.739	142	719458	1089.15	ng/ml	95
34) 1-Methylnaphthalene	8.841	142	679548	1074.24	ng/ml	95
36) Hexachlorocyclopentadiene	8.905	237	139957	1105.98	ng/ml	96
37) 2,4,6-Trichlorophenol	9.023	196	168423	1132.65	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	156692	1014.56	ng/ml	98
39) 1,1'-Biphenyl	9.210	154	849113	1006.10	ng/ml	98
41) 2-Chloronaphthalene	9.231	162	635390	1042.78	ng/ml	96
42) 2-Nitroaniline	9.328	138	190474	1025.66	ng/ml#	71
43) 2,6-Dimethylnaphthalene	9.370	156	623926	1058.16	ng/ml	93

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:58:11 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5

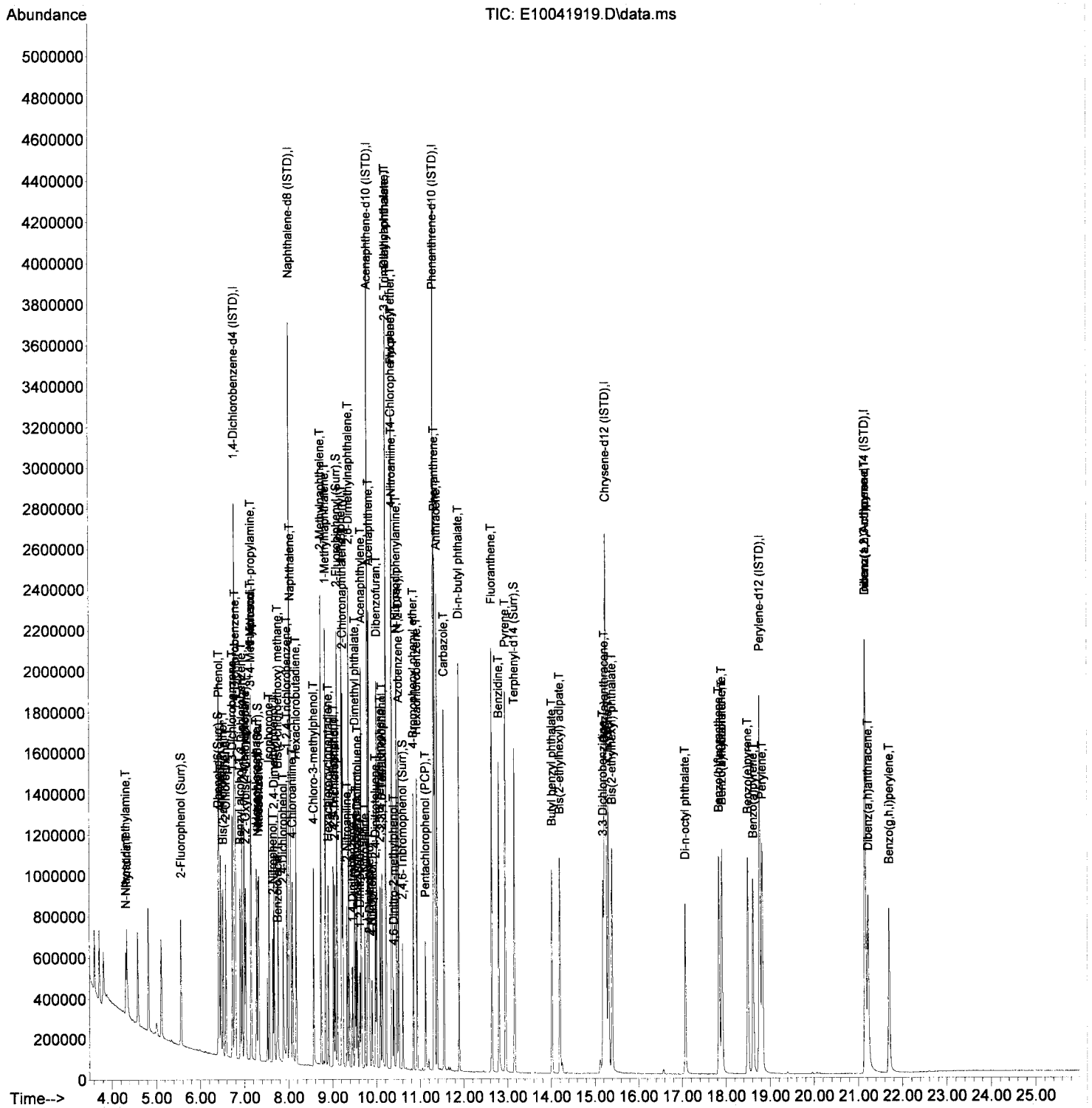
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	81682	1140.17	ng/ml#	64
45) Dimethyl phthalate	9.509	163	693670	1095.61	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	101455	1101.97	ng/ml	79
47) 2,6-Dinitrotoluene	9.568	165	156414	1127.37	ng/ml	67
48) 1,2-Dinitrobenzene	9.627	168	70276	1127.50	ng/ml#	41
49) Acenaphthylene	9.654	152	1000058	1040.73	ng/ml	100
50) 3-Nitroaniline	9.739	138	143480	907.08	ng/ml	86
51) Acenaphthene	9.836	153	660193	1013.25	ng/ml	99
52) 2,4-Dinitrophenol	9.846	184	28506	867.35	ng/ml	73
53) 4-Nitrophenol	9.900	139	98700	844.77	ng/ml	75
54) 2,4-Dinitrotoluene	9.980	165	191633	1079.47	ng/ml	72
55) Dibenzofuran	10.007	168	888188	1048.55	ng/ml	89
56) 2,3,5,6-Tetrachlorophenol	10.087	232	131737	1143.87	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.130	232	141798	1088.48	ng/ml	87
58) Diethyl phthalate	10.221	149	689577	1089.80	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.216	170	574826	1093.68	ng/ml	93
60) Fluorene	10.355	166	719583	1060.95	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.349	204	342724	1141.23	ng/ml	80
62) 4-Nitroaniline	10.360	138	157968	882.44	ng/ml#	70
63) 4,6-Dinitro-2-methylph...	10.397	198	67587	1102.81	ng/ml	75
65) N-Nitrosodiphenylamine	10.467	169	599589	1030.65	ng/ml	97
66) Azobenzene (1,2-DPH)	10.510	77	629655	792.16	ng/ml	82
68) 4-Bromophenyl phenyl e...	10.847	248	194260	1140.24	ng/ml	85
69) Hexachlorobenzene	10.927	284	213631	1246.52	ng/ml	92
70) Pentachlorophenol (PCP)	11.119	266	85386	1013.40	ng/ml	96
71) Phenanthrene	11.339	178	1049009	1037.86	ng/ml	99
72) Anthracene	11.387	178	1049019	1011.55	ng/ml	99
73) Carbazole	11.547	167	888479	915.01	ng/ml	97
74) Di-n-butyl phthalate	11.884	149	1117688	919.94	ng/ml	99
75) Fluoranthene	12.638	202	1085415	1035.29	ng/ml	97
76) Benzidine	12.799	184	803920	2372.78	ng/ml	97
77) Pyrene	12.949	202	1110546	1042.75	ng/ml	99
80) Butyl benzyl phthalate	14.018	149	395857	805.26	ng/ml	82
81) Bis(2-ethylhexyl) adipate	14.195	129	349252	713.95	ng/ml	99
82) 3,3-Dichlorobenzidine	15.190	252	405542	1477.91	ng/ml	96
83) Benz(a)anthracene	15.222	228	951598	1003.80	ng/ml	98
84) Chrysene	15.307	228	896665	992.87	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.393	149	600195	854.34	ng/ml	93
87) Di-n-octyl phthalate	17.067	149	787946	790.41	ng/ml	93
88) Benzo(b)fluoranthene	17.837	252	838133	1029.84	ng/ml	95
89) Benzo(k)fluoranthene	17.907	252	872833	1091.29	ng/ml	98
90) Benzo(b+k)fluoranthene	17.907	252	1757394	2056.16	ng/ml	98
91) Benzo(e)pyrene	18.495	252	831052	1005.77	ng/ml	99
92) Benzo(a)pyrene	18.618	252	739113	1000.24	ng/ml	97
93) Perylene	18.821	252	890521	1054.43	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.159	276	662798	1062.81	ng/ml	94
96) Dibenz(a,h)anthracene	21.223	278	632949	1108.28	ng/ml	94
97) Benzo(g,h,i)perylene	21.699	276	694679	1131.46	ng/ml	77

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 11:58:11 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 11:55:55 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 10/7/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.776	152	515923	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.023	136	1968589	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.804	162	986503	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	1841513	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.254	240	1680659	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.768	264	1540429	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	21.159	292	1137766	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.562	112	304137	1008.29	ng/ml	0.00
5) Phenol-d6(Surr)	6.407	99	384087	1026.33	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.306	82	318354	1067.39	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.103	172	764047	1033.91	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	82566	995.83	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	793230	1045.71	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.311	74	202172	999.89	ng/ml	100
3) Pyridine	4.337	79	271314	818.28	ng/ml	98
6) Phenol	6.423	94	397694	1023.05	ng/ml	99
7) Aniline	6.461	93	493149	996.46	ng/ml	99
8) Bis(2-chloroethyl) ether	6.514	93	336978	975.77	ng/ml	99
9) 2-Chlorophenol	6.578	128	340693	1018.34	ng/ml	99
10) 1,3-Dichlorobenzene	6.728	146	394218	978.25	ng/ml	100
11) 1,4-Dichlorobenzene	6.792	146	401079	984.05	ng/ml	99
12) Benzyl alcohol	6.899	108	166000	944.83	ng/ml	99
13) 1,2-Dichlorobenzene	6.942	146	380456	980.79	ng/ml	99
14) 2-Methylphenol	7.001	107	253163	996.25	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	368472	937.44	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.151	70	225840	1020.49	ng/ml	98
17) 3+4-Methylphenol	7.145	107	330291	1053.88	ng/ml	99
18) Hexachloroethane	7.274	117	136613	984.69	ng/ml	97
20) Nitrobenzene	7.327	77	319363	1044.93	ng/ml	98
22) Isophorone	7.557	82	600991	1030.49	ng/ml	100
23) 2-Nitrophenol	7.643	139	165976	1080.55	ng/ml	99
24) 2,4-Dimethylphenol	7.670	122	224667	850.52	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.761	93	393856	1007.24	ng/ml	99
26) Benzoic acid	7.750	105	131103	1853.73	ng/ml	99
27) 2,4-Dichlorophenol	7.878	162	217189	998.00	ng/ml	100
28) 1,2,4-Trichlorobenzene	7.969	180	316185	1005.34	ng/ml	99
29) Naphthalene	8.044	128	1046364	999.72	ng/ml	99
30) 4-Chloroaniline	8.087	127	366573	941.03	ng/ml	99
31) Hexachlorobutadiene	8.172	225	162141	1009.54	ng/ml	99
32) 4-Chloro-3-methylphenol	8.568	107	190730	858.00	ng/ml	99
33) 2-Methylnaphthalene	8.739	142	719458	1020.01	ng/ml	99
34) 1-Methylnaphthalene	8.841	142	679548	1015.14	ng/ml	99
36) Hexachlorocyclopentadiene	8.905	237	139957	959.38	ng/ml	97
37) 2,4,6-Trichlorophenol	9.023	196	168423	1044.38	ng/ml	99
38) 2,4,5-Trichlorophenol	9.055	196	156692	956.70	ng/ml	100
39) 1,1'-Biphenyl	9.210	154	849113	1016.15	ng/ml	100
41) 2-Chloronaphthalene	9.231	162	635390	1007.97	ng/ml	99
42) 2-Nitroaniline	9.328	138	190474	1096.08	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.370	156	623926	1032.54	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

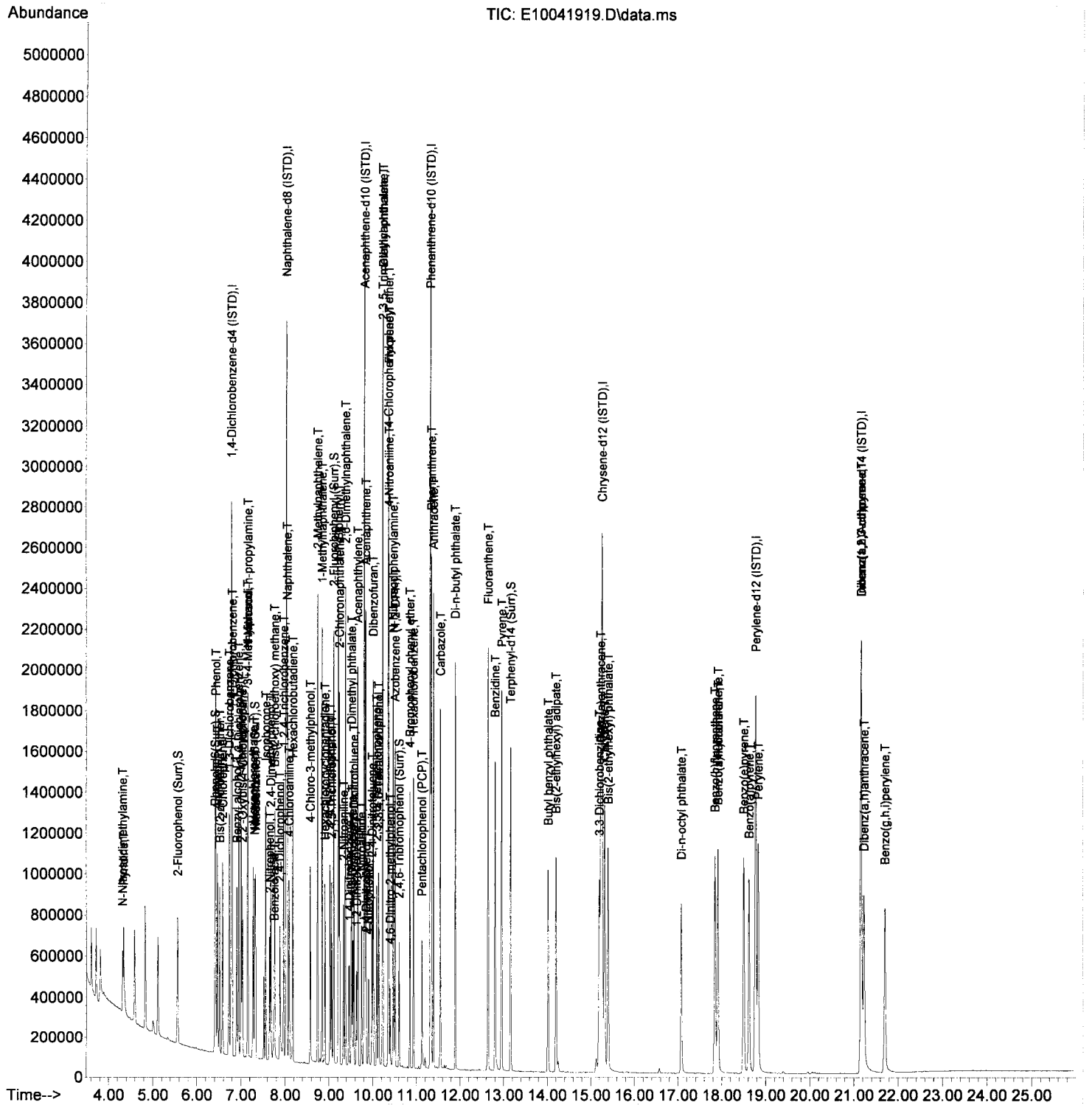
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	81682	1084.41	ng/ml	98
45) Dimethyl phthalate	9.509	163	693670	1027.24	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	101455	1054.52	ng/ml	99
47) 2,6-Dinitrotoluene	9.568	165	156414	1053.68	ng/ml	98
48) 1,2-Dinitrobenzene	9.627	168	70276	1068.29	ng/ml	94
49) Acenaphthylene	9.654	152	1000058	1048.71	ng/ml	100
50) 3-Nitroaniline	9.739	138	143480	913.57	ng/ml	99
51) Acenaphthene	9.836	153	660193	1006.62	ng/ml	98
52) 2,4-Dinitrophenol	9.846	184	28506	1054.42	ng/ml	96
53) 4-Nitrophenol	9.900	139	98700	989.78	ng/ml	100
54) 2,4-Dinitrotoluene	9.980	165	191633	1049.84	ng/ml	96
55) Dibenzofuran	10.007	168	888188	1014.26	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	10.087	232	131737	1033.74	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.130	232	141798	993.99	ng/ml	98
58) Diethyl phthalate	10.221	149	689577	1062.15	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.216	170	574826	1033.24	ng/ml	99
60) Fluorene	10.355	166	719583	1034.37	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.349	204	342724	1034.79	ng/ml	98
62) 4-Nitroaniline	10.360	138	157968	991.72	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.397	198	67587	1182.03	ng/ml	96
65) N-Nitrosodiphenylamine	10.467	169	599589	1041.23	ng/ml	99
66) Azobenzene (1,2-DPH)	10.510	77	629655	1051.11	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.847	248	194260	1022.49	ng/ml	98
69) Hexachlorobenzene	10.927	284	213631	999.53	ng/ml	99
70) Pentachlorophenol (PCP)	11.119	266	85386	1009.32	ng/ml	98
71) Phenanthrene	11.339	178	1049009	1001.35	ng/ml	100
72) Anthracene	11.387	178	1049019	1047.92	ng/ml	100
73) Carbazole	11.547	167	888479	1076.28	ng/ml	99
74) Di-n-butyl phthalate	11.884	149	1117688	1078.01	ng/ml	100
75) Fluoranthene	12.638	202	1085415	1078.53	ng/ml	100
76) Benzidine	12.799	184	803920	1852.18	ng/ml	100
77) Pyrene	12.949	202	1110546	1072.41	ng/ml	99
80) Butyl benzyl phthalate	14.018	149	395703	1006.06	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.195	129	349136	978.43	ng/ml	99
82) 3,3-Dichlorobenzidine	15.190	252	405542	1923.06	ng/ml	98
83) Benz(a)anthracene	15.222	228	951598	1052.57	ng/ml	99
84) Chrysene	15.307	228	896665	993.00	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.393	149	600195	992.15	ng/ml	98
87) Di-n-octyl phthalate	17.067	149	787946	995.04	ng/ml	99
88) Benzo(b)fluoranthene	17.837	252	838133	1011.04	ng/ml	100
89) Benzo(k)fluoranthene	17.907	252	872833	1039.02	ng/ml	98
90) Benzo(b+k)fluoranthene	17.907	252	1757394	2038.06	ng/ml	98
91) Benzo(e)pyrene	18.495	252	831052	998.55	ng/ml	99
92) Benzo(a)pyrene	18.618	252	739113	999.16	ng/ml	99
93) Perylene	18.821	252	890521	1212.56	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.159	276	662798	957.35	ng/ml	99
96) Dibenz(a,h)anthracene	21.223	278	632949	992.61	ng/ml	98
97) Benzo(g,h,i)perylene	21.699	276	694679	1044.63	ng/ml	96

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

Quantitation Report (Not Reviewed)

Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041919.D
Acq On : 5 Oct 2019 12:20 am
Operator : JK/ AMS /DTH
Sample : 9J04044-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 07 16:50:51 2019
Quant Method : Z:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5



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 9110769
Batch 9110847
Sequence 9K15037

APEX LABORATORIES

As (Arsenic) - 6020 - Total
As (Arsenic) - 200.8 - Total
Cd (Cadmium) - 6020 - Total
Co (Cobalt) - 200.8 - Total
Cr (Chromium) - 6020 - Total
Cr (Chromium) - 200.8 - Total
Cu (Copper) - 6020 - Total
Cu (Copper) - 200.8 - Total

PREPARATION BENCH SHEET

9110769

Apex Laboratories
BATCH #: 9110769 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments
9110769-BLK1		11/13/19 14:44	45	50	QC Sample		
9110769-BS1		11/13/19 14:44	45	50	QC Sample		
Spike 1: 500 uL of A19J430 Spike 2: 50 uL of A19K028							
A9K0327-01	11/26/19	11/13/19 14:44	45	50	EcoLube Recovery, LLC	Wastewater	
☐ Co (Cobalt) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9K0332-01	11/25/19	11/13/19 14:44	45	50	Anchor QEA, LLC	PDI-FB-1911121146	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-02	11/25/19	11/13/19 14:44	45	50	Anchor QEA, LLC	PDI-RB-1911120944	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0336-02	11/26/19	11/13/19 14:44	45	50	Steelscape	Wastewater-Comp	Added for BatchQC in 9110769
☐ As (Arsenic) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Fe (Iron) - 200.8 - Total ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
Batch QC:							
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Co (Cobalt) - 200.8 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
9110769-DUP1		11/13/19 14:44	45	50	QC Sample		
Source: A9K0336-02							
9110769-MS1		11/13/19 14:44	45	50	QC Sample		
Source: A9K0336-02 Spike 1: 500 uL of A19J430 Spike 2: 50 uL of A19K028							

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A17F264	06/23/23	Mars-6 Microwave
A19I314	03/22/20	Conc. HCl - Omnitrace
A19J492	04/28/20	Conc. HNO3 - Omnitrace

Analyte Spike(s) MJG 11/13/19

Std ID	Exp. Date	Description
A19J430	12/11/19	**Combo Spike** A+B+C
A19K028	03/08/20	Hg Spiking Standard

MJG 11/13/19
A) A19J351 } 250 µL
B) A19J308 } 125 µL
C) A19J309 } 125 µL

Digestion time and temperature achieved?
Initials: MJG yes

MJG 11/13/19
Prepared By: Date

Reviewed By: 11/16/19
Date

Printed: 11/13/2019 2:59:43PM

Batch #: 9110769

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: 11/13/19 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	W66A	9110769-BLK1	211.44	211.42	n/a
2	W20	9110769-BS1	209.66	209.64	n/a
3	W35	A9K0327-01	206.69	206.67	n/a
4	W11	A9K0332-01	209.75	209.74	n/a
5	W93	A9K0332-02	208.67	208.65	n/a
6	W17	A9K0336-02	212.45	212.43	n/a
7	W15	9110769-DUP1	212.27	212.25	n/a
8	W82	9110769-MS1	210.04	210.02	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
					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.

APEX LABORATORIES

As (Arsenic) - 6020 - Total
Cd (Cadmium) - 6020 - Total
Cr (Chromium) - 6020 - Total
Cu (Copper) - 6020 - Total
Mn (Manganese) - 6020 - Total
Pb (Lead) - 6020 - Total
V (Vanadium) - 6020 - Total
Zn (Zinc) - 6020 - Total

Added samples: A9K0421-02, 03, 04, 05, 06, 07, 08

PREPARATION BENCH SHEET

9110847

Apex Laboratories

BATCH #: 9110847 (Soil)

Prep Method: EPA 3051A

Lab Number	Due	Prepared	Initial (g)	Final (mL)	Client	ClientID / Sample	Extraction Comments
9110847-BLK1		11/15/19 12:16	0.52	50	QC Sample		
9110847-BS1		11/15/19 12:16	0.5	50	QC Sample		
Spike 1: 5000 uL of A19J430 Spike 2: 500 uL of A19K028							
A9K0332-04	11/25/19	11/15/19 12:16	0.47	50	Anchor QEA, LLC	PDI-140RAB-00-10-191108	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-05	11/25/19	11/15/19 12:16	0.511	50	Anchor QEA, LLC	PDI-140RAB-10-12-7-1911C	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-06	11/25/19	11/15/19 12:16	0.477	50	Anchor QEA, LLC	PDI-141RAB-00-10-191107	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-07	11/25/19	11/15/19 12:16	0.518	50	Anchor QEA, LLC	PDI-141RAB-10-17-7-1911C	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
9110847-DUP1		11/15/19 12:16	0.519	50	QC Sample		
Source: A9K0332-07							
9110847-MS1		11/15/19 12:16	0.489	50	QC Sample		
Source: A9K0332-07 Spike 1: 5000 uL of A19J430 Spike 2: 500 uL of A19K028							
A9K0332-08	11/25/19	11/15/19 12:16	0.5	50	Anchor QEA, LLC	PDI-143RAB-00-10-191111	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total. ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-09	11/25/19	11/15/19 12:16	0.487	50	Anchor QEA, LLC	PDI-143RAB-10-20-191112	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-10	11/25/19	11/15/19 12:16	0.504	50	Anchor QEA, LLC	PDI-143RAB-20-31-1-1911	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-02	11/27/19	11/15/19 12:16	0.509	50	Anchor QEA, LLC	PDI-1142RAB-20-30-4-1911	6020 As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							

2 of 2

CRL 11/15/19
Prepared By: Date

Reviewed By: 11/16/19 Date

APEX LABORATORIES

Apex Laboratories
BATCH #: 9110847 (Soil)
Prep Method: EPA 3051A

Lab Number	Due	Prepared	Initial (g)	Final (mL)	Client	ClientID / Sample	Extraction Comments
A9K0421-03	11/27/19	11/15/19 12:16	0.5.49	50	Anchor QEA, LLC	PDI-142RAB-00-10-191112	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-04	11/27/19	11/15/19 12:16	0.5.49	50	Anchor QEA, LLC	PDI-142RAB-10-20-191112	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-05	11/27/19	11/15/19 12:16	0.5.47	50	Anchor QEA, LLC	PDI-142RAB-20-30.4-19111	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-06	11/27/19	11/15/19 12:16	0.5.47	50	Anchor QEA, LLC	PDI-144RAB-00-10-191113	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-07	11/27/19	11/15/19 12:16	0.5.49	50	Anchor QEA, LLC	PDI-144RAB-10-20-191113	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0421-08	11/27/19	11/15/19 12:16	0.5.46	50	Anchor QEA, LLC	PDI-144RAB-20-29-191113	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A17F264	06/23/23	Mars-6 Microwave
A19I299	02/28/20	30% hydrogen peroxide
A19I314	03/22/20	Conc. HCl - Omnitrace
A19J492	04/28/20	Conc. HNO3 - Omnitrace

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J430	12/11/19	**Combo Spike** A+B+C
A19K028	03/08/20	Hg Spiking Standard

See previous

Digestion time and temperature achieved? Yes
Initials: CRL

CRL — Prepared By: 11/15/19 — Date

Reviewed By: — Date

Batch #: 9110847

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: 11/15/19 Prepared by: CRL

#	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		9110847-BLK1			n/a
2		9110847-BS1			n/a
3		A9K0332-04			n/a
4		A9K0332-05			n/a
5		A9K0332-06			n/a
6		A9K0332-07			n/a
7		9110847-DUP1			n/a
8		9110847-MS1			n/a
9		A9K0332-08			n/a
10		A9K0332-09			n/a
11		A9K0332-10			n/a
12	572	A9K0421-02	185.54	185.53	n/a
13	594	A9K0421-03	184.19	184.18	n/a
14	561	A9K0421-04	185.33	185.32	n/a
15	576	A9K0421-05	186.51	186.50	n/a
16	559	A9K0421-06	186.12	186.11	n/a
17	585	A9K0421-07	185.88	185.87	n/a
18	520	A9K0421-08	185.71	185.70	n/a
19					n/a
20					n/a
21					n/a
22					n/a
23					n/a
24					n/a
25					n/a

add on's

*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.

APEX LABORATORIES

As (Arsenic) - 6020 - Total
Cd (Cadmium) - 6020 - Total
Cr (Chromium) - 6020 - Total
Cu (Copper) - 6020 - Total
Mn (Manganese) - 6020 - Total
Pb (Lead) - 6020 - Total
V (Vanadium) - 6020 - Total
Zn (Zinc) - 6020 - Total

PREPARATION BENCH SHEET

9110847

Apex Laboratories
BATCH #: 9110847 (Soil)
Prep Method: EPA 3051A

Lab Number	Due	Prepared	Initial (g)	Final (mL)	Client	ClientID / Sample	Extraction Comments
9110847-BLK1		11/15/19 12:16	0.52	50	QC Sample		
9110847-BS1		11/15/19 12:16	0.5	50	QC Sample		
Spike 1: 5000 uL of A19J430 Spike 2: 500 uL of A19K028							
A9K0332-04	11/25/19	11/15/19 12:16	0.5147	50	Anchor QEA, LLC	PDI-140RAB-00-10-191108	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-05	11/25/19	11/15/19 12:16	0.5	50	Anchor QEA, LLC	PDI-140RAB-10-12-7-1911C	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-06	11/25/19	11/15/19 12:16	0.5147	50	Anchor QEA, LLC	PDI-141RAB-00-10-191107	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-07	11/25/19	11/15/19 12:16	0.518	50	Anchor QEA, LLC	PDI-141RAB-10-17-7-1911C	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
9110847-DUP1		11/15/19 12:16	0.519	50	QC Sample		
Source: A9K0332-07							
9110847-MS1		11/15/19 12:16	0.5489	50	QC Sample		
Source: A9K0332-07 Spike 1: 5000 uL of A19J430 Spike 2: 500 uL of A19K028							
A9K0332-08	11/25/19	11/15/19 12:16	0.500	50	Anchor QEA, LLC	PDI-143RAB-00-10-191111	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-09	11/25/19	11/15/19 12:16	0.5487	50	Anchor QEA, LLC	PDI-143RAB-10-20-191112	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9K0332-10	11/25/19	11/15/19 12:16	0.504	50	Anchor QEA, LLC	PDI-143RAB-20-31-1-19111	6020: As,Cd,Cr,Cu,Pb,Mn,Hg,V,Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ V (Vanadium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							

1 of 2

CRL 11/15/19
Prepared By: Date

Reviewed By: 11/16/19
Date

APEX LABORATORIES

Apex Laboratories
BATCH #: 9110847 (Soil)
Prep Method: EPA 3051A

Lab Number	Due	Prepared	Initial (g)	Final (mL)	Client	ClientID / Sample	Extraction Comments

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A17F264	06/23/23	Mars-6 Microwave
A19I299	02/28/20	30% hydrogen peroxide
A19I314	03/22/20	Conc. HCl - Omnitrace
A19J492	04/28/20	Conc. HNO3 - Omnitrace

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J430	12/11/19	**Combo Spike** A+B+C
A19K028	03/08/20	Hg Spiking Standard

CRL 11/15/19

A) A19J351 - 2500µL CRL 11/15/19
B) A19J308 - 1250µL
C) A19J309 - 1250µL

Digestion time and temperature achieved? YES
Initials: CRL

CRL 11/15/19
Prepared By: Date

Reviewed By: Date

Batch #: 9110847

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: 11/15/19 Prepared by: CRL

#	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	S67	9110847-BLK1	185.53	185.51	n/a
2	S109	9110847-BS1	188.65	188.65	n/a
3	S39	A9K0332-04	185.91	185.91	n/a
4	S9	A9K0332-05	184.87	184.87	n/a
5	S15	A9K0332-06	185.43	185.43	n/a
6	S12	A9K0332-07	187.62	187.62	n/a
7	S31	9110847-DUP1	185.56	185.55	n/a
8	S106	9110847-MS1	189.65	189.65	n/a
9	S89	A9K0332-08	185.40	185.40	n/a
10	S105	A9K0332-09	186.34	186.34	n/a
11	S92	A9K0332-10	183.42	183.42	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: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K15037-CAL1	Water	QC	QC			A19J003	A19K144
2	9K15037-CAL2	Water	QC	QC			A19J003	A19K145
3	9K15037-CAL3	Water	QC	QC			A19J003	A19K146
4	9K15037-CAL4	Water	QC	QC			A19J003	A19K147
5	9K15037-CAL5	Water	QC	QC			A19J003	A19K148
6	9K15037-CAL6	Water	QC	QC			A19J003	A19K149
7	9K15037-CAL7	Water	QC	QC			A19J003	A19K150
8	9K15037-CAL8	Water	QC	QC			A19J003	A19K151
9	9K15037-CAL9	Water	QC	QC			A19J003	A19K152
10	9K15037-ICV1	Water	QC	QC			A19J003	A19J138
11	9K15037-ICB1	Water	QC	QC			A19J003	
12	9K15037-CRL1	Water	QC	QC			A19J003	A19K144
13	9K15037-CRL2	Water	QC	QC			A19J003	A19K145
14	9K15037-CRL3	Water	QC	QC			A19J003	A19K146
15	9K15037-IFA1	Water	QC	QC			A19J003	A19K087
16	9K15037-IFB1	Water	QC	QC			A19J003	A19K088
17	A9K0295-01RE1	Water	Cu (Copper) - 200.8 - Dissolved		11/25/19	9110758	A19J003	
18	9110739-BLK2	Water	QC	QC		9110739	A19J003	
19	A9K0295-01RE1	Water	Al (Aluminum) - 200.8 - Total		11/25/19	9110739	A19J003	
20	"	Water	Cu (Copper) - 200.8 - Total	"	11/25/19	9110739	A19J003	
21	"	Water	Zn (Zinc) - 200.8 - Total	"	11/25/19	9110739	A19J003	
22	A9K0264-06RE2	Water	Ag (Silver) - 200.8 - Total		11/22/19	9110696	A19J003	
23	9110784-BLK1	Water	QC	QC		9110784	A19J003	
24	A9K0302-02	Soil	Ag (Silver) - 6020 - Total		11/15/19	9110880	A19J003	
25	"	Soil	Al (Aluminum) - 6020 - Total	"	11/15/19	9110880	A19J003	
26	"	Soil	As (Arsenic) - 6020 - Total	"	11/15/19	9110880	A19J003	
27	"	Soil	Ba (Barium) - 6020 - Total	"	11/15/19	9110880	A19J003	
28	"	Soil	Be (Beryllium) - 6020 - Total	"	11/15/19	9110880	A19J003	
29	"	Soil	Ca (Calcium) - 6020 - Total	"	11/15/19	9110880	A19J003	
30	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/15/19	9110880	A19J003	
31	"	Soil	Co (Cobalt) - 6020 - Total	"	11/15/19	9110880	A19J003	
32	"	Soil	Cr (Chromium) - 6020 - Total	"	11/15/19	9110880	A19J003	
33	"	Soil	Cu (Copper) - 6020 - Total	"	11/15/19	9110880	A19J003	
34	"	Soil	Fe (Iron) - 6020 - Total	"	11/15/19	9110880	A19J003	
35	"	Soil	Hg (Mercury) - 6020 - Total	"	11/15/19	9110880	A19J003	
36	"	Soil	K (Potassium) - 6020 - Total	"	11/15/19	9110880	A19J003	
37	"	Soil	Mg (Magnesium) - 6020 - Total	"	11/15/19	9110880	A19J003	
38	"	Soil	Mn (Manganese) - 6020 - Total	"	11/15/19	9110880	A19J003	
39	"	Soil	Mo (Molybdenum) - 6020 - Total	"	11/15/19	9110880	A19J003	
40	"	Soil	Na (Sodium) - 6020 - Total	"	11/15/19	9110880	A19J003	
41	"	Soil	Ni (Nickel) - 6020 - Total	"	11/15/19	9110880	A19J003	
42	"	Soil	Pb (Lead) - 6020 - Total	"	11/15/19	9110880	A19J003	
43	"	Soil	Sb (Antimony) - 6020 - Total	"	11/15/19	9110880	A19J003	
44	"	Soil	Se (Selenium) - 6020 - Total	"	11/15/19	9110880	A19J003	
45	"	Soil	Tl (Thallium) - 6020 - Total	"	11/15/19	9110880	A19J003	
46	"	Soil	V (Vanadium) - 6020 - Total	"	11/15/19	9110880	A19J003	
47	"	Soil	Zn (Zinc) - 6020 - Total	"	11/15/19	9110880	A19J003	
48	A9K0302-03	Soil	Ag (Silver) - 6020 - Total		11/15/19	9110880	A19J003	
49	"	Soil	Al (Aluminum) - 6020 - Total	"	11/15/19	9110880	A19J003	
50	"	Soil	As (Arsenic) - 6020 - Total	"	11/15/19	9110880	A19J003	
51	"	Soil	Ba (Barium) - 6020 - Total	"	11/15/19	9110880	A19J003	

Sequence: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	"	Soil	Be (Beryllium) - 6020 - Total	"	11/15/19	9110880	A19J003	
53	"	Soil	Ca (Calcium) - 6020 - Total	"	11/15/19	9110880	A19J003	
54	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/15/19	9110880	A19J003	
55	"	Soil	Co (Cobalt) - 6020 - Total	"	11/15/19	9110880	A19J003	
56	"	Soil	Cr (Chromium) - 6020 - Total	"	11/15/19	9110880	A19J003	
57	"	Soil	Cu (Copper) - 6020 - Total	"	11/15/19	9110880	A19J003	
58	"	Soil	Fe (Iron) - 6020 - Total	"	11/15/19	9110880	A19J003	
59	"	Soil	Hg (Mercury) - 6020 - Total	"	11/15/19	9110880	A19J003	
60	"	Soil	K (Potassium) - 6020 - Total	"	11/15/19	9110880	A19J003	
61	"	Soil	Mg (Magnesium) - 6020 - Total	"	11/15/19	9110880	A19J003	
62	"	Soil	Mn (Manganese) - 6020 - Total	"	11/15/19	9110880	A19J003	
63	"	Soil	Mo (Molybdenum) - 6020 - Total	"	11/15/19	9110880	A19J003	
64	"	Soil	Na (Sodium) - 6020 - Total	"	11/15/19	9110880	A19J003	
65	"	Soil	Ni (Nickel) - 6020 - Total	"	11/15/19	9110880	A19J003	
66	"	Soil	Pb (Lead) - 6020 - Total	"	11/15/19	9110880	A19J003	
67	"	Soil	Sb (Antimony) - 6020 - Total	"	11/15/19	9110880	A19J003	
68	"	Soil	Se (Selenium) - 6020 - Total	"	11/15/19	9110880	A19J003	
69	"	Soil	Tl (Thallium) - 6020 - Total	"	11/15/19	9110880	A19J003	
70	"	Soil	V (Vanadium) - 6020 - Total	"	11/15/19	9110880	A19J003	
71	"	Soil	Zn (Zinc) - 6020 - Total	"	11/15/19	9110880	A19J003	
72	9110784-BS1	Water	QC	QC		9110784	A19J003	
73	A9K0264-02RE1	Water	Ag (Silver) - 200.8 - Total		11/22/19	9110784	A19J003	
74	A9K0264-03RE1	Water	Ag (Silver) - 200.8 - Total		11/22/19	9110784	A19J003	
75	9K15037-CCV1	Water	QC	QC			A19J003	A19J138
76	9K15037-CCB1	Water	QC	QC			A19J003	
77	9K15037-CRL4	Water	QC	QC			A19J003	A19K144
78	9K15037-CRL5	Water	QC	QC			A19J003	A19K145
79	9K15037-CRL6	Water	QC	QC			A19J003	A19K146
80	9K15037-CRL7	Water	QC	QC			A19J003	A19K147
81	A9K0342-01	Water	Ag (Silver) - 200.8 - Total		11/18/19	9110784	A19J003	
82	"	Water	As (Arsenic) - 200.8 - Total		11/18/19	9110784	A19J003	
83	"	Water	Cd (Cadmium) - 200.8 - Total	"	11/18/19	9110784	A19J003	
84	"	Water	Cr (Chromium) - 200.8 - Total	"	11/18/19	9110784	A19J003	
85	"	Water	Cu (Copper) - 200.8 - Total	"	11/18/19	9110784	A19J003	
86	"	Water	Ni (Nickel) - 200.8 - Total	"	11/18/19	9110784	A19J003	
87	"	Water	Pb (Lead) - 200.8 - Total	"	11/18/19	9110784	A19J003	
88	"	Water	Zn (Zinc) - 200.8 - Total	"	11/18/19	9110784	A19J003	
89	A9K0343-01	Water	Ag (Silver) - 200.8 - Total		11/26/19	9110784	A19J003	
90	"	Water	As (Arsenic) - 200.8 - Total	"	11/26/19	9110784	A19J003	
91	"	Water	Cd (Cadmium) - 200.8 - Total	"	11/26/19	9110784	A19J003	
92	"	Water	Cr (Chromium) - 200.8 - Total	"	11/26/19	9110784	A19J003	
93	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110784	A19J003	
94	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9110784	A19J003	
95	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110784	A19J003	
96	"	Water	Pb (Lead) - 200.8 - Total	"	11/26/19	9110784	A19J003	
97	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9110784	A19J003	
98	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110784	A19J003	
99	9110784-DUP1	Water	QC	QC		9110784	A19J003	
100	9110784-MS1	Water	QC	QC		9110784	A19J003	
101	A9K0348-01	Water	Ag (Silver) - 200.8 - Total		11/26/19	9110784	A19J003	
102	"	Water	As (Arsenic) - 200.8 - Total		11/26/19	9110784	A19J003	
103	"	Water	Cd (Cadmium) - 200.8 - Total	"	11/26/19	9110784	A19J003	
104	"	Water	Cr (Chromium) - 200.8 - Total	"	11/26/19	9110784	A19J003	
105	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110784	A19J003	
106	"	Water	Mo (Molybdenum) - 200.8 - Total	"	11/26/19	9110784	A19J003	

Sequence: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
107	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110784	A19J003	
108	"	Water	Pb (Lead) - 200.8 - Total	"	11/26/19	9110784	A19J003	
109	"	Water	Se (Selenium) - 200.8 - Total	"	11/26/19	9110784	A19J003	
110	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110784	A19J003	
111	A9K0368-01	Water	Cr (Chromium) - 200.8 - Total		11/26/19	9110784	A19J003	
112	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110784	A19J003	
113	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110784	A19J003	
114	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110784	A19J003	
115	A9K0369-01	Water	Cr (Chromium) - 200.8 - Total		11/26/19	9110784	A19J003	
116	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110784	A19J003	
117	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110784	A19J003	
118	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110784	A19J003	
119	9110769-BLK1	Water	QC	QC		9110769	A19J003	
120	9110769-BS1	Water	QC	QC		9110769	A19J003	
121	A9K0327-01	Water	Co (Cobalt) - 200.8 - Total		11/26/19	9110769	A19J003	
122	"	Water	Cr (Chromium) - 200.8 - Total	"	11/26/19	9110769	A19J003	
123	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110769	A19J003	
124	"	Water	Mo (Molybdenum) - 200.8 - Total	"	11/26/19	9110769	A19J003	
125	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110769	A19J003	
126	"	Water	Pb (Lead) - 200.8 - Total	"	11/26/19	9110769	A19J003	
127	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110769	A19J003	
128	9K15037-CCV2	Water	QC	QC			A19J003	A19J138
129	9K15037-CCB2	Water	QC	QC			A19J003	
130	A9K0332-01	Water	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110769	A19J003	
131	"	Water	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110769	A19J003	
132	"	Water	Cr (Chromium) - 6020 - Total	"	11/25/19	9110769	A19J003	
133	"	Water	Cu (Copper) - 6020 - Total	"	11/25/19	9110769	A19J003	
134	"	Water	Mn (Manganese) - 6020 - Total	"	11/25/19	9110769	A19J003	
135	"	Water	Pb (Lead) - 6020 - Total	"	11/25/19	9110769	A19J003	
136	"	Water	V (Vanadium) - 6020 - Total	"	11/25/19	9110769	A19J003	
137	"	Water	Zn (Zinc) - 6020 - Total	"	11/25/19	9110769	A19J003	
138	A9K0332-02	Water	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110769	A19J003	
139	"	Water	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110769	A19J003	
140	"	Water	Cr (Chromium) - 6020 - Total	"	11/25/19	9110769	A19J003	
141	"	Water	Cu (Copper) - 6020 - Total	"	11/25/19	9110769	A19J003	
142	"	Water	Mn (Manganese) - 6020 - Total	"	11/25/19	9110769	A19J003	
143	"	Water	Pb (Lead) - 6020 - Total	"	11/25/19	9110769	A19J003	
144	"	Water	V (Vanadium) - 6020 - Total	"	11/25/19	9110769	A19J003	
145	"	Water	Zn (Zinc) - 6020 - Total	"	11/25/19	9110769	A19J003	
146	A9K0336-02	Water	As (Arsenic) - 6020 - Total	(QC Source)		9110769	A19J003	
147	"	Water	As (Arsenic) - 200.8 - Total	"	11/26/19	9110769	A19J003	
148	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9110769	A19J003	
149	"	Water	Co (Cobalt) - 200.8 - Total	(QC Source)		9110769	A19J003	
150	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9110769	A19J003	
151	"	Water	Cr (Chromium) - 200.8 - Total	"	11/26/19	9110769	A19J003	
152	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9110769	A19J003	
153	"	Water	Cu (Copper) - 200.8 - Total	"	11/26/19	9110769	A19J003	
154	"	Water	Fe (Iron) - 200.8 - Total	"	11/26/19	9110769	A19J003	
155	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9110769	A19J003	
156	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9110769	A19J003	
157	"	Water	Ni (Nickel) - 200.8 - Total	"	11/26/19	9110769	A19J003	
158	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9110769	A19J003	
159	"	Water	Pb (Lead) - 200.8 - Total	"	11/26/19	9110769	A19J003	
160	"	Water	V (Vanadium) - 6020 - Total	(QC Source)		9110769	A19J003	
161	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9110769	A19J003	

Sequence: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
162	"	Water	Zn (Zinc) - 200.8 - Total	"	11/26/19	9110769	A19J003	
163	9110769-DUP1	Water	QC	QC		9110769	A19J003	
164	9110769-MS1	Water	QC	QC		9110769	A19J003	
165	9110847-BLK1	Soil	QC	QC		9110847	A19J003	
166	9110847-BS1	Soil	QC	QC		9110847	A19J003	
167	A9K0332-04	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
168	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
169	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
170	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
171	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
172	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
173	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
174	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
175	A9K0332-05	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
176	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
177	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
178	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
179	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
180	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
181	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
182	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
183	A9K0332-06	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
184	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
185	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
186	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
187	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
188	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
189	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
190	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
191	9K15037-CCV3	Water	QC	QC			A19J003	A19J138
192	9K15037-CCB3	Water	QC	QC			A19J003	
193	A9K0332-07	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
194	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
195	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
196	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
197	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
198	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
199	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
200	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
201	9110847-DUP1	Soil	QC	QC		9110847	A19J003	
202	9110847-MS1	Soil	QC	QC		9110847	A19J003	
203	A9K0332-08	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
204	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
205	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
206	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
207	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
208	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
209	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
210	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
211	A9K0332-09	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
212	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
213	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
214	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
215	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
216	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	

Sequence: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
217	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
218	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
219	A9K0332-10	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/25/19	9110847	A19J003	
220	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/25/19	9110847	A19J003	
221	"	Soil	Cr (Chromium) - 6020 - Total	"	11/25/19	9110847	A19J003	
222	"	Soil	Cu (Copper) - 6020 - Total	"	11/25/19	9110847	A19J003	
223	"	Soil	Mn (Manganese) - 6020 - Total	"	11/25/19	9110847	A19J003	
224	"	Soil	Pb (Lead) - 6020 - Total	"	11/25/19	9110847	A19J003	
225	"	Soil	V (Vanadium) - 6020 - Total	"	11/25/19	9110847	A19J003	
226	"	Soil	Zn (Zinc) - 6020 - Total	"	11/25/19	9110847	A19J003	
227	A9K0421-02	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
228	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
229	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
230	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
231	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
232	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
233	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
234	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
235	A9K0421-03	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
236	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
237	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
238	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
239	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
240	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
241	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
242	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
243	A9K0421-04	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
244	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
245	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
246	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
247	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
248	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
249	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
250	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
251	A9K0421-05	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
252	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
253	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
254	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
255	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
256	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
257	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
258	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
259	9K15037-CCV4	Water	QC	QC			A19J003	A19J138
260	9K15037-CCB4	Water	QC	QC			A19J003	
261	A9K0421-06	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
262	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
263	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
264	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
265	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
266	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
267	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
268	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
269	A9K0421-07	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
270	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
271	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	

Sequence: **9K15037** Instrument: **ICPMS6**

Date: **11/15/19 14:35** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
272	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
273	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
274	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
275	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
276	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
277	A9K0421-08	Soil	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/27/19	9110847	A19J003	
278	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/27/19	9110847	A19J003	
279	"	Soil	Cr (Chromium) - 6020 - Total	"	11/27/19	9110847	A19J003	
280	"	Soil	Cu (Copper) - 6020 - Total	"	11/27/19	9110847	A19J003	
281	"	Soil	Mn (Manganese) - 6020 - Total	"	11/27/19	9110847	A19J003	
282	"	Soil	Pb (Lead) - 6020 - Total	"	11/27/19	9110847	A19J003	
283	"	Soil	V (Vanadium) - 6020 - Total	"	11/27/19	9110847	A19J003	
284	"	Soil	Zn (Zinc) - 6020 - Total	"	11/27/19	9110847	A19J003	
285	9110847-MSD1	Soil	QC	QC		9110847	A19J003	
286	9K15037-CCV5	Water	QC	QC			A19J003	A19J138
287	9K15037-CCB5	Water	QC	QC			A19J003	
288	9K15037-CRL8	Water	QC	QC			A19J003	A19K144
289	9K15037-CRL9	Water	QC	QC			A19J003	A19K145
290	9K15037-CRLA	Water	QC	QC			A19J003	A19K146
291	9K15037-CRLB	Water	QC	QC			A19J003	A19K147

Data Entered By: 11/16/19 Comments:

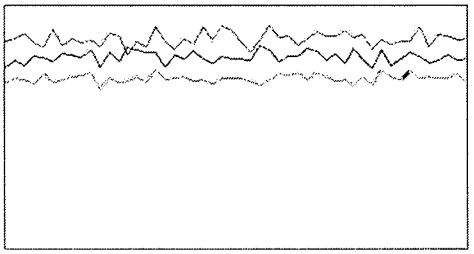
Data Reviewed By: 11/18/19

Standard Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9K15037.b
Acq. Date-Time	11/15/2019 14:54:43
Report Comment	9K15037 General Multi-Mode Tune Report Std ID A19J434
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	2000	1727	17270.59	5000.00	
89	10000	6992	69920.91	10000.00	
205	10000	7874	78735.38	10000.00	
102	20	0			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
7	0.25	0.20 - 1.00	
89	1.00	1.00 - 1.00	
205	1.13	0.50 - 1.50	
102		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
7	3.405	5.000	
89	2.465	5.000	
205	3.063	5.000	
102			

Mass	Background	Background (Required)	Background (Flag)
7	0.000	6.900	
89	0.000	4.600	
205	0.200	11.500	
102	0.100		

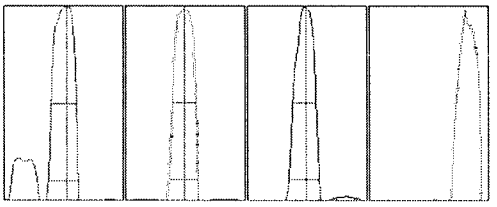
Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.254 %
Doubly Charged	69 / 138 1.360 %

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	1726.59	7.10	6.90 - 7.10	
89	6967.99	89.00	88.90 - 89.10	
205	7844.06	205.00	204.90 - 205.10	
102	0.00	102.05	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.750	0.900	
89	0.61	0.724	0.900	
205	0.60	0.766	0.900	
102	0.05	0.050		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	12.8 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-40 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.1 V		
H2 Flow	---	OctP RF	130 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-3.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.7 mm	Torch V	0.7 mm		

EM

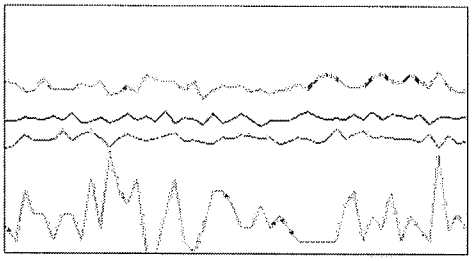
Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 V

[He]

Sensitivity

Sampling Period [sec]	0.412

Standard Tune Check Report ICPMS6



Integration Time [sec] 0.1

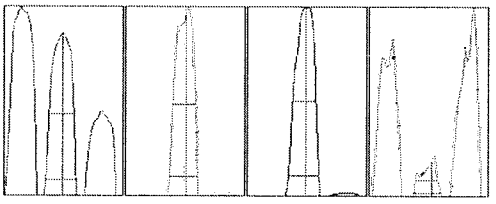
Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
59	2000	926	9255.83	1000.00	
89	2000	1361	13606.88	2000.00	
205	10000	5463	54632.24	1000.00	
75	20	3			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
75		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	3.875	5.000	
89	3.854	5.000	
205	2.804	5.000	
75	69.714		

Mass	Background	Background (Required)	Background (Flag)
59	0.000	10.000	
89	0.000	4.600	
205	0.100	11.500	
75	0.000		

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 29.92
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	932.09	59.00	58.90 - 59.10	
89	1377.74	89.05	88.90 - 89.10	
205	5389.23	205.00	204.90 - 205.10	
75	4.50	75.10	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.64	0.759	0.900	
89	0.59	0.716	0.900	

Standard Tune Check Report ICPMS6

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
205	0.60	0.764	0.900	
75	0.56	0.674		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	2.0 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-90 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	130 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

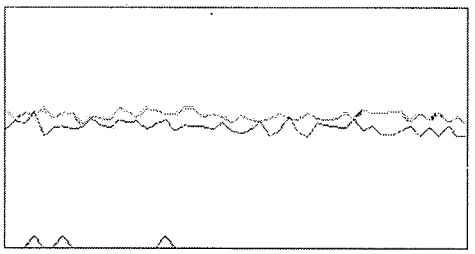
Torch H	-0.7 mm	Torch V	0.7 mm

EM

Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 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	1000	505	5054.11	1000.00	
89	2000	1108	11078.63	2000.00	
78	20	0			

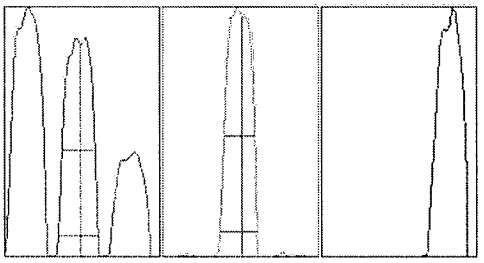
Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
78		-	

Standard Tune Check Report ICPMS6

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	4.806	5.000	
89	3.216	5.000	
78	399.830		

Mass	Background	Background (Required)	Background (Flag)
59	0.200	10.000	
89	0.000	4.600	
78	0.100		

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.14
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	474.60	59.00	58.90 - 59.10	
89	1073.22	89.05	88.90 - 89.10	
78			-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.65	0.767	0.900	
89	0.61	0.723	0.900	
78				

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	-79.0 V
Extract 2	-110.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-90 V	Cell Exit	-150 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	10.0 mL/min	OctP Bias	-100.0 V		
H2 Flow	---	OctP RF	130 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-96.0 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Standard Tune Check Report ICPMS6

Torch H	-0.7 mm	Torch V	0.7 mm		

EM

Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 V

EPA Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9K15037.b
Acq. Date-Time	11/15/2019 15:11:55
Report Comment	9K15037 EPA Multi-Mode Tune Report Std ID A19J434
Instrument Name	ICPMS6 JP17412047

[No Gas]

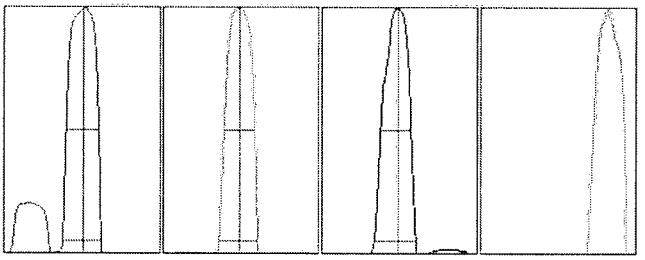
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
7	1.00	1084	10840.90	5000.00	1.039		5.000	
89	1.00	4094	40942.64	10000.00	0.394		5.000	
205	1.00	4391	43909.83	10000.00	0.860		5.000	
102		0	0.50		122.474			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	1102	1081	1087	1078	1073
89	4106	4114	4090	4072	4089
205	4386	4391	4404	4334	4439
102	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)
7	1743.02	7.05	6.90 - 7.10		0.64	0.742	0.900	
89	6953.82	89.00	88.90 - 89.10		0.61	0.739	0.900	
205	7828.46	205.00	204.90 - 205.10		0.60	0.793	0.900	
102	0.00	101.85	-		0.13	0.125		

Integration Time [sec] 0.1
Acquisition Time [sec] 135.3
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	12.8 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-40 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.1 V		
H2 Flow	---	OctP RF	130 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-3.1 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.7 mm	Torch V	0.7 mm

EM

Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 V

[He]

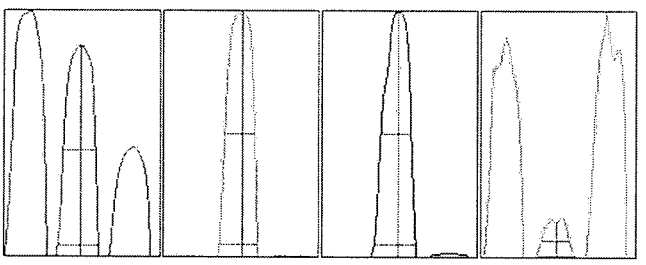
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	560	5599.73	1000.00	1.227		5.000	
89	1.00	791	7909.74	2000.00	1.085		5.000	
205	1.00	3065	30652.10	1000.00	0.534		5.000	
75		2	16.30		33.992			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	565	566	563	549	557
89	799	777	790	793	797
205	3062	3057	3046	3090	3070
75	1	2	2	1	2

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	922.82	59.00	58.90 - 59.10		0.63	0.779	0.900	
89	1371.75	89.05	88.90 - 89.10		0.60	0.735	0.900	
205	5465.53	205.00	204.90 - 205.10		0.60	0.792	0.900	
75	2.85	75.00	-		0.54	0.728		

Integration Time [sec]	0.1
Acquisition Time [sec]	134.8
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	2.0 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-90 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	130 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	-0.7 mm	Torch V	0.7 mm

EM

Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 V

[HEHe]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	308	3076.14	1000.00	2.032		5.000	
89	1.00	640	6400.89	2000.00	1.767		5.000	
78		0	0.30		149.071			

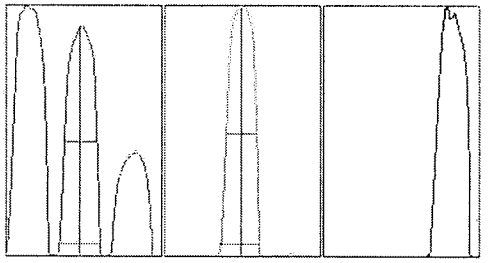
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	315	305	303	314	301
89	656	629	630	640	646

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	506.00	58.95	58.90 - 59.10		0.64	0.785	0.900	
89	1091.30	89.00	88.90 - 89.10		0.60	0.739	0.900	
78			-					

Integration Time [sec] 0.1
Acquisition Time [sec] 100.35
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.94 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	9.5 mm	S/C Temp	1 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.6 V	Deflect	-79.0 V
Extract 2	-110.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-90 V	Cell Exit	-150 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	10.0 mL/min	OctP Bias	-100.0 V		
H2 Flow	---	OctP RF	130 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9993	QP Bias	-96.0 V
Mass Offset	126	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	-0.7 mm	Torch V	0.7 mm		

EM

Discriminator	4.9 mV	Analog HV	2286 V	Pulse HV	1979 V

Sample Report ICPMS6

Sample Name	**rinse**	**Sample Type**	Rinse
File Name	001RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 16:46:11	**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	750736	0.4	0		70	120	
Sc	45	He	185421	1.6	0		70	120	
Ge	74	No Gas	1072852	0.3	0		70	120	
Ge	74	He	194898	1.9	0		70	120	
Ge	74	HEHe	118754	0.9	0		70	120	
Rh	103	No Gas	1239520	0.7	0		70	120	
Rh	103	He	660453	1.9	0		70	120	
Tb	159	No Gas	3007973	0.4	0		70	120	
Tb	159	He	1720888	2.6	0		70	120	
Bi	209	No Gas	1873341	0.6	0		70	120	

Sample Report ICPMS6

Sample Name	**rinse**	**Sample Type**	Rinse
File Name	002RINS.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 16:50:51	**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	745711	0.2	0		70	120	
Sc	45	He	188202	0.8	0		70	120	
Ge	74	No Gas	1065157	0.6	0		70	120	
Ge	74	He	196049	0.7	0		70	120	
Ge	74	HEHe	118815	0.6	0		70	120	
Rh	103	No Gas	1227216	0.8	0		70	120	
Rh	103	He	668118	0.3	0		70	120	
Tb	159	No Gas	2974321	1.1	0		70	120	
Tb	159	He	1708629	0.6	0		70	120	
Bi	209	No Gas	1852699	0.8	0		70	120	

Calibration Blank Report ICPMS6

Sample Name	**9K15037-CAL0**	**Sample Type**	CalBlk
File Name	003CALB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 16:55:30	**Sample QC Pass/Fail**	Fail
Comment	Cal Blank	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Be	9	6	No Gas	17	40.0
Na	23	45	He	2657	6.0
Mg	24	45	He	322	6.3
Al	27	45	He	110	24.1
K	39	45	He	13148	0.6
Ca	44	45	He	57	36.7
Ti	47	45	He	2	173.2
V	51	74	He	880	3.9
Cr	52	74	He	184	15.4
Mn	55	74	He	74	18.6
Fe	56	74	He	7215	4.4
Co	59	74	He	30	33.3
Ni	60	74	He	86	12.5
Cu	65	74	He	334	9.0
Cu	65	74	No Gas	781	14.6
Zn	66	74	He	151	19.9
As	75	74	He	29	6.3
Se	78	74	HEHe	0	86.6
Mo	95	103	He	37	39.6
[Cd]	106	103	No Gas	10	33.3
[Cd]	108	103	No Gas	16	24.8
Ag	109	103	No Gas	48	56.0
Cd	111	103	He	10	66.7
Cd	111	103	No Gas	12	88.5
Sb	123	103	No Gas	143	9.3
Ba	138	159	He	290	14.0
W	186	159	No Gas	93	30.9
Hg	201	159	No Gas	25	5.7
Tl	205	159	No Gas	611	6.9
Pb	208	159	No Gas	3116	1.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	743093	0.2
Ge	74	No Gas	1059075	0.3
Rh	103	No Gas	1231019	0.7
Tb	159	No Gas	2964739	1.2
Bi	209	No Gas	1828139	0.2
Sc	45	He	187263	1.0
Ge	74	He	195723	0.4
Rh	103	He	663778	0.3
Tb	159	He	1715097	1.3
Ge	74	HEHe	118805	1.7

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL1**	**Sample Type**	CalStd
File Name	004CALS.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:00:27	**Sample QC Pass/Fail**	Fail
Comment	A19K144 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.18	ug/l	578	5.9	3	0.3000	
Na	23	45	He		ug/l	10195	3.4	3	0.2001	
Mg	24	45	He		ug/l	4842	1.2	3	0.2001	
Al	27	45	He		ug/l	2529	6.9	3	0.2001	
K	39	45	He		ug/l	17167	0.7	3	0.2001	
Ca	44	45	He		ug/l	333	7.7	3	0.2001	
Ti	47	45	He		ug/l	37	0.0	3	0.3000	
V	51	74	He	0.18	ug/l	1591	4.8	3	0.3000	
Cr	52	74	He	0.18	ug/l	1202	6.2	3	0.3000	
Mn	55	74	He	0.18	ug/l	818	2.7	3	0.3000	
Fe	56	74	He	9	ug/l	56151	1.1	3	0.3000	
Co	59	74	He	0.18	ug/l	1603	9.8	3	0.3000	
Ni	60	74	He	0.18	ug/l	457	13.5	3	0.3000	
Cu	65	74	He	0.18	ug/l	823	7.9	3	0.3000	
Cu	65	74	No Gas	0.18	ug/l	1881	7.6	3	0.3000	
Zn	66	74	He		ug/l	304	9.9	3	0.3000	
As	75	74	He	0.18	ug/l	168	7.5	3	2.0001	
Se	78	74	HEHe	0.18	ug/l	15	11.3	3	3.0000	
Mo	95	103	He	0.18	ug/l	871	8.6	3	0.3000	
[Cd]	106	103	No Gas	0.18	ug/l	104	20.8	3	0.3000	RSD Warning
[Cd]	108	103	No Gas	0.18	ug/l	90	31.6	3	0.3000	RSD Warning
Ag	109	103	No Gas	0.18	ug/l	4684	2.2	3	0.3000	
Cd	111	103	He	0.18	ug/l	520	2.6	3	0.3000	
Cd	111	103	No Gas	0.18	ug/l	1191	2.7	3	0.3000	
Sb	123	103	No Gas	0.18	ug/l	3438	2.8	3	0.3000	
Ba	138	159	He	0.18	ug/l	3946	4.4	3	0.3000	
W	186	159	No Gas		ug/l	73	61.5	3	0.0999	RSD Warning
Hg	201	159	No Gas		ng/l	56	9.1	3	2.0001	
Tl	205	159	No Gas	0.18	ug/l	13673	2.1	3	0.3000	
Pb	208	159	No Gas	0.18	ug/l	21184	1.3	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	744792	0.4	3	743093.21	100.23	70	120	
Sc	45	He	186923	1.0	3	187263.33	99.82	70	120	
Ge	74	No Gas	1054693	0.6	3	1059075.15	99.59	70	120	
Ge	74	He	196325	0.4	3	195722.79	100.31	70	120	
Ge	74	HEHe	118102	0.6	3	118804.81	99.41	70	120	
Rh	103	No Gas	1227843	0.9	3	1231018.97	99.74	70	120	
Rh	103	He	660027	0.5	3	663778.05	99.43	70	120	
Tb	159	No Gas	2962724	0.3	3	2964739.4	99.93	70	120	
Tb	159	He	1702422	1.1	3	1715096.85	99.26	70	120	
Bi	209	No Gas	1843289	0.4	3	1828139.18	100.83	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL2**	**Sample Type**	CalStd
File Name	005CALS.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:05:21	**Sample QC Pass/Fail**	Fail
Comment	A19K145 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.902	ug/l	3033	2.4	3	0.3000	
Na	23	45	He	45	ug/l	41251	0.1	3	0.2001	
Mg	24	45	He	45	ug/l	22762	0.9	3	0.2001	
Al	27	45	He	45	ug/l	11763	2.7	3	0.2001	
K	39	45	He	45	ug/l	34569	1.7	3	0.2001	
Ca	44	45	He	45	ug/l	1251	12.2	3	0.2001	
Ti	47	45	He		ug/l	139	20.0	3	0.3000	RSD Warning
V	51	74	He	0.904	ug/l	4803	3.9	3	0.3000	
Cr	52	74	He	0.899	ug/l	5099	1.3	3	0.3000	
Mn	55	74	He	0.898	ug/l	3504	0.7	3	0.3000	
Fe	56	74	He	45.001	ug/l	249371	0.8	3	0.3000	
Co	59	74	He	0.9	ug/l	7791	0.9	3	0.3000	
Ni	60	74	He	0.902	ug/l	2032	2.2	3	0.3000	
Cu	65	74	He	0.903	ug/l	2984	4.0	3	0.3000	
Cu	65	74	No Gas	0.905	ug/l	7185	1.3	3	0.3000	
Zn	66	74	He	0.9	ug/l	1140	6.5	3	0.3000	
As	75	74	He	0.9	ug/l	726	1.1	3	2.0001	
Se	78	74	HEHe	0.9	ug/l	75	12.0	3	3.0000	
Mo	95	103	He	0.897	ug/l	3937	1.4	3	0.3000	
[Cd]	106	103	No Gas	0.904	ug/l	549	11.4	3	0.3000	
[Cd]	108	103	No Gas	0.898	ug/l	367	13.5	3	0.3000	
Ag	109	103	No Gas	0.9	ug/l	23366	2.0	3	0.3000	
Cd	111	103	He	0.897	ug/l	2386	0.1	3	0.3000	
Cd	111	103	No Gas	0.899	ug/l	5818	3.3	3	0.3000	
Sb	123	103	No Gas	0.9	ug/l	16692	0.8	3	0.3000	
Ba	138	159	He	0.9	ug/l	18471	2.5	3	0.3000	
W	186	159	No Gas		ug/l	97	52.1	3	0.0999	RSD Warning
Hg	201	159	No Gas	36	ng/l	168	6.1	3	2.0001	
Tl	205	159	No Gas	0.9	ug/l	66882	0.3	3	0.3000	
Pb	208	159	No Gas	0.9	ug/l	94174	0.9	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	747690	0.3	3	743093.21	100.62	70	120	
Sc	45	He	187491	1.1	3	187263.33	100.12	70	120	
Ge	74	No Gas	1061405	0.1	3	1059075.15	100.22	70	120	
Ge	74	He	194307	0.8	3	195722.79	99.28	70	120	
Ge	74	HEHe	118089	0.3	3	118804.81	99.4	70	120	
Rh	103	No Gas	1233379	0.6	3	1231018.97	100.19	70	120	
Rh	103	He	662576	1.2	3	663778.05	99.82	70	120	
Tb	159	No Gas	2989136	1.5	3	2964739.4	100.82	70	120	
Tb	159	He	1706064	0.8	3	1715096.85	99.47	70	120	
Bi	209	No Gas	1848479	0.6	3	1828139.18	101.11	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL3**	**Sample Type**	CalStd
File Name	006CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:10:14	**Sample QC Pass/Fail**	Fail
Comment	A19K146 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.783	ug/l	5793	3.6	3	0.3000	
Na	23	45	He	89.813	ug/l	78769	0.7	3	0.2001	
Mg	24	45	He	89.733	ug/l	44392	1.5	3	0.2001	
Al	27	45	He	89.821	ug/l	23109	1.6	3	0.2001	
K	39	45	He	90.033	ug/l	55853	1.0	3	0.2001	
Ca	44	45	He	89.909	ug/l	2426	2.6	3	0.2001	
Ti	47	45	He	1.8	ug/l	277	15.1	3	0.3000	RSD Warning
V	51	74	He	1.792	ug/l	8605	2.1	3	0.3000	
Cr	52	74	He	1.788	ug/l	9778	0.2	3	0.3000	
Mn	55	74	He	1.802	ug/l	7040	3.1	3	0.3000	
Fe	56	74	He	89.726	ug/l	487968	0.2	3	0.3000	
Co	59	74	He	1.784	ug/l	15007	1.1	3	0.3000	
Ni	60	74	He	1.802	ug/l	4021	3.1	3	0.3000	
Cu	65	74	He	1.806	ug/l	5745	4.1	3	0.3000	
Cu	65	74	No Gas	1.8	ug/l	13418	2.3	3	0.3000	
Zn	66	74	He	1.814	ug/l	2226	1.5	3	0.3000	
As	75	74	He	1.804	ug/l	1450	1.6	3	2.0001	
Se	78	74	HEHe	1.797	ug/l	148	11.0	3	3.0000	
Mo	95	103	He	1.796	ug/l	7770	1.8	3	0.3000	
[Cd]	106	103	No Gas	1.798	ug/l	1066	10.4	3	0.3000	
[Cd]	108	103	No Gas	1.84	ug/l	793	7.5	3	0.3000	
Ag	109	103	No Gas	1.8	ug/l	46168	0.8	3	0.3000	
Cd	111	103	He	1.8	ug/l	4768	4.5	3	0.3000	
Cd	111	103	No Gas	1.797	ug/l	11399	1.6	3	0.3000	
Sb	123	103	No Gas	1.795	ug/l	32429	1.1	3	0.3000	
Ba	138	159	He	1.797	ug/l	36479	0.6	3	0.3000	
W	186	159	No Gas		ug/l	90	0.0	3	0.0999	
Hg	201	159	No Gas	73.156	ng/l	331	5.4	3	2.0001	
Tl	205	159	No Gas	1.802	ug/l	132065	0.7	3	0.3000	
Pb	208	159	No Gas	1.802	ug/l	183587	0.4	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	750459	0.3	3	743093.21	100.99	70	120	
Sc	45	He	186834	1.0	3	187263.33	99.77	70	120	
Ge	74	No Gas	1054472	1.0	3	1059075.15	99.57	70	120	
Ge	74	He	195687	0.6	3	195722.79	99.98	70	120	
Ge	74	HEHe	117757	1.0	3	118804.81	99.12	70	120	
Rh	103	No Gas	1219731	0.7	3	1231018.97	99.08	70	120	
Rh	103	He	661817	0.2	3	663778.05	99.7	70	120	
Tb	159	No Gas	2947056	0.4	3	2964739.4	99.4	70	120	
Tb	159	He	1713114	1.2	3	1715096.85	99.88	70	120	
Bi	209	No Gas	1843991	0.9	3	1828139.18	100.87	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL4**	**Sample Type**	CalStd
File Name	007CALS.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:15:07	**Sample QC Pass/Fail**	Fail
Comment	A19K147 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	3.622	ug/l	11906	1.6	3	0.3000	
Na	23	45	He	181.166	ug/l	159639	0.7	3	0.2001	
Mg	24	45	He	181.154	ug/l	91262	0.8	3	0.2001	
Al	27	45	He	179.81	ug/l	46054	0.7	3	0.2001	
K	39	45	He	181.487	ug/l	101727	0.9	3	0.2001	
Ca	44	45	He	182.963	ug/l	5154	3.3	3	0.2001	
Ti	47	45	He	3.623	ug/l	570	3.7	3	0.3000	
V	51	74	He	3.621	ug/l	16788	1.0	3	0.3000	
Cr	52	74	He	3.615	ug/l	19858	1.7	3	0.3000	
Mn	55	74	He	3.619	ug/l	14306	1.9	3	0.3000	
Fe	56	74	He	181.057	ug/l	995909	0.1	3	0.3000	
Co	59	74	He	3.62	ug/l	30983	1.0	3	0.3000	
Ni	60	74	He	3.608	ug/l	8019	1.9	3	0.3000	
Cu	65	74	He	3.615	ug/l	11309	0.4	3	0.3000	
Cu	65	74	No Gas	3.622	ug/l	26597	1.2	3	0.3000	
Zn	66	74	He	3.623	ug/l	4383	2.7	3	0.3000	
As	75	74	He	3.608	ug/l	2890	1.0	3	2.0001	
Se	78	74	HEHe	3.577	ug/l	292	6.3	3	3.0000	
Mo	95	103	He	3.596	ug/l	15522	1.0	3	0.3000	
[Cd]	106	103	No Gas	3.569	ug/l	2035	1.6	3	0.3000	
[Cd]	108	103	No Gas	3.633	ug/l	1587	2.6	3	0.3000	
Ag	109	103	No Gas	3.608	ug/l	92533	1.1	3	0.3000	
Cd	111	103	He	3.611	ug/l	9680	1.0	3	0.3000	
Cd	111	103	No Gas	3.615	ug/l	23069	1.5	3	0.3000	
Sb	123	103	No Gas	3.617	ug/l	65735	1.4	3	0.3000	
Ba	138	159	He	3.607	ug/l	73387	0.5	3	0.3000	
W	186	159	No Gas		ug/l	113	31.0	3	0.0999	RSD Warning
Hg	201	159	No Gas	144.713	ng/l	636	3.9	3	2.0001	
Tl	205	159	No Gas	3.614	ug/l	265918	0.5	3	0.3000	
Pb	208	159	No Gas	3.613	ug/l	366901	0.7	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	746137	0.7	3	743093.21	100.41	70	120	
Sc	45	He	187059	0.4	3	187263.33	99.89	70	120	
Ge	74	No Gas	1048851	1.3	3	1059075.15	99.03	70	120	
Ge	74	He	195730	1.1	3	195722.79	100	70	120	
Ge	74	HEHe	119109	1.2	3	118804.81	100.26	70	120	
Rh	103	No Gas	1212078	1.9	3	1231018.97	98.46	70	120	
Rh	103	He	664334	0.6	3	663778.05	100.08	70	120	
Tb	159	No Gas	2930399	1.5	3	2964739.4	98.84	70	120	
Tb	159	He	1713167	0.3	3	1715096.85	99.89	70	120	
Bi	209	No Gas	1838820	1.8	3	1828139.18	100.58	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL5**	**Sample Type**	CalStd
File Name	008CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:20:54	**Sample QC Pass/Fail**	Fail
Comment	A19K148 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	10.022	ug/l	33083	1.3	3	0.3000	
Na	23	45	He	401.589	ug/l	347537	0.6	3	0.2001	
Mg	24	45	He	401.202	ug/l	199215	0.3	3	0.2001	
Al	27	45	He	401.48	ug/l	101676	1.7	3	0.2001	
K	39	45	He	402.124	ug/l	208383	0.7	3	0.2001	
Ca	44	45	He	399.028	ug/l	10811	0.6	3	0.2001	
Ti	47	45	He	20.007	ug/l	3089	4.1	3	0.3000	
V	51	74	He	20.025	ug/l	88776	0.9	3	0.3000	
Cr	52	74	He	20.021	ug/l	108512	0.4	3	0.3000	
Mn	55	74	He	20.038	ug/l	80068	0.3	3	0.3000	
Fe	56	74	He	402.524	ug/l	2190168	0.9	3	0.3000	
Co	59	74	He	20.014	ug/l	168684	0.6	3	0.3000	
Ni	60	74	He	20.033	ug/l	44531	2.1	3	0.3000	
Cu	65	74	He	20.033	ug/l	61705	1.5	3	0.3000	
Cu	65	74	No Gas	20.014	ug/l	145311	0.4	3	0.3000	
Zn	66	74	He	20.031	ug/l	23694	0.6	3	0.3000	
As	75	74	He	20.002	ug/l	15458	0.5	3	2.0001	
Se	78	74	HEHe	10	ug/l	806	1.8	3	3.0000	
Mo	95	103	He	10.03	ug/l	42530	0.5	3	0.3000	
[Cd]	106	103	No Gas	20.002	ug/l	11328	0.7	3	0.3000	
[Cd]	108	103	No Gas	20.015	ug/l	8781	1.6	3	0.3000	
Ag	109	103	No Gas	10.012	ug/l	257275	0.5	3	0.3000	
Cd	111	103	He	20.021	ug/l	53132	0.5	3	0.3000	
Cd	111	103	No Gas	20.008	ug/l	128271	0.4	3	0.3000	
Sb	123	103	No Gas	10.021	ug/l	183297	0.7	3	0.3000	
Ba	138	159	He	20.016	ug/l	402731	0.2	3	0.3000	
W	186	159	No Gas		ug/l	150	54.6	3	0.0999	RSD Warning
Hg	201	159	No Gas	402.221	ng/l	1768	0.5	3	2.0001	
Tl	205	159	No Gas	10.05	ug/l	755125	0.7	3	0.3000	
Pb	208	159	No Gas	20.02	ug/l	2053721	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	740356	1.1	3	743093.21	99.63	70	120	
Sc	45	He	182646	0.6	3	187263.33	97.53	70	120	
Ge	74	No Gas	1045199	1.2	3	1059075.15	98.69	70	120	
Ge	74	He	189781	0.9	3	195722.79	96.96	70	120	
Ge	74	HEHe	117748	2.0	3	118804.81	99.11	70	120	
Rh	103	No Gas	1206210	1.5	3	1231018.97	97.98	70	120	
Rh	103	He	642156	0.1	3	663778.05	96.74	70	120	
Tb	159	No Gas	2908555	1.1	3	2964739.4	98.1	70	120	
Tb	159	He	1668246	0.2	3	1715096.85	97.27	70	120	
Bi	209	No Gas	1833516	1.9	3	1828139.18	100.29	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL6**	**Sample Type**	CalStd
File Name	009CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:26:40	**Sample QC Pass/Fail**	Pass
Comment	A19K149	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	49.967	ug/l	163415	0.6	3	0.3000	
Na	23	45	He	2499.164	ug/l	2154103	1.0	3	0.2001	
Mg	24	45	He	2498.241	ug/l	1227697	2.4	3	0.2001	
Al	27	45	He	2498.456	ug/l	628184	1.0	3	0.2001	
K	39	45	He	2498.164	ug/l	1215929	0.2	3	0.2001	
Ca	44	45	He	2499.421	ug/l	67788	0.8	3	0.2001	
Ti	47	45	He	49.761	ug/l	7559	2.8	3	0.3000	
V	51	74	He	49.707	ug/l	216022	0.1	3	0.3000	
Cr	52	74	He	49.873	ug/l	271443	0.5	3	0.3000	
Mn	55	74	He	49.832	ug/l	199081	0.4	3	0.3000	
Fe	56	74	He	2498.178	ug/l	13529354	0.5	3	0.3000	
Co	59	74	He	49.819	ug/l	419312	0.2	3	0.3000	
Ni	60	74	He	49.718	ug/l	108963	0.6	3	0.3000	
Cu	65	74	He	49.774	ug/l	151839	0.3	3	0.3000	
Cu	65	74	No Gas	49.866	ug/l	354277	0.6	3	0.3000	
Zn	66	74	He	49.846	ug/l	58863	1.7	3	0.3000	
As	75	74	He	49.903	ug/l	38862	0.3	3	2.0001	
Se	78	74	HEHe	50.003	ug/l	3980	0.7	3	3.0000	
Mo	95	103	He	49.958	ug/l	211881	0.4	3	0.3000	
[Cd]	106	103	No Gas	49.79	ug/l	27377	2.3	3	0.3000	
[Cd]	108	103	No Gas	49.717	ug/l	20982	2.5	3	0.3000	
Ag	109	103	No Gas	49.974	ug/l	1264445	0.3	3	0.3000	
Cd	111	103	He	49.698	ug/l	129680	0.6	3	0.3000	
Cd	111	103	No Gas	49.872	ug/l	313545	0.1	3	0.3000	
Sb	123	103	No Gas	49.98	ug/l	901863	0.5	3	0.3000	
Ba	138	159	He	49.831	ug/l	998621	0.7	3	0.3000	
W	186	159	No Gas		ug/l	487	14.0	3	0.0999	
Hg	201	159	No Gas	1996.407	ng/l	8467	1.1	3	2.0001	
Tl	205	159	No Gas	49.996	ug/l	3798124	0.7	3	0.3000	
Pb	208	159	No Gas	49.858	ug/l	5092108	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	744113	1.3	3	743093.21	100.14	70	120	
Sc	45	He	184944	0.5	3	187263.33	98.76	70	120	
Ge	74	No Gas	1042525	1.2	3	1059075.15	98.44	70	120	
Ge	74	He	193669	0.8	3	195722.79	98.95	70	120	
Ge	74	HEHe	116212	2.9	3	118804.81	97.82	70	120	
Rh	103	No Gas	1201089	1.3	3	1231018.97	97.57	70	120	
Rh	103	He	654294	0.5	3	663778.05	98.57	70	120	
Tb	159	No Gas	2947843	1.4	3	2964739.4	99.43	70	120	
Tb	159	He	1696155	0.7	3	1715096.85	98.9	70	120	
Bi	209	No Gas	1847334	1.5	3	1828139.18	101.05	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL7**	**Sample Type**	CalStd
File Name	010CALS.d	**Vial #**	2107
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:31:29	**Sample QC Pass/Fail**	Pass
Comment	A19K150	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	99.949	ug/l	320925	0.6	3	0.3000	
Na	23	45	He	3987.986	ug/l	3337323	0.5	3	0.2001	
Mg	24	45	He	4004.793	ug/l	1931626	1.5	3	0.2001	
Al	27	45	He	4004.951	ug/l	988426	0.5	3	0.2001	
K	39	45	He	4015.956	ug/l	1924050	0.4	3	0.2001	
Ca	44	45	He	4002.722	ug/l	106382	1.1	3	0.2001	
Ti	47	45	He	200.025	ug/l	29782	0.1	3	0.3000	
V	51	74	He	199.984	ug/l	848658	0.3	3	0.3000	
Cr	52	74	He	199.87	ug/l	1056683	0.3	3	0.3000	
Mn	55	74	He	199.929	ug/l	779118	0.5	3	0.3000	
Fe	56	74	He	3983.069	ug/l	20926563	0.4	3	0.3000	
Co	59	74	He	200.025	ug/l	1653434	0.8	3	0.3000	
Ni	60	74	He	199.788	ug/l	422919	0.4	3	0.3000	
Cu	65	74	He	199.891	ug/l	592481	0.3	3	0.3000	
Cu	65	74	No Gas	199.828	ug/l	1373605	0.1	3	0.3000	
Zn	66	74	He	199.942	ug/l	230142	0.4	3	0.3000	
As	75	74	He	199.705	ug/l	149389	0.2	3	2.0001	
Se	78	74	HEHe	99.773	ug/l	7719	0.3	3	3.0000	
Mo	95	103	He	100.184	ug/l	416343	0.5	3	0.3000	
[Cd]	106	103	No Gas	200.109	ug/l	108578	0.5	3	0.3000	
[Cd]	108	103	No Gas	199.85	ug/l	81748	1.5	3	0.3000	
Ag	109	103	No Gas	100.292	ug/l	2513898	0.6	3	0.3000	
Cd	111	103	He	200.169	ug/l	514150	0.5	3	0.3000	
Cd	111	103	No Gas	200.096	ug/l	1240496	0.7	3	0.3000	
Sb	123	103	No Gas	100.391	ug/l	1801432	0.8	3	0.3000	
Ba	138	159	He	200.166	ug/l	3998074	0.8	3	0.3000	
W	186	159	No Gas		ug/l	1085	10.3	3	0.0999	
Hg	201	159	No Gas	3994.638	ng/l	16807	0.6	3	2.0001	
Tl	205	159	No Gas	99.745	ug/l	7493269	0.6	3	0.3000	
Pb	208	159	No Gas	199.888	ug/l	20220551	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	731924	0.8	3	743093.21	98.5	70	120	
Sc	45	He	180990	0.6	3	187263.33	96.65	70	120	
Ge	74	No Gas	1022146	0.6	3	1059075.15	96.51	70	120	
Ge	74	He	189884	0.4	3	195722.79	97.02	70	120	
Ge	74	HEHe	113903	1.2	3	118804.81	95.87	70	120	
Rh	103	No Gas	1176484	0.1	3	1231018.97	95.57	70	120	
Rh	103	He	636669	0.3	3	663778.05	95.92	70	120	
Tb	159	No Gas	2943380	0.2	3	2964739.4	99.28	70	120	
Tb	159	He	1671597	0.6	3	1715096.85	97.46	70	120	
Bi	209	No Gas	1835440	1.6	3	1828139.18	100.4	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL8**	**Sample Type**	CalStd
File Name	011CALS.d	**Vial #**	2108
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:36:11	**Sample QC Pass/Fail**	Fail
Comment	A19K151	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.02	ug/l	79	39.3	3	0.3000	RSD Warning
Na	23	45	He	10053.83	ug/l	8110786	1.1	3	0.2001	
Mg	24	45	He	10036.661	ug/l	4632392	1.2	3	0.2001	
Al	27	45	He	10042.35	ug/l	2378304	1.9	3	0.2001	
K	39	45	He	10018.953	ug/l	4538332	0.7	3	0.2001	
Ca	44	45	He	10036.464	ug/l	255119	0.3	3	0.2001	
Ti	47	45	He	502.435	ug/l	72480	1.5	3	0.3000	
V	51	74	He	504.297	ug/l	2119610	0.6	3	0.3000	
Cr	52	74	He	503.572	ug/l	2615693	1.0	3	0.3000	
Mn	55	74	He	503.224	ug/l	1918795	1.1	3	0.3000	
Fe	56	74	He	10023.288	ug/l	50094899	0.6	3	0.3000	
Co	59	74	He	502.486	ug/l	4027809	0.6	3	0.3000	
Ni	60	74	He	501.495	ug/l	1017417	1.2	3	0.3000	
Cu	65	74	He	502.003	ug/l	1434104	0.7	3	0.3000	
Cu	65	74	No Gas	501.949	ug/l	3355187	0.2	3	0.3000	
Zn	66	74	He	501.53	ug/l	553167	0.4	3	0.3000	
As	75	74	He	502.87	ug/l	366441	1.1	3	2.0001	
Se	78	74	HEHe	0.055	ug/l	4	28.4	3	3.0000	RSD Warning
Mo	95	103	He	0.124	ug/l	519	7.5	3	0.3000	
[Cd]	106	103	No Gas	502.33	ug/l	265468	0.4	3	0.3000	
[Cd]	108	103	No Gas	501.632	ug/l	198184	0.5	3	0.3000	
Ag	109	103	No Gas	0.02	ug/l	517	7.2	3	0.3000	
Cd	111	103	He	502.911	ug/l	1257108	0.9	3	0.3000	
Cd	111	103	No Gas	503.376	ug/l	3078207	0.4	3	0.3000	
Sb	123	103	No Gas	0.1	ug/l	1830	3.2	3	0.3000	
Ba	138	159	He	499.37	ug/l	9650406	1.3	3	0.3000	
W	186	159	No Gas	100	ug/l	2928883	1.1	3	0.0999	
Hg	201	159	No Gas	109.294	ng/l	468	6.2	3	2.0001	
Tl	205	159	No Gas	0.064	ug/l	5187	1.0	3	0.3000	
Pb	208	159	No Gas	501.157	ug/l	49563539	1.5	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	701935	2.4	3	743093.21	94.46	70	120	
Sc	45	He	170489	3.8	3	187263.33	91.04	70	120	
Ge	74	No Gas	972031	2.4	3	1059075.15	91.78	70	120	
Ge	74	He	179054	4.9	3	195722.79	91.48	70	120	
Ge	74	HEHe	108999	1.1	3	118804.81	91.75	70	120	
Rh	103	No Gas	1115494	2.8	3	1231018.97	90.62	70	120	
Rh	103	He	599212	4.4	3	663778.05	90.27	70	120	
Tb	159	No Gas	2841124	3.7	3	2964739.4	95.83	70	120	
Tb	159	He	1630181	3.6	3	1715096.85	95.05	70	120	
Bi	209	No Gas	1792376	3.4	3	1828139.18	98.04	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9K15037-CAL9**	**Sample Type**	CalStd
File Name	012CALS.d	**Vial #**	2109
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:40:49	**Sample QC Pass/Fail**	Fail
Comment	A19K152	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.008	ug/l	40	22.0	3	0.3000	RSD Warning
Na	23	45	He	49895.531	ug/l	40133461	0.7	3	0.2001	
Mg	24	45	He	49849.85	ug/l	22541454	0.3	3	0.2001	
Al	27	45	He	49862.878	ug/l	11626469	1.3	3	0.2001	
K	39	45	He	49851.368	ug/l	22094460	0.1	3	0.2001	
Ca	44	45	He	49910.036	ug/l	1272497	1.6	3	0.2001	
Ti	47	45	He	2496.154	ug/l	362493	0.5	3	0.3000	
V	51	74	He	0.011	ug/l	853	3.1	3	0.3000	
Cr	52	74	He	991.689	ug/l	5033489	0.6	3	0.3000	
Mn	55	74	He	2494.939	ug/l	9163094	0.8	3	0.3000	
Fe	56	74	He	49954.775	ug/l	246341212	0.2	3	0.3000	
Co	59	74	He	0.201	ug/l	1650	2.9	3	0.3000	
Ni	60	74	He	993.721	ug/l	1983160	0.7	3	0.3000	
Cu	65	74	He	989.044	ug/l	2736658	1.5	3	0.3000	
Cu	65	74	No Gas	985.09	ug/l	6142303	0.7	3	0.3000	
Zn	66	74	He	2496.094	ug/l	2677370	0.2	3	0.3000	
As	75	74	He	0.14	ug/l	128	3.7	3	2.0001	
Se	78	74	HEHe	0.095	ug/l	7	41.6	3	3.0000	RSD Warning
Mo	95	103	He	0.26	ug/l	1049	2.5	3	0.3000	
[Cd]	106	103	No Gas	995.131	ug/l	499893	0.2	3	0.3000	
[Cd]	108	103	No Gas	995.685	ug/l	374609	0.4	3	0.3000	
Ag	109	103	No Gas	0.028	ug/l	677	4.2	3	0.3000	
Cd	111	103	He	994.475	ug/l	2442502	0.1	3	0.3000	
Cd	111	103	No Gas	987.892	ug/l	5605865	0.7	3	0.3000	
Sb	123	103	No Gas	0.054	ug/l	1016	7.8	3	0.3000	
Ba	138	159	He	2493.047	ug/l	47074888	1.3	3	0.3000	
W	186	159	No Gas	0.376	ug/l	10993	0.6	3	0.0999	
Hg	201	159	No Gas	37.027	ng/l	173	2.2	3	2.0001	
Tl	205	159	No Gas	0.019	ug/l	1927	0.9	3	0.3000	
Pb	208	159	No Gas	0.151	ug/l	17763	2.3	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	694488	0.8	3	743093.21	93.46	70	120	
Sc	45	He	177172	1.2	3	187263.33	94.61	70	120	
Ge	74	No Gas	952642	0.8	3	1059075.15	89.95	70	120	
Ge	74	He	179693	0.6	3	195722.79	91.81	70	120	
Ge	74	HEHe	109093	0.3	3	118804.81	91.83	70	120	
Rh	103	No Gas	1077327	0.5	3	1231018.97	87.52	70	120	
Rh	103	He	599237	0.6	3	663778.05	90.28	70	120	
Tb	159	No Gas	2812278	0.5	3	2964739.4	94.86	70	120	
Tb	159	He	1686420	0.8	3	1715096.85	98.33	70	120	
Bi	209	No Gas	1727083	0.8	3	1828139.18	94.47	70	120	

P/A Factor Tuning Report

========== Current Sample ==========
Sample Name: 9K15037-ICV1
Data File: 013_ICV.d
Acquired: 11/15/2019 17:53:49

========= Detector Parameters and P/A Factors =========
Discriminator: 4.9 mV
AnalogHV: 2286 V
PulseHV: 1979 V

Acquired: 11/15/2019 16:35:11

Mass[u]	Element	P/A Factor
23	Na	0.105623
24	Mg	0.112258
27	Al	0.118004
39	K	0.122643
44	Ca	0.122294
47	Ti	0.123666
51	V	0.128450
52	Cr	0.131236
55	Mn	0.128686
56	Fe	0.136474
59	Co	0.141962
60	Ni	0.139364
65	Cu	0.143337
66	Zn	0.148045
95	Mo	0.138395
106	[Cd]	0.151578
108	[Cd]	0.152929
109	Ag	0.151800
111	Cd	0.149569
123	Sb	0.153801
137	Ba	0.152994
138	Ba	0.153928
186	W	0.156364
205	Tl	0.170184
206	[Pb]	0.165190
207	[Pb]	0.166096
208	Pb	0.169496
7	[Li]	Signal too low
9	Be	Signal too low
45	Sc	Signal too low
74	Ge	Signal too low
103	Rh	Signal too low
159	Tb	Signal too low
209	Bi	Signal too low

=== Independent Detector Parameters and P/A Factors ===
Tune Mode Name: No Gas
Discriminator: 4.9 mV
AnalogHV: 2286 V
PulseHV: 1979 V

Acquired: 11/15/2019 17:40:52

Mass[u]	Element	P/A Factor
6	Li	0.096574
65	Cu	0.149723
74	Ge	0.147549
103	Rh	0.150549
106	[Cd]	0.154411
109	Ag	0.157401
111	Cd	0.155343
123	Sb	0.154090
159	Tb	0.158009
186	W	0.158395
205	Tl	0.170052
206	[Pb]	0.167924
207	[Pb]	0.168193
208	Pb	0.169199
209	Bi	0.168497
7	[Li]	Signal too low
9	Be	Signal too low
108	[Cd]	Signal too low
201	Hg	Signal too low

Tune Mode Name: He
Discriminator: 4.9 mV
AnalogHV: 2286 V
PulseHV: 1979 V

Acquired: 11/15/2019 17:41:47

Mass[u]	Element	P/A Factor
23	Na	0.110125
24	Mg	0.115308
27	Al	0.120248
39	K	0.126843
44	Ca	0.127681
51	V	0.130035
52	Cr	0.134350
55	Mn	0.135734
56	Fe	0.139588
59	Co	0.142076
60	Ni	0.144753
65	Cu	0.148427

66	Zn	0.147124
103	Rh	0.148602
111	Cd	0.153378
138	Ba	0.154332
159	Tb	0.155903
45	Sc	Signal too low
47	Ti	Signal too low
74	Ge	Signal too low
75	As	Signal too low
95	Mo	Signal too low

Tune Mode Name: HEHe
Discriminator: 4.9 mV
AnalogHV: 2286 V
PulseHV: 1979 V

Acquired: 10/25/2019 14:18:04

Mass[u]	Element	P/A Factor
56	Fe	0.136777
74	Ge	Signal too low
78	Se	Signal too low

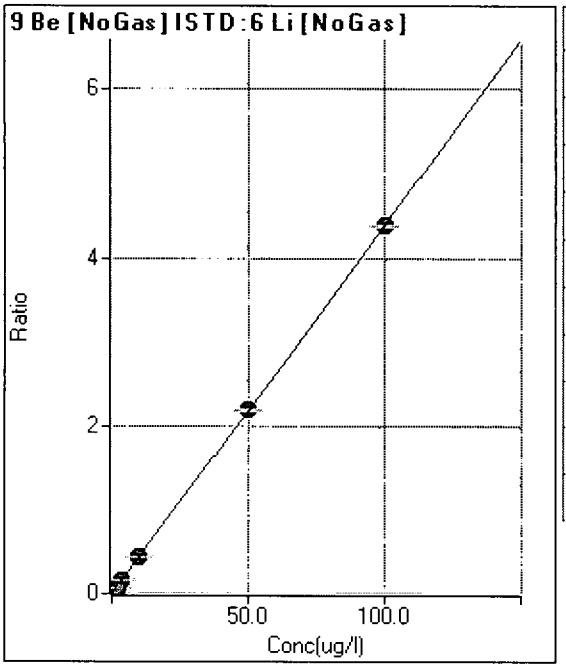
Created: 11/16/2019 11:20:42

Calibration for 013_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\9K15037A.b\
Analysis File: 9K15037A.batch.bin
DA Date-Time: 11/15/2019 17:55:41
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	9K15037-CAL0	11/15/2019 16:55:30
2	004CALS.d	9K15037-CAL1	11/15/2019 17:00:27
3	005CALS.d	9K15037-CAL2	11/15/2019 17:05:21
4	006CALS.d	9K15037-CAL3	11/15/2019 17:10:14
5	007CALS.d	9K15037-CAL4	11/15/2019 17:15:07
6	008CALS.d	9K15037-CAL5	11/15/2019 17:20:54
7	009CALS.d	9K15037-CAL6	11/15/2019 17:26:40
8	010CALS.d	9K15037-CAL7	11/15/2019 17:31:29
9	011CALS.d	9K15037-CAL8	11/15/2019 17:36:11
10	012CALS.d	9K15037-CAL9	11/15/2019 17:40:49

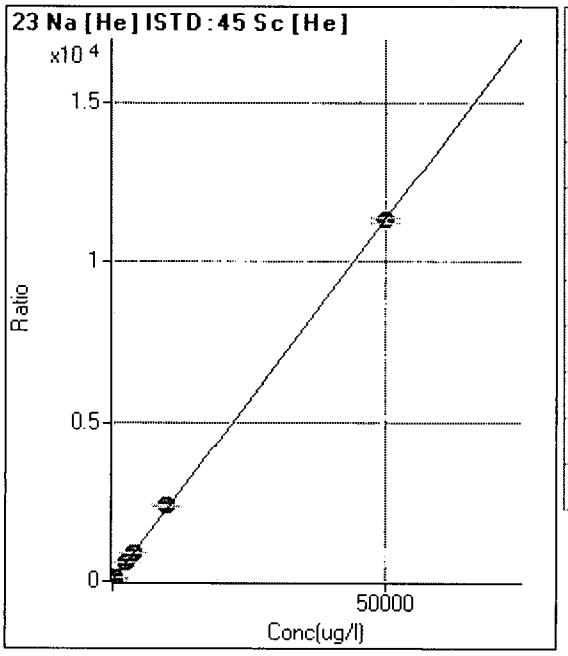
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	17	0.000	P	40.0
2	☐	0.180	0.172	578	0.008	P	6.3
3	☐	0.900	0.919	3033	0.041	P	2.3
4	☐	1.800	1.755	5793	0.077	P	3.4
5	☐	3.600	3.632	11906	0.160	P	0.9
6	☐	10.000	10.183	33083	0.447	P	2.3
7	☐	50.000	50.064	163415	2.196	P	1.7
8	☐	100.000	99.949	320925	4.385	P	0.7
9	☐			79	0.001	P	37.6
10	☐			40	0.001	P	21.4

y = 0.0439 * x + 2.2426E-004
R = 1.0000
DL = 0.006131
BEC = 0.005112

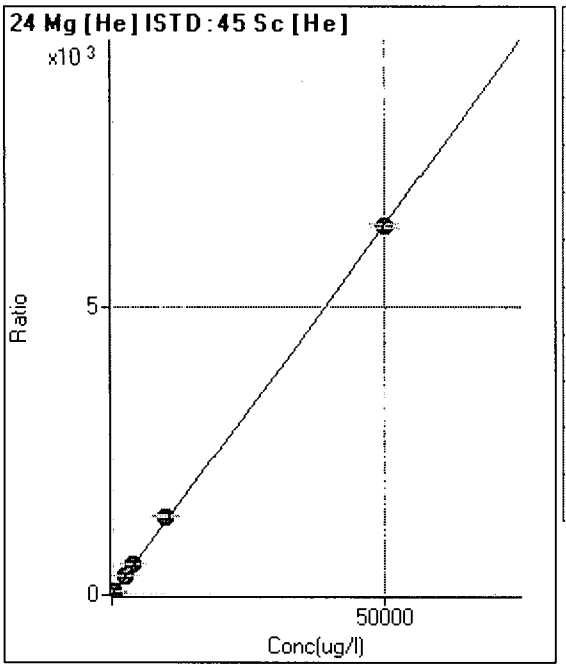
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2657	0.710	P	6.4
2	☐			10195	2.727	P	2.9
3	☐	45.000	45.338	41251	11.002	P	1.2
4	☐	90.000	89.740	78769	21.081	P	1.2
5	☐	180.000	184.849	159639	42.672	P	1.1
6	☐	400.000	415.973	347537	95.140	P	0.1
7	☐	2500.000	2562.240	2154103	582.364	A	0.7
8	☐	4000.000	4058.410	3337323	922.009	A	1.1
9	☐	10000.000	10482.695	8110786	2,380.386	A	2.8
10	☐	50000.000	49895.531	40133461	11,327.493	A	1.6

y = 0.2270 * x + 0.7097
R = 0.9999
DL = 0.6012
BEC = 3.126

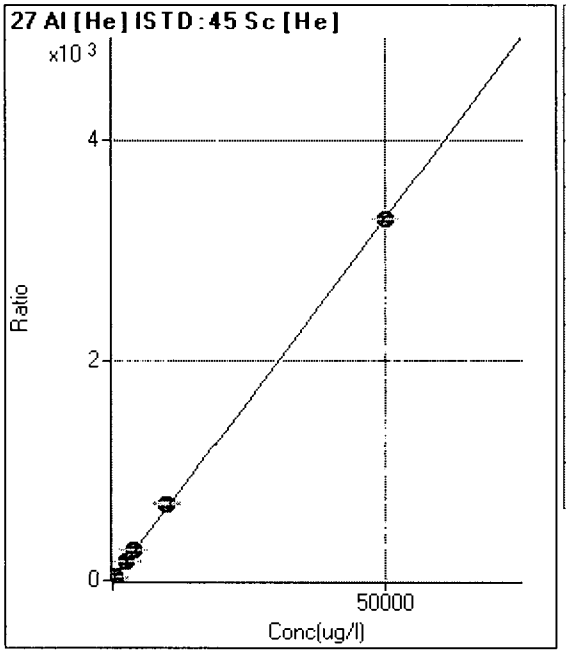
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc.Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	322	0.086	P	7.3
2	☐			4842	1.295	P	1.2
3	☐	45.000	46.896	22762	6.071	P	1.4
4	☐	90.000	92.414	44392	11.880	P	0.5
5	☐	180.000	190.476	91262	24.395	P	1.1
6	☐	400.000	426.670	199215	54.538	P	0.9
7	☐	2500.000	2600.364	1227697	331.946	A	2.9
8	☐	4000.000	4180.925	1931626	533.658	A	1.9
9	☐	10000.000	10652.005	4632392	1,359.502	A	2.8
10	☐	50000.000	49849.850	22541454	6,361.959	A	1.0

y = 0.1276 * x + 0.0859
R = 0.9999
DL = 0.1476
BEC = 0.673

Weight: <None>
Min Conc: <None>

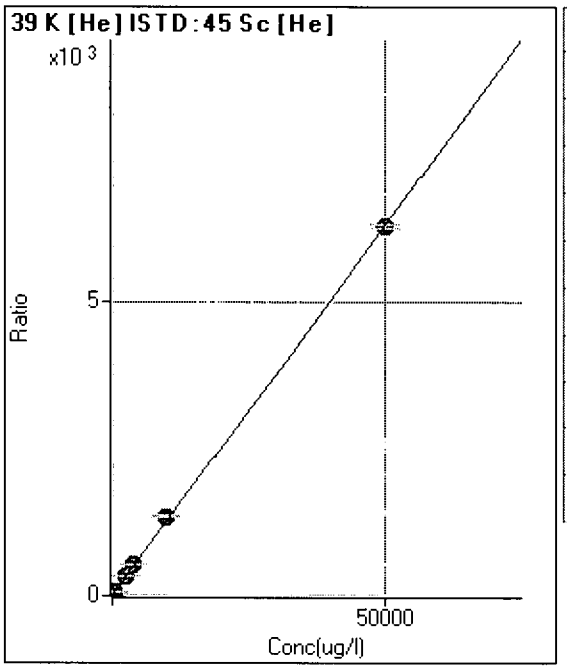


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110	0.029	P	23.3
2	☐			2529	0.676	P	6.4
3	☐	45.000	47.238	11763	3.138	P	3.7
4	☐	90.000	93.543	23109	6.185	P	1.6
5	☐	180.000	186.630	46054	12.310	P	0.7
6	☐	400.000	422.591	101676	27.837	P	2.2
7	☐	2500.000	2580.633	628184	169.840	P	1.5
8	☐	4000.000	4149.416	988426	273.069	P	0.8
9	☐	10000.000	10604.619	2378304	697.833	A	1.9
10	☐	50000.000	49862.878	11626469	3,281.099	A	0.1

y = 0.0658 * x + 0.0293
R = 0.9999
DL = 0.3114
BEC = 0.4456

Weight: <None>
Min Conc: <None>

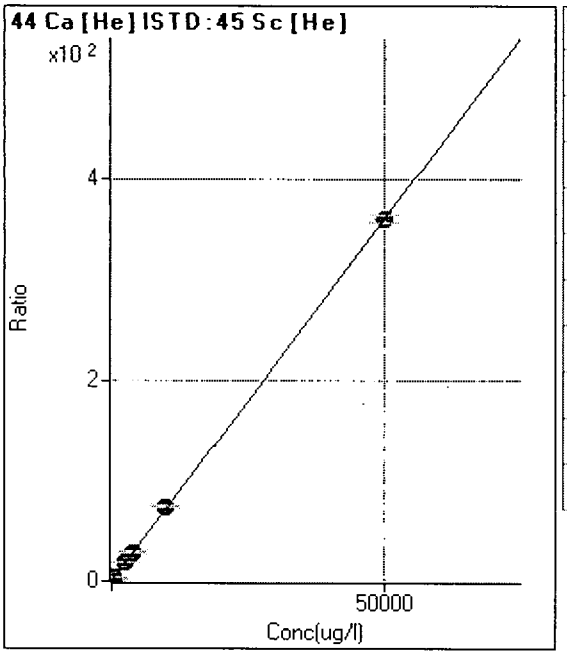
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13148	3.511	P	1.1
2	☐			17167	4.592	P	1.0
3	☐	45.000	45.656	34569	9.219	P	1.1
4	☐	90.000	91.480	55853	14.948	P	0.9
5	☐	180.000	189.410	101727	27.191	P	0.6
6	☐	400.000	428.237	208383	57.049	P	1.3
7	☐	2500.000	2601.420	1215929	328.738	A	0.7
8	☐	4000.000	4223.725	1924050	531.556	A	1.0
9	☐	10000.000	10627.002	4538332	1,332.087	A	3.3
10	☐	50000.000	49851.368	22094460	6,235.876	A	1.1

y = 0.1250 * x + 3.5108
R = 0.9999
DL = 0.9659
BEC = 28.08

Weight: <None>
Min Conc: <None>

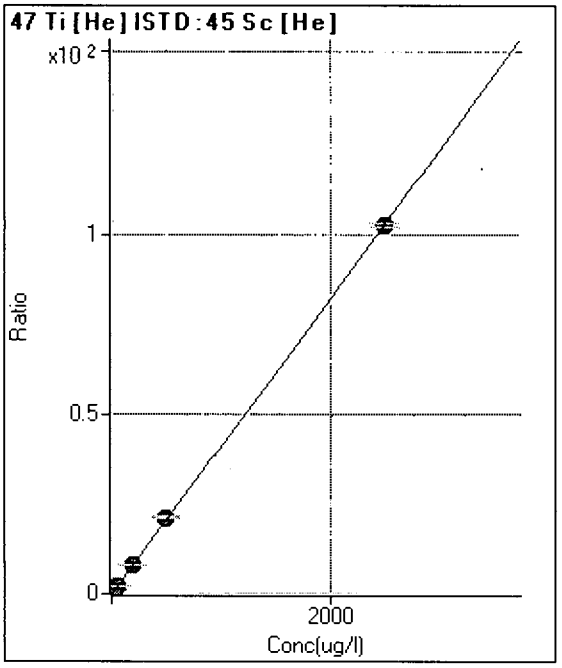


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57	0.015	P	36.0
2	☐			333	0.089	P	6.8
3	☐	45.000	44.292	1251	0.334	P	12.8
4	☐	90.000	88.140	2426	0.649	P	3.7
5	☐	180.000	189.334	5154	1.378	P	3.3
6	☐	400.000	409.184	10811	2.960	P	0.7
7	☐	2500.000	2544.850	67788	18.327	P	1.3
8	☐	4000.000	4082.365	106382	29.391	P	1.7
9	☐	10000.000	10405.145	255119	74.889	P	3.6
10	☐	50000.000	49910.036	1272497	359.158	A	2.2

y = 0.0072 * x + 0.0151
R = 1.0000
DL = 2.264
BEC = 2.098

Weight: <None>
Min Conc: <None>

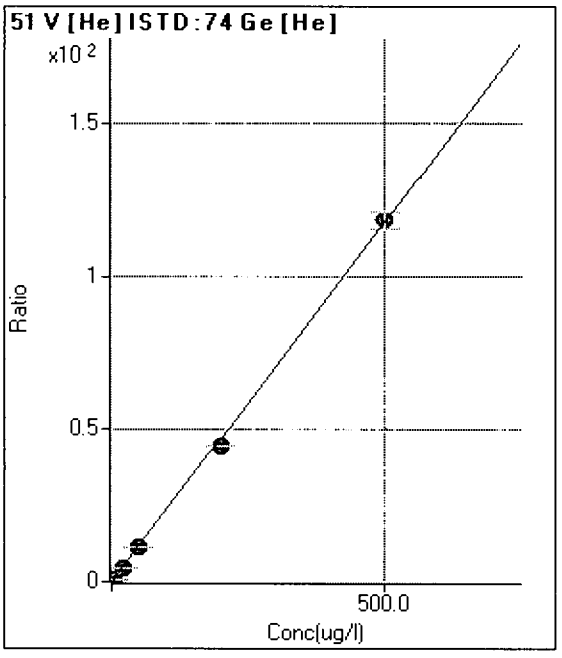
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2	0.001	P	173.2
2	☐			37	0.010	P	1.0
3	☐			139	0.037	P	20.2
4	☐	1.800	1.794	277	0.074	P	16.0
5	☐	3.600	3.703	570	0.152	P	3.9
6	☐	20.000	20.619	3089	0.846	P	3.9
7	☐	50.000	49.850	7559	2.044	P	3.2
8	☐	200.000	200.730	29782	8.228	P	0.6
9	☐	500.000	518.926	72480	21.269	P	2.3
10	☐	2500.000	2496.154	362493	102.307	P	0.9

y = 0.0410 * x + 5.9108E-004
R = 1.0000
DL = 0.07494
BEC = 0.01442

Weight: <None>
Min Conc: <None>

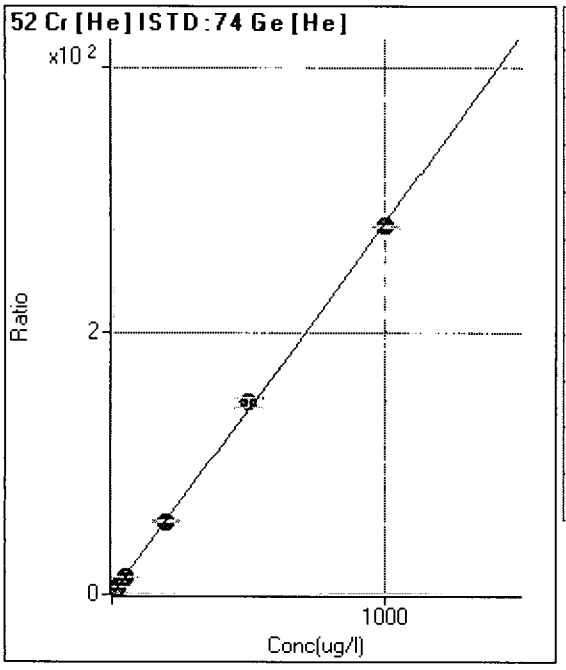


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	880	0.045	P	4.4
2	☐	0.180	0.154	1591	0.081	P	5.1
3	☐	0.900	0.861	4803	0.247	P	4.3
4	☐	1.800	1.680	8605	0.440	P	1.5
5	☐	3.600	3.458	16788	0.858	P	1.3
6	☐	20.000	19.712	88776	4.678	P	0.1
7	☐	50.000	47.269	216022	11.155	P	0.9
8	☐	200.000	189.972	848658	44.694	P	0.6
9	☐	500.000	504.297	2119610	118.570	A	5.0
10	☐			853	0.047	P	3.2

y = 0.2350 * x + 0.0450
R = 0.9997
DL = 0.02501
BEC = 0.1913

Weight: <None>
Min Conc: <None>

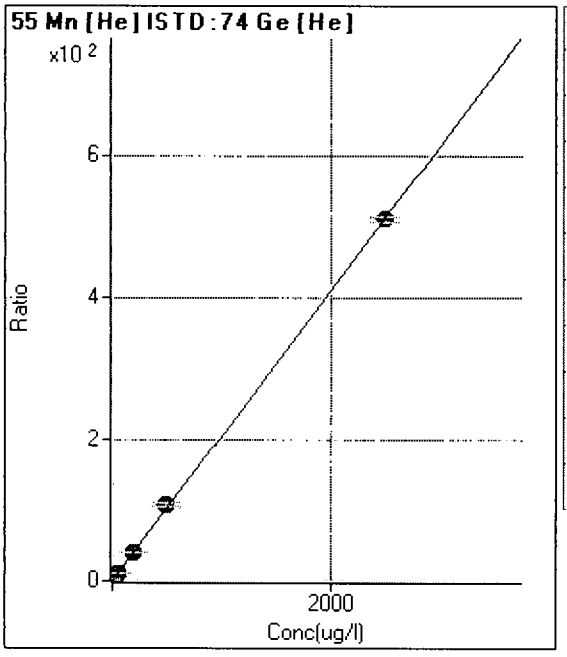
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	184	0.009	P	15.5
2	☐	0.180	0.183	1202	0.061	P	6.5
3	☐	0.900	0.896	5099	0.262	P	2.1
4	☐	1.800	1.736	9778	0.500	P	0.7
5	☐	3.600	3.559	19858	1.015	P	1.9
6	☐	20.000	20.211	108512	5.718	P	1.0
7	☐	50.000	49.591	271443	14.017	P	1.2
8	☐	200.000	196.987	1056683	55.650	P	0.6
9	☐	500.000	517.860	2615693	146.282	A	4.2
10	☐	1000.000	991.689	5033489	280.119	A	0.5

y = 0.2825 * x + 0.0094
R = 0.9998
DL = 0.01554
BEC = 0.03337

Weight: <None>
Min Conc: <None>

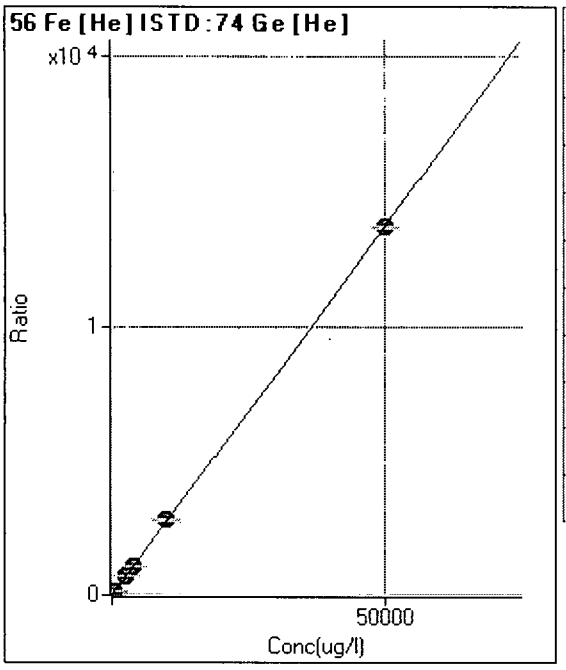


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	74	0.004	P	18.2
2	☐	0.180	0.185	818	0.042	P	2.9
3	☐	0.900	0.864	3504	0.180	P	1.4
4	☐	1.800	1.741	7040	0.360	P	2.5
5	☐	3.600	3.558	14306	0.731	P	2.8
6	☐	20.000	20.624	80068	4.219	P	1.0
7	☐	50.000	50.277	199081	10.280	P	1.2
8	☐	200.000	200.730	779118	41.032	P	0.9
9	☐	500.000	524.962	1918795	107.304	A	4.0
10	☐	2500.000	2494.939	9163094	509.960	A	1.4

y = 0.2044 * x + 0.0038
R = 0.9999
DL = 0.01014
BEC = 0.0186

Weight: <None>
Min Conc: <None>

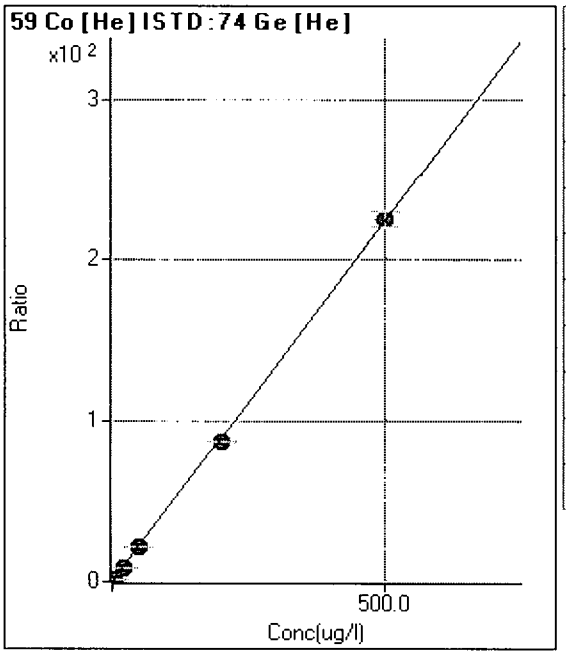
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7215	0.369	P	4.7
2	☐	9.000	9.079	56151	2.860	P	1.1
3	☐	45.000	45.426	249371	12.835	P	1.6
4	☐	90.000	89.523	487968	24.937	P	0.5
5	☐	180.000	184.081	995909	50.886	P	1.2
6	☐	400.000	419.181	2190168	115.405	A	0.2
7	☐	2500.000	2544.348	13529354	698.616	A	1.0
8	☐	4000.000	4014.547	20926563	1,102.084	A	0.6
9	☐	10000.000	10208.381	50094899	2,801.862	A	4.5
10	☐	50000.000	49954.775	246341212	13,709.495	A	0.8

y = 0.2744 * x + 0.3687
R = 1.0000
DL = 0.1901
BEC = 1.343

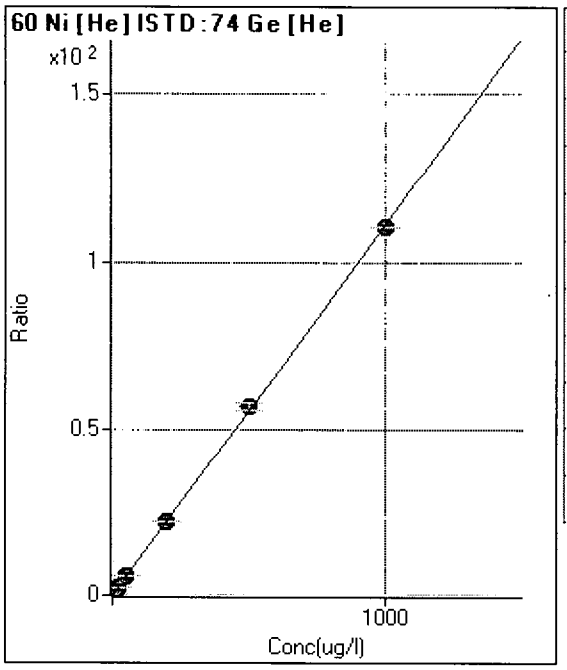
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30	0.002	P	33.0
2	☐	0.180	0.179	1603	0.082	P	9.9
3	☐	0.900	0.891	7791	0.401	P	1.5
4	☐	1.800	1.707	15007	0.767	P	0.9
5	☐	3.600	3.528	30983	1.583	P	0.2
6	☐	20.000	19.823	168684	8.889	P	0.7
7	☐	50.000	48.293	419312	21.652	P	1.0
8	☐	200.000	194.232	1653434	87.078	A	1.1
9	☐	500.000	502.486	4027809	225.273	A	4.4
10	☐			1650	0.092	P	2.6

y = 0.4483 * x + 0.0015
R = 0.9999
DL = 0.00338
BEC = 0.003417

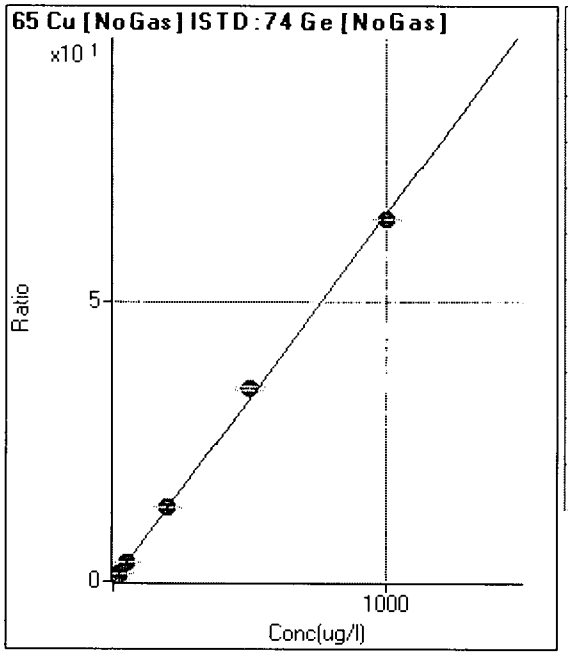
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86	0.004	P	12.5
2	☐	0.180	0.170	457	0.023	P	13.7
3	☐	0.900	0.902	2032	0.105	P	2.0
4	☐	1.800	1.811	4021	0.205	P	3.0
5	☐	3.600	3.650	8019	0.410	P	1.6
6	☐	20.000	21.088	44531	2.346	P	1.4
7	☐	50.000	50.625	108963	5.627	P	1.1
8	☐	200.000	200.516	422919	22.273	P	0.8
9	☐	500.000	512.245	1017417	56.892	P	3.8
10	☐	1000.000	993.721	1983160	110.363	A	0.2

y = 0.1111 * x + 0.0044
R = 0.9999
DL = 0.01475
BEC = 0.03936

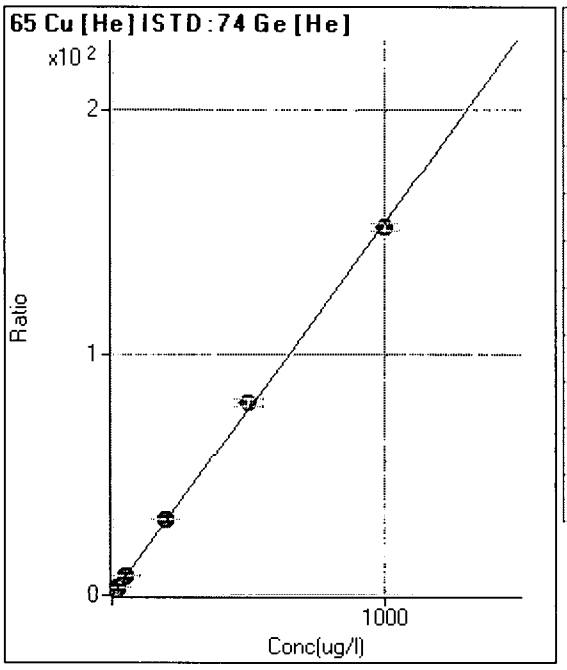
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	781	0.007	P	14.8
2	☐	0.180	0.160	1881	0.018	P	7.4
3	☐	0.900	0.922	7185	0.068	P	1.4
4	☐	1.800	1.832	13418	0.127	P	3.3
5	☐	3.600	3.762	26597	0.254	P	1.0
6	☐	20.000	21.133	145311	1.390	P	1.5
7	☐	50.000	51.819	354277	3.399	P	1.6
8	☐	200.000	205.230	1373605	13.439	P	0.5
9	☐	500.000	527.500	3355187	34.530	A	2.3
10	☐	1000.000	985.090	6142303	64.477	A	0.1

y = 0.0654 * x + 0.0074
R = 0.9995
DL = 0.04994
BEC = 0.1127

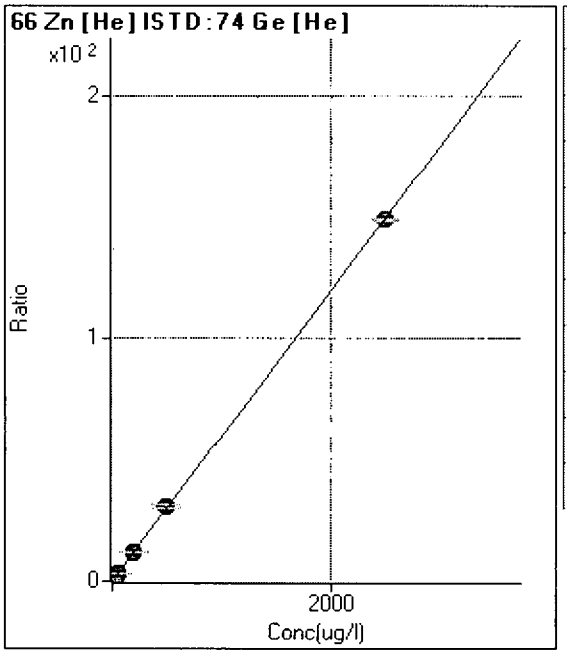
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	334	0.017	P	9.4
2	☐	0.180	0.161	823	0.042	P	8.2
3	☐	0.900	0.886	2984	0.154	P	4.4
4	☐	1.800	1.795	5745	0.294	P	3.7
5	☐	3.600	3.642	11309	0.578	P	0.7
6	☐	20.000	21.004	61705	3.251	P	0.7
7	☐	50.000	50.809	151839	7.841	P	1.1
8	☐	200.000	202.528	592481	31.202	P	0.2
9	☐	500.000	520.780	1434104	80.207	M	4.3
10	☐	1000.000	989.044	2736658	152.310	A	2.1

y = 0.1540 * x + 0.0171
R = 0.9997
DL = 0.03143
BEC = 0.111

Weight: <None>
Min Conc: <None>

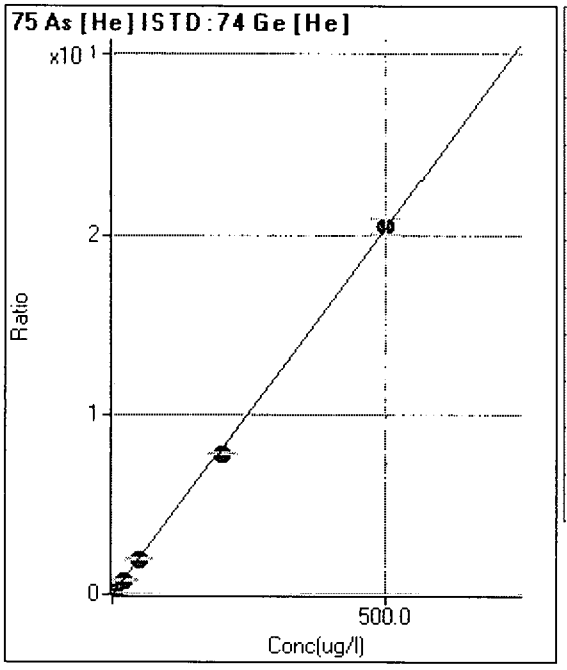


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	151	0.008	P	19.5
2	☐			304	0.016	P	10.2
3	☐	0.900	0.854	1140	0.059	P	7.0
4	☐	1.800	1.776	2226	0.114	P	1.1
5	☐	3.600	3.623	4383	0.224	P	3.1
6	☐	20.000	20.787	23694	1.249	P	0.7
7	☐	50.000	50.792	58863	3.040	P	2.0
8	☐	200.000	202.925	230142	12.120	P	0.8
9	☐	500.000	518.250	553167	30.942	P	4.8
10	☐	2500.000	2496.094	2677370	149.000	A	0.5

y = 0.0597 * x + 0.0077
R = 1.0000
DL = 0.07558
BEC = 0.1293

Weight: <None>
Min Conc: <None>

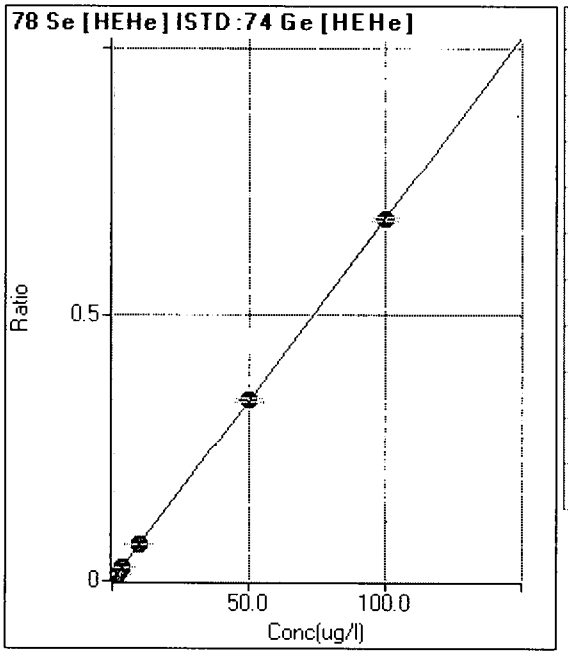
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29	0.001	P	6.1
2	☐	0.180	0.175	168	0.009	P	7.8
3	☐	0.900	0.882	726	0.037	P	1.9
4	☐	1.800	1.782	1450	0.074	P	2.2
5	☐	3.600	3.588	2890	0.148	P	1.4
6	☐	20.000	19.953	15458	0.815	P	0.8
7	☐	50.000	49.209	38862	2.007	P	1.1
8	☐	200.000	193.028	149389	7.867	P	0.3
9	☐	500.000	502.870	366441	20.494	P	4.3
10	☐			128	0.007	P	4.2

y = 0.0408 * x + 0.0015
R = 0.9999
DL = 0.006525
BEC = 0.03573

Weight: <None>
Min Conc: <None>

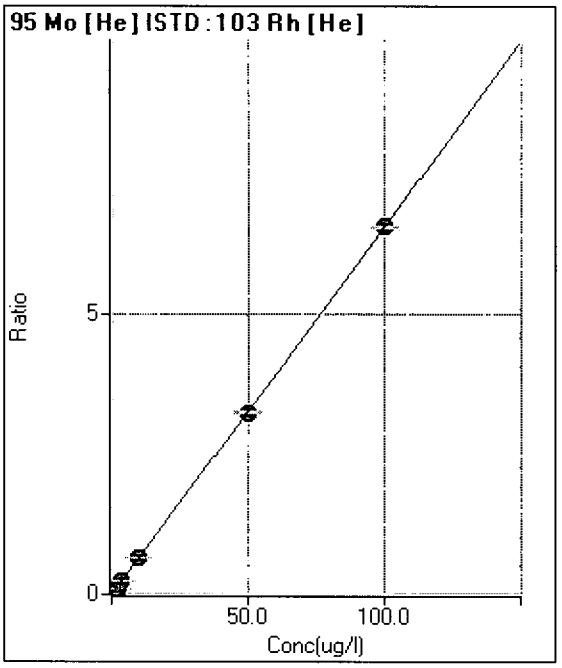


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0	0.000	P	86.6
2	☐	0.180	0.186	15	0.001	P	11.8
3	☐	0.900	0.932	75	0.006	P	11.7
4	☐	1.800	1.847	148	0.013	P	11.8
5	☐	3.600	3.603	292	0.025	P	5.7
6	☐	10.000	10.074	806	0.068	P	1.2
7	☐	50.000	50.437	3980	0.343	P	2.3
8	☐	100.000	99.773	7719	0.678	P	0.9
9	☐			4	0.000	P	29.2
10	☐			7	0.001	P	41.8

y = 0.0068 * x + 3.7611E-005
R = 1.0000
DL = 0.01439
BEC = 0.005537

Weight: <None>
Min Conc: <None>

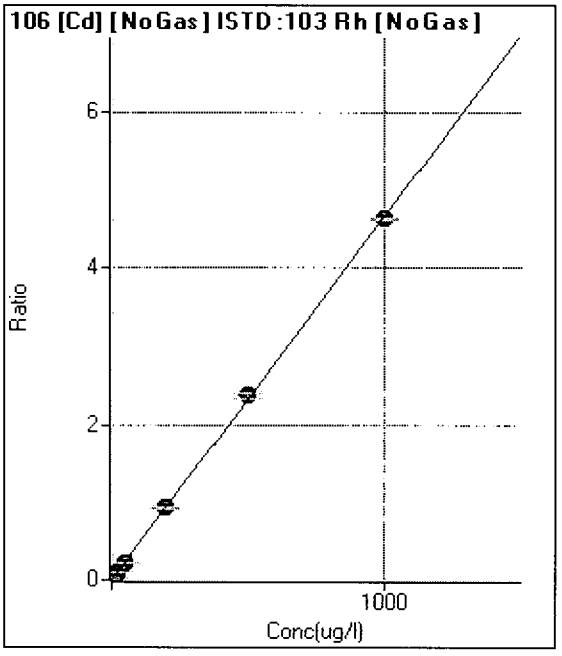
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37	0.001	P	39.8
2	☐	0.180	0.194	871	0.013	P	8.2
3	☐	0.900	0.902	3937	0.059	P	1.4
4	☐	1.800	1.790	7770	0.117	P	1.9
5	☐	3.600	3.571	15522	0.234	P	0.5
6	☐	10.000	10.139	42530	0.662	P	0.5
7	☐	50.000	49.607	211881	3.238	P	0.6
8	☐	100.000	100.184	416343	6.539	P	0.6
9	☐			519	0.009	P	9.6
10	☐			1049	0.018	P	2.3

y = 0.0653 * x + 5.5260E-004
R = 1.0000
DL = 0.01011
BEC = 0.008467

Weight: <None>
Min Conc: <None>

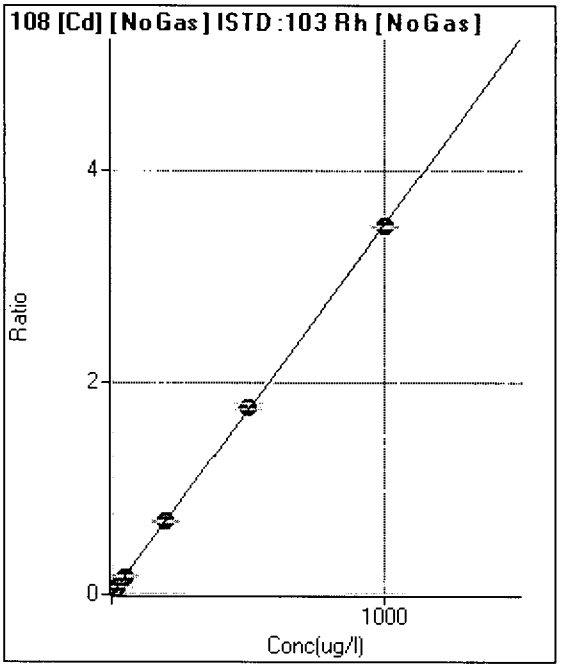


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10	0.000	P	33.5
2	☐	0.180	0.165	104	0.001	P	20.6
3	☐	0.900	0.937	549	0.004	P	11.1
4	☐	1.800	1.856	1066	0.009	P	9.9
5	☐	3.600	3.583	2035	0.017	P	2.2
6	☐	20.000	20.128	11328	0.094	P	2.1
7	☐	50.000	48.876	27377	0.228	P	3.1
8	☐	200.000	197.913	108578	0.923	P	0.5
9	☐	500.000	510.679	265468	2.381	P	3.2
10	☐	1000.000	995.131	499893	4.640	P	0.3

y = 0.0047 * x + 8.1303E-005
R = 0.9999
DL = 0.01754
BEC = 0.01744

Weight: <None>
Min Conc: <None>

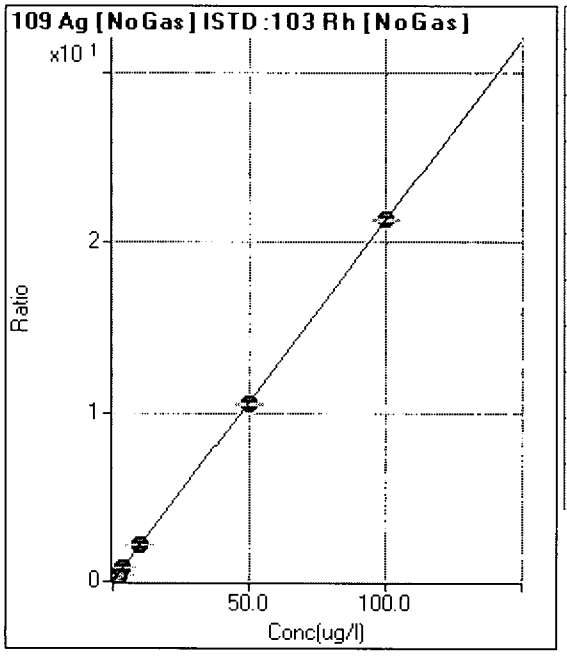
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16	0.000	P	24.1
2	☐	0.180	0.173	90	0.001	P	30.8
3	☐	0.900	0.815	367	0.003	P	13.5
4	☐	1.800	1.826	793	0.007	P	6.8
5	☐	3.600	3.713	1587	0.013	P	2.9
6	☐	20.000	20.812	8781	0.073	P	2.2
7	☐	50.000	50.000	20982	0.175	P	3.4
8	☐	200.000	198.939	81748	0.695	P	1.5
9	☐	500.000	509.020	198184	1.778	P	3.2
10	☐	1000.000	995.685	374609	3.477	P	0.3

y = 0.0035 * x + 1.2622E-004
R = 0.9999
DL = 0.02612
BEC = 0.03614

Weight: <None>
Min Conc: <None>

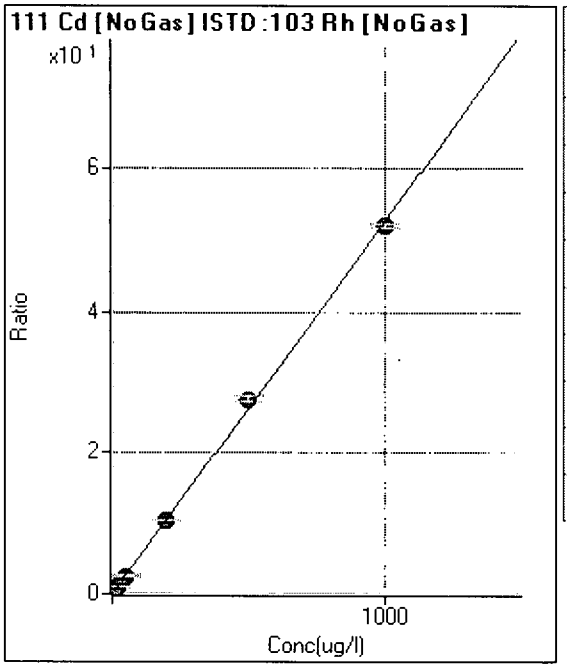


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48	0.000	P	55.4
2	☐	0.180	0.177	4684	0.038	P	2.4
3	☐	0.900	0.887	23366	0.189	P	1.6
4	☐	1.800	1.775	46168	0.379	P	1.4
5	☐	3.600	3.582	92533	0.764	P	1.8
6	☐	10.000	10.011	257275	2.133	P	2.0
7	☐	50.000	49.415	1264445	10.528	P	1.1
8	☐	100.000	100.292	2513898	21.368	A	0.6
9	☐			517	0.005	P	5.1
10	☐			677	0.006	P	3.9

y = 0.2131 * x + 3.8713E-004
R = 1.0000
DL = 0.003022
BEC = 0.001817

Weight: <None>
Min Conc: <None>

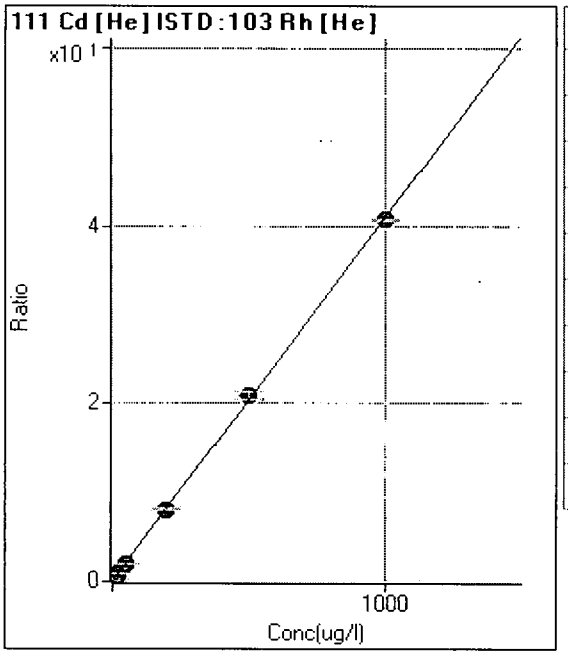
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12	0.000	P	88.4
2	☐	0.180	0.182	1191	0.010	P	3.1
3	☐	0.900	0.894	5818	0.047	P	3.0
4	☐	1.800	1.772	11399	0.093	P	1.7
5	☐	3.600	3.613	23069	0.190	P	3.1
6	☐	20.000	20.189	128271	1.064	P	1.3
7	☐	50.000	49.563	313545	2.611	P	1.3
8	☐	200.000	200.172	1240496	10.544	P	0.7
9	☐	500.000	524.184	3078207	27.611	A	3.1
10	☐	1000.000	987.892	5605865	52.037	A	1.1

y = 0.0527 * x + 9.7599E-005
R = 0.9996
DL = 0.004914
BEC = 0.001853

Weight: <None>
Min Conc: <None>

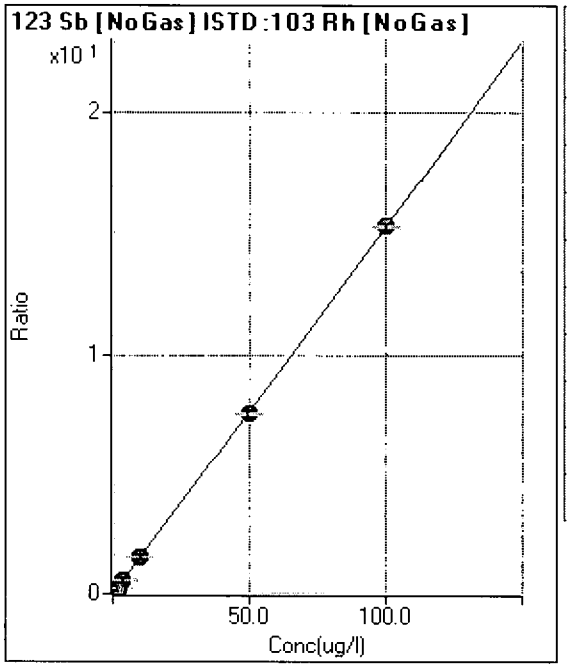


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10	0.000	P	66.8
2	☐	0.180	0.189	520	0.008	P	2.2
3	☐	0.900	0.875	2386	0.036	P	1.1
4	☐	1.800	1.754	4768	0.072	P	4.6
5	☐	3.600	3.552	9680	0.146	P	1.2
6	☐	20.000	20.183	53132	0.827	P	0.5
7	☐	50.000	48.353	129680	1.982	P	0.9
8	☐	200.000	197.027	514150	8.076	P	0.8
9	☐	500.000	512.398	1257108	21.002	P	3.7
10	☐	1000.000	994.475	2442502	40.761	A	0.6

y = 0.0410 * x + 1.5085E-004
R = 0.9999
DL = 0.007381
BEC = 0.00368

Weight: <None>
Min Conc: <None>

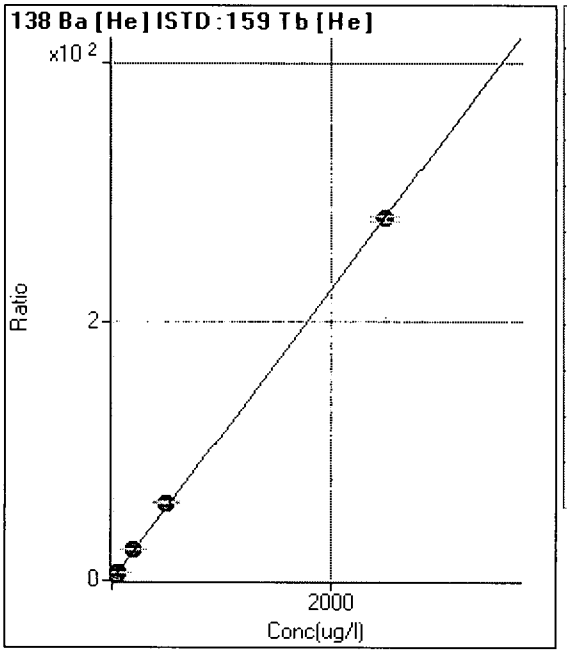
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	143	0.001	P	9.7
2	☐	0.180	0.176	3438	0.028	P	3.6
3	☐	0.900	0.880	16692	0.135	P	0.3
4	☐	1.800	1.736	32429	0.266	P	0.4
5	☐	3.600	3.549	65735	0.542	P	2.2
6	☐	10.000	9.958	183297	1.520	P	1.8
7	☐	50.000	49.233	901863	7.510	P	1.7
8	☐	100.000	100.391	1801432	15.312	A	0.8
9	☐			1830	0.016	P	2.1
10	☐			1016	0.009	P	7.8

y = 0.1525 * x + 0.0012
R = 1.0000
DL = 0.002212
BEC = 0.007637

Weight: <None>
Min Conc: <None>

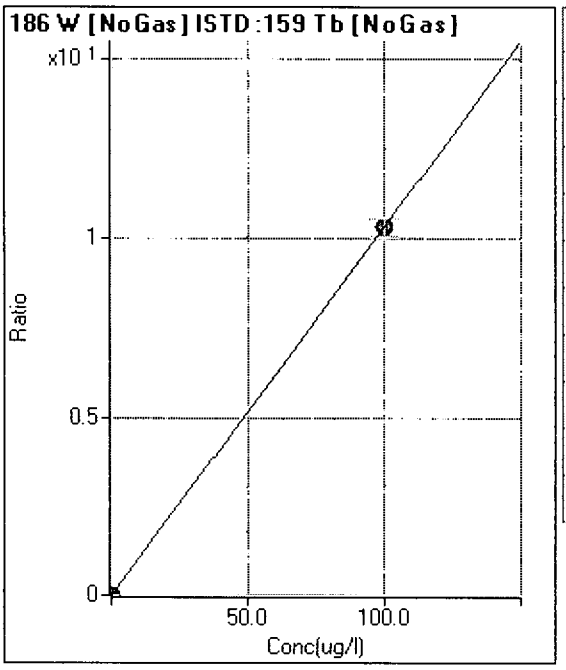


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	290	0.002	P	14.8
2	☐	0.180	0.192	3946	0.023	P	3.4
3	☐	0.900	0.952	18471	0.108	P	2.5
4	☐	1.800	1.887	36479	0.213	P	1.0
5	☐	3.600	3.811	73387	0.428	P	0.8
6	☐	20.000	21.545	402731	2.414	P	0.3
7	☐	50.000	52.570	998621	5.888	P	1.4
8	☐	200.000	213.599	3998074	23.919	A	1.2
9	☐	500.000	529.004	9650406	59.235	A	2.6
10	☐	2500.000	2493.047	47074888	279.150	A	1.5

y = 0.1120 * x + 0.0017
R = 0.9999
DL = 0.006725
BEC = 0.01512

Weight: <None>
Min Conc: <None>

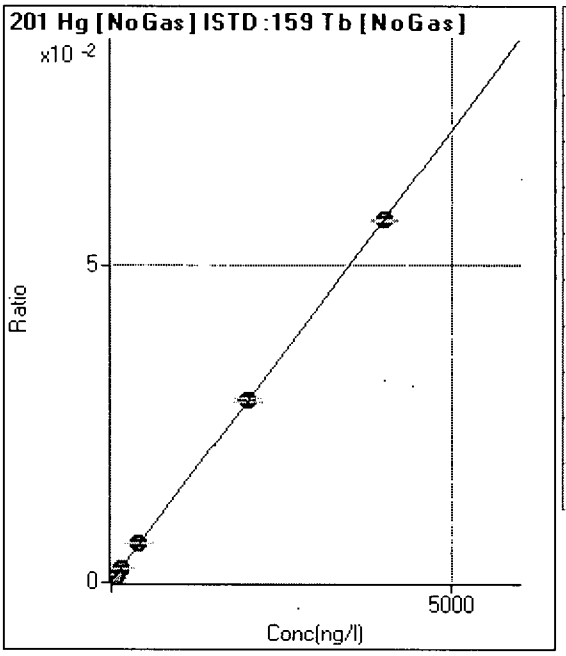
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93	0.000	P	31.5
2	☐			73	0.000	P	61.6
3	☐			97	0.000	P	53.5
4	☐			90	0.000	P	0.4
5	☐			113	0.000	P	31.1
6	☐			150	0.001	P	53.6
7	☐			487	0.002	P	15.2
8	☐			1085	0.004	P	10.1
9	☐	100.000	100.000	2928883	10.320	A	4.5
10	☐			10993	0.039	P	1.0

y = 0.1032 * x + 3.1565E-004
R = 1.0000
DL = 0.00289
BEC = 0.003059

Weight: <None>
Min Conc: <None>

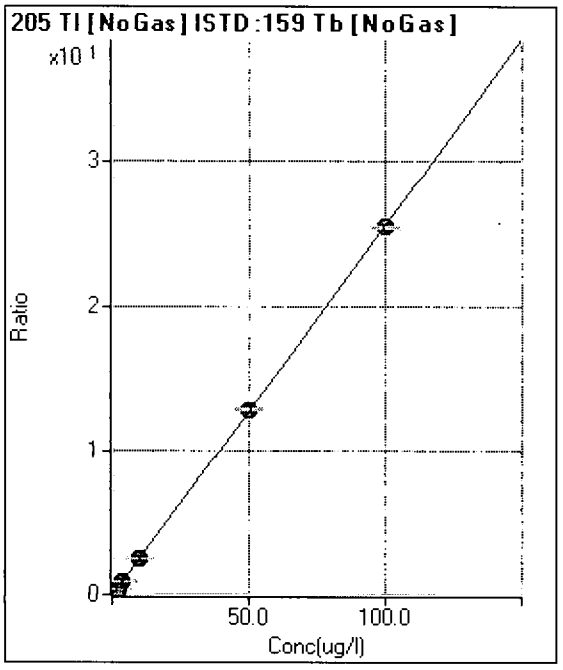


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25	0.000	P	5.3
2	☐			56	0.000	P	9.0
3	☐	36.000	33.475	168	0.001	P	6.5
4	☐	72.000	72.691	331	0.001	P	5.1
5	☐	144.000	146.106	636	0.002	P	5.4
6	☐	400.000	419.801	1768	0.006	P	1.2
7	☐	2000.000	2006.632	8467	0.029	P	1.9
8	☐	4000.000	3994.638	16807	0.057	P	0.8
9	☐			468	0.002	P	3.9
10	☐			173	0.001	P	2.2

y = 1.4274E-005 * x + 8.5442E-005
R = 1.0000
DL = 0.9606
BEC = 5.986

Weight: <None>
Min Conc: <None>

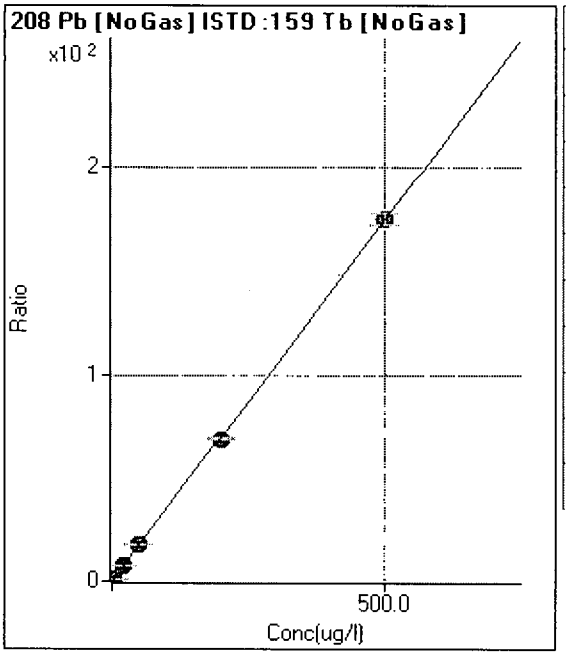
Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	611	0.002	P	5.9
2	☐	0.180	0.173	13673	0.046	P	2.3
3	☐	0.900	0.869	66882	0.224	P	1.8
4	☐	1.800	1.748	132065	0.448	P	1.1
5	☐	3.600	3.548	265918	0.908	P	1.9
6	☐	10.000	10.166	755125	2.597	P	1.7
7	☐	50.000	50.483	3798124	12.886	A	1.3
8	☐	100.000	99.745	7493269	25.458	A	0.4
9	☐			5187	0.018	P	2.9
10	☐			1927	0.007	P	1.2

y = 0.2552 * x + 0.0021
R = 1.0000
DL = 0.001419
BEC = 0.008074

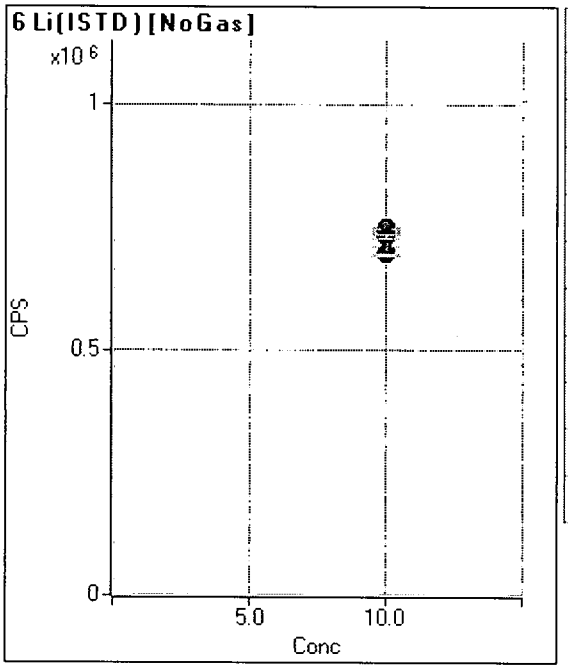
Weight: <None>
Min Conc: <None>



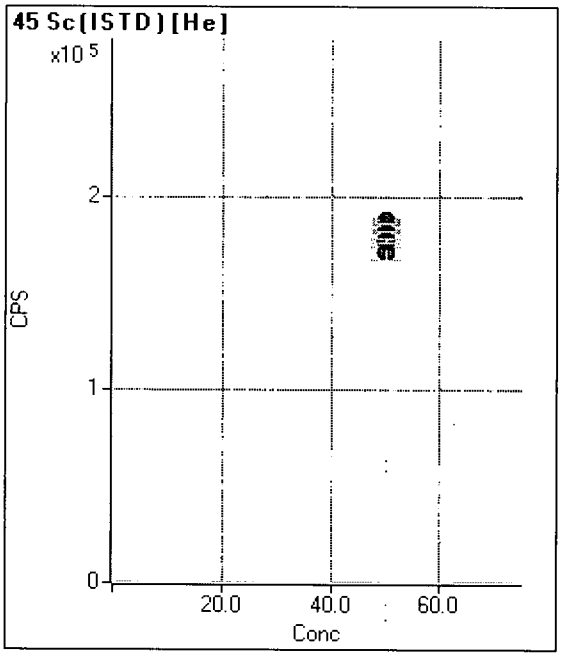
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3116	0.011	P	2.4
2	☐	0.180	0.175	21184	0.072	P	1.5
3	☐	0.900	0.874	94174	0.315	P	2.2
4	☐	1.800	1.758	183587	0.623	P	0.9
5	☐	3.600	3.565	366901	1.252	P	2.0
6	☐	20.000	20.242	2053721	7.062	P	1.1
7	☐	50.000	49.565	5092108	17.276	A	1.1
8	☐	200.000	197.194	20220551	68.699	A	0.8
9	☐	500.000	501.157	49563539	174.579	A	3.2
10	☐			17763	0.063	P	2.2

y = 0.3483 * x + 0.0105
R = 1.0000
DL = 0.002192
BEC = 0.03018

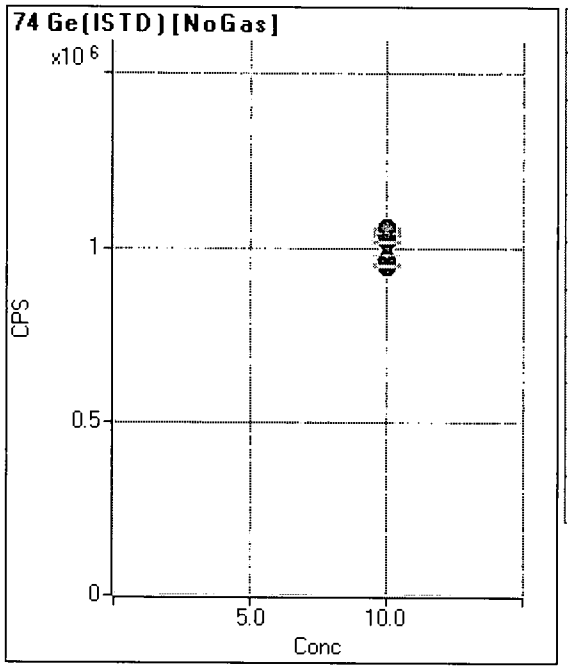
Weight: <None>
Min Conc: <None>



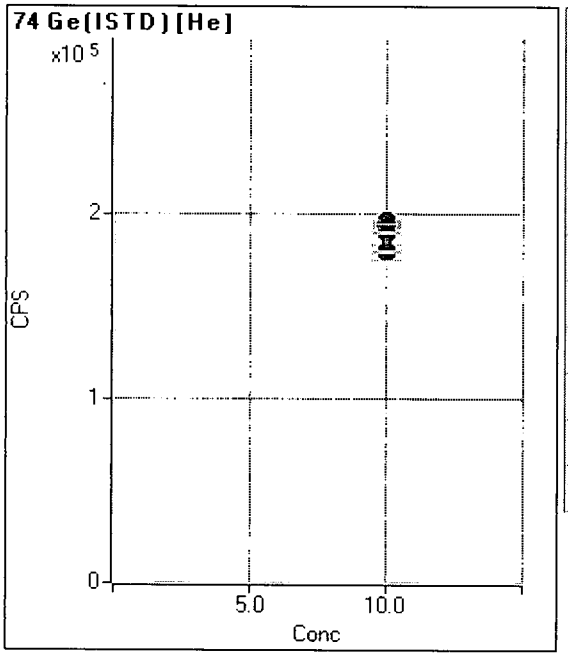
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		743093		P	0.2
2	☐	10.000		744792		P	0.4
3	☐	10.000		747690		P	0.3
4	☐	10.000		750459		P	0.3
5	☐	10.000		746137		P	0.7
6	☐	10.000		740356		P	1.1
7	☐	10.000		744113		P	1.3
8	☐	10.000		731924		P	0.8
9	☐	10.000		701935		P	2.4
10	☐	10.000		694488		P	0.8



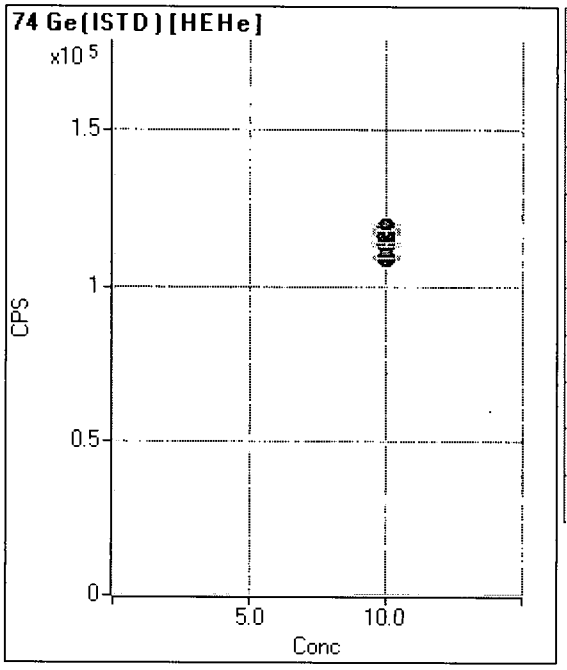
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	50.000		187263		P	1.0
2	☐	50.000		186923		P	1.0
3	☐	50.000		187491		P	1.1
4	☐	50.000		186834		P	1.0
5	☐	50.000		187059		P	0.4
6	☐	50.000		182646		P	0.6
7	☐	50.000		184944		P	0.5
8	☐	50.000		180990		P	0.6
9	☐	50.000		170489		P	3.8
10	☐	50.000		177172		P	1.2



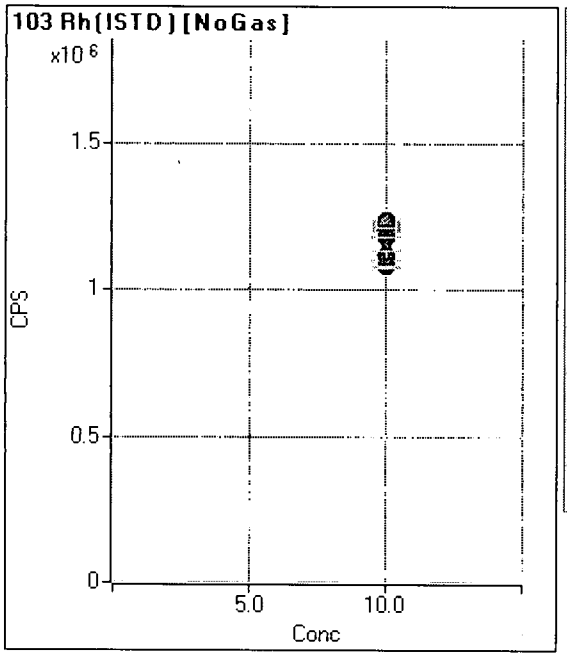
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	%RSD
1	☐	10.000		1059075		P	0.3
2	☐	10.000		1054693		P	0.6
3	☐	10.000		1061405		P	0.1
4	☐	10.000		1054472		P	1.0
5	☐	10.000		1048851		P	1.3
6	☐	10.000		1045199		P	1.2
7	☐	10.000		1042525		P	1.2
8	☐	10.000		1022146		P	0.6
9	☐	10.000		972031		P	2.4
10	☐	10.000		952642		P	0.8



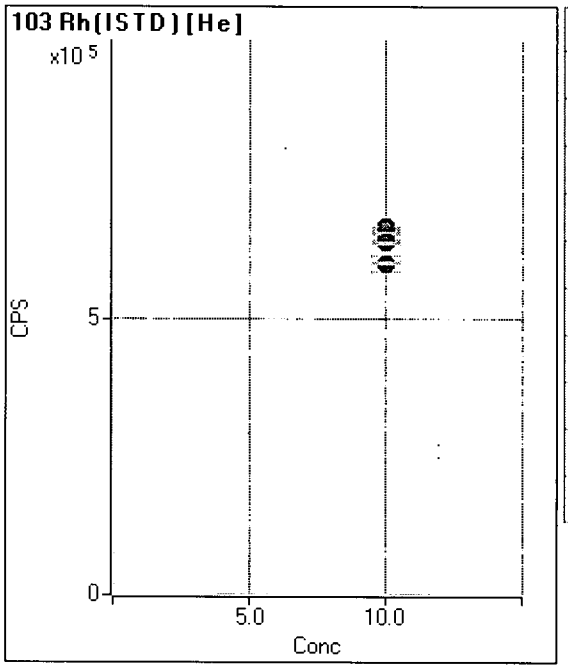
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	%RSD
1	☐	10.000		195723		P	0.4
2	☐	10.000		196325		P	0.4
3	☐	10.000		194307		P	0.8
4	☐	10.000		195687		P	0.6
5	☐	10.000		195730		P	1.1
6	☐	10.000		189781		P	0.9
7	☐	10.000		193669		P	0.8
8	☐	10.000		189884		P	0.4
9	☐	10.000		179054		P	4.9
10	☐	10.000		179693		P	0.6



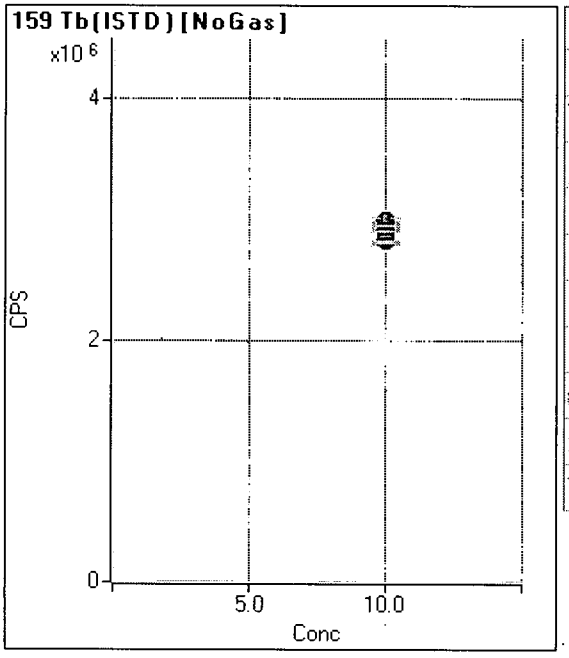
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		118805		P	1.7
2	☐	10.000		118102		P	0.6
3	☐	10.000		118089		P	0.3
4	☐	10.000		117757		P	1.0
5	☐	10.000		119109		P	1.2
6	☐	10.000		117748		P	2.0
7	☐	10.000		116212		P	2.9
8	☐	10.000		113903		P	1.2
9	☐	10.000		108999		P	1.1
10	☐	10.000		109093		P	0.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1231019		P	0.7
2	☐	10.000		1227843		P	0.9
3	☐	10.000		1233379		P	0.6
4	☐	10.000		1219731		P	0.7
5	☐	10.000		1212078		P	1.9
6	☐	10.000		1206210		P	1.5
7	☐	10.000		1201089		P	1.3
8	☐	10.000		1176484		P	0.1
9	☐	10.000		1115494		P	2.8
10	☐	10.000		1077327		P	0.5

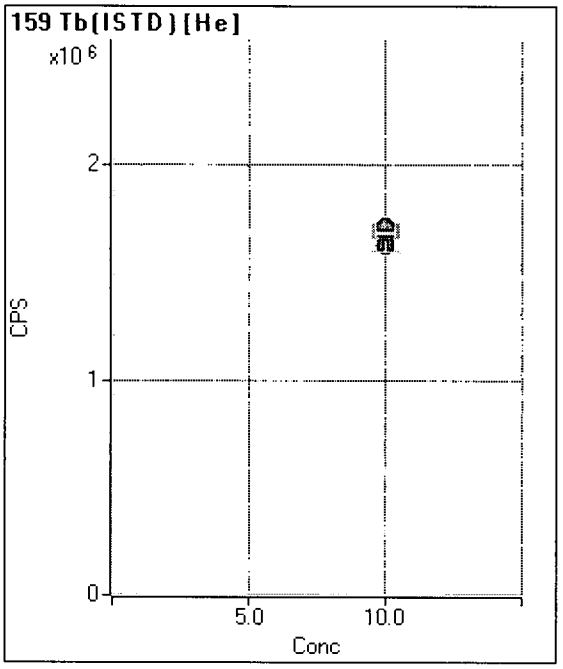


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		663778		P	0.3
2	☐	10.000		660027		P	0.5
3	☐	10.000		662576		P	1.2
4	☐	10.000		661817		P	0.2
5	☐	10.000		664334		P	0.6
6	☐	10.000		642156		P	0.1
7	☐	10.000		654294		P	0.5
8	☐	10.000		636669		P	0.3
9	☐	10.000		599212		P	4.4
10	☐	10.000		599237		P	0.6

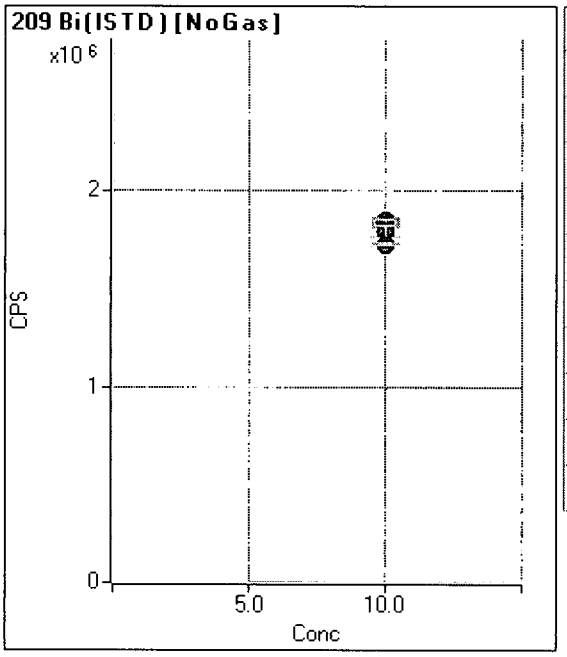


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		2964739		A	1.2
2	☐	10.000		2962724		A	0.3
3	☐	10.000		2989136		A	1.5
4	☐	10.000		2947056		A	0.4
5	☐	10.000		2930399		A	1.5
6	☐	10.000		2908555		A	1.1
7	☐	10.000		2947843		A	1.4
8	☐	10.000		2943380		A	0.2
9	☐	10.000		2841124		A	3.7
10	☐	10.000		2812278		A	0.5

Calibration for 013_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1715097		A	1.3
2	☐	10.000		1702422		A	1.1
3	☐	10.000		1706064		A	0.8
4	☐	10.000		1713114		A	1.2
5	☐	10.000		1713167		A	0.3
6	☐	10.000		1668246		A	0.2
7	☐	10.000		1696155		A	0.7
8	☐	10.000		1671597		A	0.6
9	☐	10.000		1630181		A	3.6
10	☐	10.000		1686420		A	0.8



	Rjct	Conc.	Calc.Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		1828139		A	0.2
2	☐	10.000		1843289		A	0.4
3	☐	10.000		1848479		A	0.6
4	☐	10.000		1843991		A	0.9
5	☐	10.000		1838820		A	1.8
6	☐	10.000		1833516		A	1.9
7	☐	10.000		1847334		A	1.5
8	☐	10.000		1835440		A	1.6
9	☐	10.000		1792376		A	3.4
10	☐	10.000		1727083		A	0.8

Initial Calibration Verification (ICV) Report ICPMS6

Sample Name	**9K15037-ICV1**	**Sample Type**	ICV
File Name	013_ICV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:53:49	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 11/15	**ISTD Ref File**	003CALB.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	40.231	ug/l	0.8	123241	40	100.58	90	110	
Na	23	45	He	4026.875	ug/l	1.4	3207503	4000	100.67	90	110	
Mg	24	45	He	4246.464	ug/l	1.2	1900390	4000	106.16	90	110	
Al	27	45	He	4101.968	ug/l	1.8	946369	4000	102.55	90	110	
K	39	45	He	4145.870	ug/l	1.3	1829478	4000	103.65	90	110	
Ca	44	45	He	4074.198	ug/l	1.5	102835	4000	101.85	90	110	
Ti	47	45	He	100.321	ug/l	2.0	14416	100	100.32	90	110	
V	51	74	He	94.782	ug/l	1.0	406772	100	94.78	90	110	
Cr	52	74	He	98.983	ug/l	1.2	509657	100	98.98	90	110	
Mn	55	74	He	102.262	ug/l	1.6	380947	100	102.26	90	110	
Fe	56	74	He	4079.528	ug/l	2.1	20406135	4000	101.99	90	110	
Co	59	74	He	99.789	ug/l	1.1	815258	100	99.79	90	110	
Ni	60	74	He	103.618	ug/l	1.6	209768	100	103.62	90	110	
Cu	65	74	He	101.617	ug/l	1.5	285435	100	101.62	90	110	
Cu	65	74	No Gas	102.416	ug/l	1.3	658571	100	102.42	90	110	
Zn	66	74	He	101.637	ug/l	1.5	110690	100	101.64	90	110	
As	75	74	He	96.280	ug/l	1.3	71522	100	96.28	90	110	
Se	78	74	HEHe	39.778	ug/l	1.5	3012	40	99.44	90	110	
Mo	95	103	He	39.944	ug/l	0.6	159861	40	99.86	90	110	
Ag	109	103	No Gas	40.101	ug/l	0.1	970392	40	100.25	90	110	
Cd	111	103	He	97.123	ug/l	1.4	244028	100	97.12	90	110	
Cd	111	103	No Gas	97.674	ug/l	0.6	584341	100	97.67	90	110	
Sb	123	103	No Gas	38.375	ug/l	0.3	664866	40	95.94	90	110	
Ba	138	159	He	107.816	ug/l	0.3	1976185	100	107.82	90	110	
Hg	201	159	No Gas	811.112	ng/l	0.6	3321	800	101.39	90	110	
Tl	205	159	No Gas	40.583	ug/l	2.3	2948901	40	101.46	90	110	
Pb	208	159	No Gas	99.956	ug/l	1.2	9915702	100	99.96	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	698252	1.1	743093.21	93.97	70	120	
Ge	74	No Gas	981578	1.2	1059075.15	92.68	70	120	
Rh	103	No Gas	1135764	0.9	1231018.97	92.26	70	120	
Tb	159	No Gas	2847384	1.6	2964739.4	96.04	70	120	
Bi	209	No Gas	1768632	1.1	1828139.18	96.74	70	120	
Sc	45	He	175317	1.4	187263.33	93.62	70	120	
Ge	74	He	182250	1.6	195722.79	93.12	70	120	
Rh	103	He	613049	1.1	663778.05	92.36	70	120	
Tb	159	He	1636713	0.6	1715096.85	95.43	70	120	
Ge	74	HEHe	111489	0.6	118804.81	93.84	70	120	

Initial Calibration Blank (ICB) Report ICPMS6

Sample Name	**9K15037-ICB1**	**Sample Type**	ICB
File Name	014_ICB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 17:58:23	**Sample QC Pass/Fail**	Pass
Comment	ICB	**ISTD Ref File**	003CALB.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	46.7	44	0.09	
Na	23	45	He	1.857	ug/l	13.6	3922	45	
Mg	24	45	He	1.214	ug/l	2.1	835	45	
Al	27	45	He	1.008	ug/l	21.3	332	22.5	
K	39	45	He	0.946	ug/l	44.2	12580	45	
Ca	44	45	He	1.708	ug/l	53.3	95	45	
Ti	47	45	He	0.064	ug/l	118.3	11	1.8	
V	51	74	He	-0.052	ug/l	N/A	598	0.45	
Cr	52	74	He	0.030	ug/l	11.8	326	0.45	
Mn	55	74	He	0.038	ug/l	12.5	211	0.45	
Fe	56	74	He	1.158	ug/l	5.7	12558	22.5	
Co	59	74	He	0.011	ug/l	1.8	119	0.09	
Ni	60	74	He	0.027	ug/l	56.1	136	0.45	
Cu	65	74	He	0.080	ug/l	4.2	539	0.45	
Cu	65	74	No Gas	0.104	ug/l	13.3	1388	0.45	
Zn	66	74	He	0.062	ug/l	42.1	209	1.8	
As	75	74	He	0.020	ug/l	40.5	42	0.45	
Se	78	74	HEHe	0.023	ug/l	45.8	2	0.45	
Mo	95	103	He	0.021	ug/l	28.3	120	0.45	
Ag	109	103	No Gas	0.003	ug/l	43.8	128	0.09	
Cd	111	103	He	0.018	ug/l	10.1	56	0.09	
Cd	111	103	No Gas	0.029	ug/l	7.3	185	0.09	
Sb	123	103	No Gas	0.162	ug/l	2.3	2973	0.45	
Ba	138	159	He	0.052	ug/l	1.3	1221	0.45	
Hg	201	159	No Gas	4.622	ng/l	18.5	43	36	
Tl	205	159	No Gas	0.010	ug/l	14.2	1270	0.09	
Pb	208	159	No Gas	0.016	ug/l	2.5	4507	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	691447	1.2	743093.21	93.05	70	120	
Ge	74	No Gas	979603	1.5	1059075.15	92.5	70	120	
Rh	103	No Gas	1147918	2.0	1231018.97	93.25	70	120	
Tb	159	No Gas	2817468	2.0	2964739.4	95.03	70	120	
Bi	209	No Gas	1779448	1.8	1828139.18	97.34	70	120	
Sc	45	He	173322	0.4	187263.33	92.56	70	120	
Ge	74	He	182965	0.9	195722.79	93.48	70	120	
Rh	103	He	620558	1.4	663778.05	93.49	70	120	
Tb	159	He	1615591	0.7	1715096.85	94.2	70	120	
Ge	74	HEHe	110738	1.5	118804.81	93.21	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL1**	**Sample Type**	CRL1
File Name	015CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 18:05:17	**Sample QC Pass/Fail**	Fail
Comment	A19K144 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag	
Be	9	6	No Gas	0.178	ug/l	4.5	551	98.89	70	130		
Na	23	45	He	9.715	ug/l	3.1	10366	107.94	70	130		
Mg	24	45	He	10.058	ug/l	2.0	4870	111.76	70	130		
Al	27	45	He	9.963	ug/l	8.6	2436	110.7	70	130		
K	39	45	He	10.183	ug/l	8.1	17012	113.14	70	130		
Ca	44	45	He	8.961	ug/l	16.5	283	99.57	70	130		
Ti	47	45	He	0.169	ug/l	71.0	27	93.89	70	130		
V	51	74	He	0.121	ug/l	1.0	1362	67.22	70	130	CRL1 Failed	LMRL
Cr	52	74	He	0.182	ug/l	5.1	1127	101.11	70	130		
Mn	55	74	He	0.201	ug/l	1.7	834	111.67	70	130		
Fe	56	74	He	9.847	ug/l	0.4	56973	109.41	70	130		
Co	59	74	He	0.182	ug/l	5.7	1541	101.11	70	130		
Ni	60	74	He	0.167	ug/l	11.8	424	92.78	70	130		
Cu	65	74	He	0.208	ug/l	4.2	910	115.56	70	130		
Cu	65	74	No Gas	0.247	ug/l	5.5	2277	137.22	70	130	CRL1 Failed	NR
Zn	66	74	He	0.165	ug/l	13.2	326	91.67	70	130		
As	75	74	He	0.189	ug/l	2.0	170	105	70	130		
Se	78	74	HEHe	0.200	ug/l	22.4	16	111.11	70	130		
Mo	95	103	He	0.199	ug/l	4.6	847	110.56	70	130		
Ag	109	103	No Gas	0.178	ug/l	3.6	4302	98.89	70	130		
Cd	111	103	He	0.191	ug/l	17.0	499	106.11	70	130		
Cd	111	103	No Gas	0.204	ug/l	6.2	1221	113.33	70	130		
Sb	123	103	No Gas	0.207	ug/l	3.3	3686	115	70	130		
Ba	138	159	He	0.217	ug/l	1.1	4283	120.56	70	130		
Hg	201	159	No Gas	9.839	ng/l	14.1	62	136.65	70	130	CRL1 Failed	LMRL
Tl	205	159	No Gas	0.178	ug/l	3.9	13145	98.89	70	130		
Pb	208	159	No Gas	0.187	ug/l	6.5	20867	103.89	70	130		

QC ISTD Table

JPB 11/16/19

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	684703	3.3	743093.21	92.14	70	120	
Ge	74	No Gas	968856	3.0	1059075.15	91.48	70	120	
Rh	103	No Gas	1125948	3.3	1231018.97	91.46	70	120	
Tb	159	No Gas	2764696	3.9	2964739.4	93.25	70	120	
Bi	209	No Gas	1732515	2.5	1828139.18	94.77	70	120	
Sc	45	He	177821	0.9	187263.33	94.96	70	120	
Ge	74	He	185523	0.2	195722.79	94.79	70	120	
Rh	103	He	626496	0.5	663778.05	94.38	70	120	
Tb	159	He	1646868	0.9	1715096.85	96.02	70	120	
Ge	74	HEHe	112253	4.2	118804.81	94.48	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL2**	**Sample Type**	CRL2
File Name	016_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 18:09:59	**Sample QC Pass/Fail**	Pass
Comment	A19K145 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.924	ug/l	4.2	2810	102.67	70	130	
Na	23	45	He	45.353	ug/l	1.7	38692	100.78	70	130	
Mg	24	45	He	47.527	ug/l	1.7	21626	105.62	70	130	
Al	27	45	He	46.866	ug/l	3.8	10947	104.15	70	130	
K	39	45	He	46.718	ug/l	2.3	32876	103.82	70	130	
Ca	44	45	He	47.153	ug/l	8.0	1246	104.78	70	130	
Ti	47	45	He	0.896	ug/l	13.2	131	99.56	70	130	
V	51	74	He	0.798	ug/l	2.5	4323	88.67	70	130	
Cr	52	74	He	0.883	ug/l	3.8	4812	98.11	70	130	
Mn	55	74	He	0.953	ug/l	0.9	3693	105.89	70	130	
Fe	56	74	He	45.242	ug/l	1.0	237713	100.54	70	130	
Co	59	74	He	0.872	ug/l	1.1	7296	96.89	70	130	
Ni	60	74	He	0.893	ug/l	5.0	1926	99.22	70	130	
Cu	65	74	He	0.960	ug/l	3.2	3066	106.67	70	130	
Cu	65	74	No Gas	0.985	ug/l	3.3	7010	109.44	70	130	
Zn	66	74	He	0.843	ug/l	8.4	1079	93.67	70	130	
As	75	74	He	0.905	ug/l	1.7	713	100.56	70	130	
Se	78	74	HEHe	0.867	ug/l	4.9	66	96.33	70	130	
Mo	95	103	He	0.906	ug/l	4.7	3722	100.67	70	130	
Ag	109	103	No Gas	0.895	ug/l	3.1	21645	99.44	70	130	
Cd	111	103	He	0.940	ug/l	1.5	2411	104.44	70	130	
Cd	111	103	No Gas	0.916	ug/l	6.0	5474	101.78	70	130	
Sb	123	103	No Gas	0.911	ug/l	3.6	15864	101.22	70	130	
Ba	138	159	He	0.973	ug/l	1.3	18046	108.11	70	130	
Hg	201	159	No Gas	36.833	ng/l	2.6	169	102.31	70	130	
Tl	205	159	No Gas	0.885	ug/l	1.1	63019	98.33	70	130	
Pb	208	159	No Gas	0.899	ug/l	0.8	89477	99.89	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	689519	1.9	743093.21	92.79	70	120	
Ge	74	No Gas	976319	1.7	1059075.15	92.19	70	120	
Rh	103	No Gas	1133352	2.9	1231018.97	92.07	70	120	
Tb	159	No Gas	2765198	1.0	2964739.4	93.27	70	120	
Bi	209	No Gas	1741986	3.2	1828139.18	95.29	70	120	
Sc	45	He	175791	0.9	187263.33	93.87	70	120	
Ge	74	He	185943	0.4	195722.79	95	70	120	
Rh	103	He	623341	0.2	663778.05	93.91	70	120	
Tb	159	He	1630740	0.8	1715096.85	95.08	70	120	
Ge	74	HEHe	111239	0.5	118804.81	93.63	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL3**	**Sample Type**	CRL3
File Name	017CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 18:14:40	**Sample QC Pass/Fail**	Pass
Comment	A19K146 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.804	ug/l	2.7	5542	100.22	70	130	
Na	23	45	He	89.826	ug/l	1.2	75512	99.81	70	130	
Mg	24	45	He	91.503	ug/l	1.8	42095	101.67	70	130	
Al	27	45	He	91.540	ug/l	2.2	21659	101.71	70	130	
K	39	45	He	91.595	ug/l	1.2	53543	101.77	70	130	
Ca	44	45	He	93.114	ug/l	8.8	2451	103.46	70	130	
Ti	47	45	He	1.759	ug/l	12.4	260	97.72	70	130	
V	51	74	He	1.675	ug/l	0.3	8175	93.06	70	130	
Cr	52	74	He	1.791	ug/l	1.8	9607	99.5	70	130	
Mn	55	74	He	1.797	ug/l	4.7	6915	99.83	70	130	
Fe	56	74	He	90.023	ug/l	0.9	467334	100.03	70	130	
Co	59	74	He	1.723	ug/l	1.9	14425	95.72	70	130	
Ni	60	74	He	1.810	ug/l	4.1	3827	100.56	70	130	
Cu	65	74	He	1.852	ug/l	2.0	5635	102.89	70	130	
Cu	65	74	No Gas	1.889	ug/l	0.9	12987	104.94	70	130	
Zn	66	74	He	1.768	ug/l	3.9	2111	98.22	70	130	
As	75	74	He	1.799	ug/l	1.4	1393	99.94	70	130	
Se	78	74	HEHe	1.825	ug/l	1.9	139	101.39	70	130	
Mo	95	103	He	1.787	ug/l	2.1	7405	99.28	70	130	
Ag	109	103	No Gas	1.767	ug/l	0.8	43461	98.17	70	130	
Cd	111	103	He	1.727	ug/l	2.4	4483	95.94	70	130	
Cd	111	103	No Gas	1.773	ug/l	2.1	10781	98.5	70	130	
Sb	123	103	No Gas	1.762	ug/l	1.0	31130	97.89	70	130	
Ba	138	159	He	1.923	ug/l	1.1	35733	106.83	70	130	
Hg	201	159	No Gas	74.424	ng/l	3.2	324	103.37	70	130	
Tl	205	159	No Gas	1.738	ug/l	0.7	126009	96.56	70	130	
Pb	208	159	No Gas	1.755	ug/l	0.8	175758	97.5	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	698596	0.4	743093.21	94.01	70	120	
Ge	74	No Gas	991362	0.8	1059075.15	93.61	70	120	
Rh	103	No Gas	1153266	1.0	1231018.97	93.68	70	120	
Tb	159	No Gas	2827205	0.4	2964739.4	95.36	70	120	
Bi	209	No Gas	1768411	0.8	1828139.18	96.73	70	120	
Sc	45	He	178939	0.9	187263.33	95.55	70	120	
Ge	74	He	186391	0.5	195722.79	95.23	70	120	
Rh	103	He	631864	0.3	663778.05	95.19	70	120	
Tb	159	He	1646197	0.9	1715096.85	95.98	70	120	
Ge	74	HEHe	111878	1.5	118804.81	94.17	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9K15037-CCV 1 JPB 11/16/19	**Sample Type**	CCV
File Name	030_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:32:00	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 11/15	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.449	ug/l	0.4	113152	40	103.62	90	110	
Na	23	45	He	3989.426	ug/l	1.0	3224302	4000	99.74	90	110	
Mg	24	45	He	4176.340	ug/l	0.6	1896395	4000	104.41	90	110	
Al	27	45	He	3967.252	ug/l	0.7	928791	4000	99.18	90	110	
K	39	45	He	4077.937	ug/l	0.9	1826161	4000	101.95	90	110	
Ca	44	45	He	4026.123	ug/l	1.1	103117	4000	100.65	90	110	
Ti	47	45	He	99.189	ug/l	0.3	14464	100	99.19	90	110	
V	51	74	He	92.626	ug/l	0.5	411506	100	92.63	90	110	
Cr	52	74	He	97.161	ug/l	0.8	517855	100	97.16	90	110	
Mn	55	74	He	101.009	ug/l	1.1	389516	100	101.01	90	110	
Fe	56	74	He	4008.294	ug/l	0.6	20756644	4000	100.21	90	110	
Co	59	74	He	98.178	ug/l	1.3	830263	100	98.18	90	110	
Ni	60	74	He	101.863	ug/l	0.7	213480	100	101.86	90	110	
Cu	65	74	He	99.854	ug/l	0.6	290356	100	99.85	90	110	
Cu	65	74	No Gas	99.598	ug/l	0.2	658170	100	99.6	90	110	
Zn	66	74	He	100.197	ug/l	0.3	112966	100	100.2	90	110	
As	75	74	He	94.868	ug/l	0.8	72952	100	94.87	90	110	
Se	78	74	HEHe	39.840	ug/l	0.9	3252	40	99.6	90	110	
Mo	95	103	He	39.594	ug/l	1.0	167057	40	98.98	90	110	
Ag	109	103	No Gas	40.246	ug/l	0.4	998805	40	100.62	90	110	
Cd	111	103	He	95.887	ug/l	0.8	254022	100	95.89	90	110	
Cd	111	103	No Gas	99.801	ug/l	0.4	612349	100	99.8	90	110	
Sb	123	103	No Gas	39.699	ug/l	1.1	705387	40	99.25	90	110	
Ba	138	159	He	104.577	ug/l	0.4	2040997	100	104.58	90	110	
Hg	201	159	No Gas	817.373	ng/l	0.3	3516	800	102.17	90	110	
Tl	205	159	No Gas	41.556	ug/l	0.6	3173121	40	103.89	90	110	
Pb	208	159	No Gas	101.646	ug/l	0.8	10594414	100	101.65	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	622236	0.5	743093.21	83.74	70	120	
Ge	74	No Gas	1008594	0.3	1059075.15	95.23	70	120	
Rh	103	No Gas	1164818	0.3	1231018.97	94.62	70	120	
Tb	159	No Gas	2991482	0.9	2964739.4	100.9	70	120	
Bi	209	No Gas	1890850	0.4	1828139.18	103.43	70	120	
Sc	45	He	177873	0.1	187263.33	94.99	70	120	
Ge	74	He	188640	0.8	195722.79	96.38	70	120	
Rh	103	He	646347	1.0	663778.05	97.37	70	120	
Tb	159	He	1742806	0.9	1715096.85	101.62	70	120	
Ge	74	HEHe	120175	0.3	118804.81	101.15	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9K15037-CCB**	**Sample Type**	CCB
File Name	031_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:36:33	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.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	78.9	33	0.09	
Na	23	45	He	3.422	ug/l	4.6	5113	45	
Mg	24	45	He	0.985	ug/l	2.3	728	45	
Al	27	45	He	0.717	ug/l	3.9	263	22.5	
K	39	45	He	0.225	ug/l	426.5	12173	45	
Ca	44	45	He	1.738	ug/l	10.6	95	45	
Ti	47	45	He	0.009	ug/l	257.5	3	1.8	
V	51	74	He	-0.028	ug/l	N/A	711	0.45	
Cr	52	74	He	0.001	ug/l	416.7	179	0.45	
Mn	55	74	He	0.002	ug/l	192.5	79	0.45	
Fe	56	74	He	1.517	ug/l	6.5	14531	22.5	
Co	59	74	He	0.006	ug/l	11.7	81	0.09	
Ni	60	74	He	0.018	ug/l	75.3	119	0.45	
Cu	65	74	He	0.024	ug/l	35.6	386	0.45	
Cu	65	74	No Gas	0.014	ug/l	25.4	830	0.45	
Zn	66	74	He	0.038	ug/l	22.6	184	1.8	
As	75	74	He	0.021	ug/l	33.8	43	0.45	
Se	78	74	HEHe	0.011	ug/l	149.8	1	0.45	
Mo	95	103	He	0.033	ug/l	30.2	172	0.45	
Ag	109	103	No Gas	0.006	ug/l	11.0	182	0.09	
Cd	111	103	He	0.007	ug/l	113.0	28	0.09	
Cd	111	103	No Gas	0.010	ug/l	47.7	71	0.09	
Sb	123	103	No Gas	0.194	ug/l	0.4	3575	0.45	
Ba	138	159	He	0.015	ug/l	21.4	569	0.45	
Hg	201	159	No Gas	2.221	ng/l	15.5	35	36	
Tl	205	159	No Gas	0.007	ug/l	10.2	1153	0.09	
Pb	208	159	No Gas	0.011	ug/l	17.8	4233	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	623468	0.7	743093.21	83.9	70	120	
Ge	74	No Gas	998145	0.0	1059075.15	94.25	70	120	
Rh	103	No Gas	1161779	0.8	1231018.97	94.38	70	120	
Tb	159	No Gas	2944167	1.1	2964739.4	99.31	70	120	
Bi	209	No Gas	1868119	1.3	1828139.18	102.19	70	120	
Sc	45	He	171988	0.5	187263.33	91.84	70	120	
Ge	74	He	185171	1.5	195722.79	94.61	70	120	
Rh	103	He	637748	0.8	663778.05	96.08	70	120	
Tb	159	He	1698939	0.8	1715096.85	99.06	70	120	
Ge	74	HEHe	118494	0.6	118804.81	99.74	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL4**	**Sample Type**	CRL1
File Name	032CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:41:12	**Sample QC Pass/Fail**	Fail
Comment	A19K144 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag	
Be	9	6	No Gas	0.179	ug/l	11.0	509	99.44	70	130		
Na	23	45	He	11.706	ug/l	2.8	11492	130.07	70	130	CRL1 Failed	LMRL
Mg	24	45	He	10.723	ug/l	2.4	4964	119.14	70	130		
Al	27	45	He	9.599	ug/l	1.5	2256	106.66	70	130		
K	39	45	He	8.765	ug/l	7.6	15723	97.39	70	130		
Ca	44	45	He	9.773	ug/l	8.8	292	108.59	70	130		
Ti	47	45	He	0.224	ug/l	56.4	33	124.44	70	130		
V	51	74	He	0.143	ug/l	5.4	1428	79.44	70	130		
Cr	52	74	He	0.168	ug/l	3.5	1031	93.33	70	130		
Mn	55	74	He	0.181	ug/l	6.2	741	100.56	70	130		
Fe	56	74	He	10.335	ug/l	1.5	58228	114.83	70	130		
Co	59	74	He	0.168	ug/l	9.4	1398	93.33	70	130		
Ni	60	74	He	0.180	ug/l	15.3	442	100	70	130		
Cu	65	74	He	0.178	ug/l	19.9	808	98.89	70	130		
Cu	65	74	No Gas	0.171	ug/l	5.3	1849	95	70	130		
Zn	66	74	He	0.129	ug/l	14.5	280	71.67	70	130		
As	75	74	He	0.199	ug/l	8.7	174	110.56	70	130		
Se	78	74	HEHe	0.189	ug/l	6.1	15	105	70	130		
Mo	95	103	He	0.206	ug/l	7.2	882	114.44	70	130		
Ag	109	103	No Gas	0.176	ug/l	2.1	4424	97.78	70	130		
Cd	111	103	He	0.182	ug/l	10.1	479	101.11	70	130		
Cd	111	103	No Gas	0.183	ug/l	3.2	1138	101.67	70	130		
Sb	123	103	No Gas	0.238	ug/l	2.5	4376	132.22	70	130	CRL1 Failed	LMRL
Ba	138	159	He	0.187	ug/l	2.8	3817	103.89	70	130		
Hg	201	159	No Gas	7.158	ng/l	19.6	56	99.42	70	130		
Tl	205	159	No Gas	0.173	ug/l	0.6	13738	96.11	70	130		
Pb	208	159	No Gas	0.176	ug/l	1.3	21272	97.78	70	130		

JPB 11/16/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	630189	1.3	743093.21	84.81	70	120	
Ge	74	No Gas	997238	1.2	1059075.15	94.16	70	120	
Rh	103	No Gas	1167320	1.0	1231018.97	94.83	70	120	
Tb	159	No Gas	2968690	0.8	2964739.4	100.13	70	120	
Bi	209	No Gas	1856959	1.8	1828139.18	101.58	70	120	
Sc	45	He	170652	0.2	187263.33	91.13	70	120	
Ge	74	He	181679	0.3	195722.79	92.82	70	120	
Rh	103	He	629623	0.4	663778.05	94.85	70	120	
Tb	159	He	1685214	1.4	1715096.85	98.26	70	120	
Ge	74	HEHe	115225	0.8	118804.81	96.99	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL5**	**Sample Type**	CRL2
File Name	033_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:45:52	**Sample QC Pass/Fail**	Pass
Comment	A19K145 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.888	ug/l	5.6	2439	98.67	70	130	
Na	23	45	He	47.033	ug/l	1.0	38627	104.52	70	130	
Mg	24	45	He	47.131	ug/l	2.7	20695	104.74	70	130	
Al	27	45	He	45.357	ug/l	3.5	10226	100.79	70	130	
K	39	45	He	46.274	ug/l	3.5	31533	102.83	70	130	
Ca	44	45	He	42.349	ug/l	12.5	1085	94.11	70	130	
Ti	47	45	He	0.817	ug/l	17.2	116	90.78	70	130	
V	51	74	He	0.784	ug/l	4.7	4140	87.11	70	130	
Cr	52	74	He	0.871	ug/l	2.8	4614	96.78	70	130	
Mn	55	74	He	0.878	ug/l	1.4	3309	97.56	70	130	
Fe	56	74	He	45.391	ug/l	0.3	231563	100.87	70	130	
Co	59	74	He	0.875	ug/l	4.2	7109	97.22	70	130	
Ni	60	74	He	0.873	ug/l	3.0	1830	97	70	130	
Cu	65	74	He	0.895	ug/l	2.8	2797	99.44	70	130	
Cu	65	74	No Gas	0.882	ug/l	4.3	6343	98	70	130	
Zn	66	74	He	0.841	ug/l	5.9	1046	93.44	70	130	
As	75	74	He	0.866	ug/l	2.2	663	96.22	70	130	
Se	78	74	HEHe	0.908	ug/l	6.9	71	100.89	70	130	
Mo	95	103	He	0.860	ug/l	1.0	3526	95.56	70	130	
Ag	109	103	No Gas	0.869	ug/l	2.4	21008	96.56	70	130	
Cd	111	103	He	0.877	ug/l	4.5	2244	97.44	70	130	
Cd	111	103	No Gas	0.931	ug/l	3.1	5561	103.44	70	130	
Sb	123	103	No Gas	0.939	ug/l	5.9	16326	104.33	70	130	
Ba	138	159	He	0.906	ug/l	0.8	17235	100.67	70	130	
Hg	201	159	No Gas	34.502	ng/l	5.0	166	95.84	70	130	
Tl	205	159	No Gas	0.876	ug/l	6.2	64640	97.33	70	130	
Pb	208	159	No Gas	0.894	ug/l	5.5	92215	99.33	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	623300	2.2	743093.21	83.88	70	120	
Ge	74	No Gas	975058	2.8	1059075.15	92.07	70	120	
Rh	103	No Gas	1132516	3.8	1231018.97	92	70	120	
Tb	159	No Gas	2870131	4.8	2964739.4	96.81	70	120	
Bi	209	No Gas	1808419	3.5	1828139.18	98.92	70	120	
Sc	45	He	169620	0.5	187263.33	90.58	70	120	
Ge	74	He	180551	0.4	195722.79	92.25	70	120	
Rh	103	He	621731	0.4	663778.05	93.67	70	120	
Tb	159	He	1671132	0.7	1715096.85	97.44	70	120	
Ge	74	HEHe	114204	0.2	118804.81	96.13	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL6**	**Sample Type**	CRL3
File Name	034CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:50:31	**Sample QC Pass/Fail**	Pass
Comment	A19K146 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.792	ug/l	1.9	4925	99.56	70	130	
Na	23	45	He	91.090	ug/l	1.3	72320	101.21	70	130	
Mg	24	45	He	93.063	ug/l	2.0	40454	103.4	70	130	
Al	27	45	He	89.828	ug/l	3.5	20085	99.81	70	130	
K	39	45	He	92.279	ug/l	2.7	50880	102.53	70	130	
Ca	44	45	He	93.074	ug/l	1.4	2316	103.42	70	130	
Ti	47	45	He	1.878	ug/l	3.3	262	104.33	70	130	
V	51	74	He	1.610	ug/l	2.5	7627	89.44	70	130	
Cr	52	74	He	1.736	ug/l	1.5	9003	96.44	70	130	
Mn	55	74	He	1.812	ug/l	1.8	6742	100.67	70	130	
Fe	56	74	He	89.019	ug/l	0.7	446764	98.91	70	130	
Co	59	74	He	1.722	ug/l	0.9	13936	95.67	70	130	
Ni	60	74	He	1.747	ug/l	2.0	3575	97.06	70	130	
Cu	65	74	He	1.812	ug/l	1.9	5334	100.67	70	130	
Cu	65	74	No Gas	1.776	ug/l	1.9	12003	98.67	70	130	
Zn	66	74	He	1.806	ug/l	2.2	2081	100.33	70	130	
As	75	74	He	1.749	ug/l	1.5	1310	97.17	70	130	
Se	78	74	HEHe	1.774	ug/l	9.2	134	98.56	70	130	
Mo	95	103	He	1.758	ug/l	2.5	7151	97.67	70	130	
Ag	109	103	No Gas	1.747	ug/l	0.8	41953	97.06	70	130	
Cd	111	103	He	1.753	ug/l	0.8	4464	97.39	70	130	
Cd	111	103	No Gas	1.801	ug/l	0.9	10696	100.06	70	130	
Sb	123	103	No Gas	1.804	ug/l	1.7	31115	100.22	70	130	
Ba	138	159	He	1.859	ug/l	1.0	34675	103.28	70	130	
Hg	201	159	No Gas	70.557	ng/l	4.6	315	98	70	130	
Tl	205	159	No Gas	1.724	ug/l	0.7	127334	95.78	70	130	
Pb	208	159	No Gas	1.737	ug/l	0.2	177253	96.5	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	624658	0.7	743093.21	84.06	70	120	
Ge	74	No Gas	970901	0.5	1059075.15	91.67	70	120	
Rh	103	No Gas	1126285	0.9	1231018.97	91.49	70	120	
Tb	159	No Gas	2879983	0.7	2964739.4	97.14	70	120	
Bi	209	No Gas	1807249	0.4	1828139.18	98.86	70	120	
Sc	45	He	169075	0.5	187263.33	90.29	70	120	
Ge	74	He	180168	1.0	195722.79	92.05	70	120	
Rh	103	He	620081	0.2	663778.05	93.42	70	120	
Tb	159	He	1652121	0.7	1715096.85	96.33	70	120	
Ge	74	HEHe	111370	2.3	118804.81	93.74	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL7**	**Sample Type**	CRL4
File Name	035CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 19:55:10	**Sample QC Pass/Fail**	Pass
Comment	A19K147 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.602	ug/l	2.7	9960	100.06	70	130	
Na	23	45	He	179.789	ug/l	0.9	143258	99.88	70	130	
Mg	24	45	He	183.580	ug/l	2.4	81108	101.99	70	130	
Al	27	45	He	179.991	ug/l	2.0	40956	100	70	130	
K	39	45	He	183.890	ug/l	1.0	91424	102.16	70	130	
Ca	44	45	He	180.533	ug/l	3.4	4534	100.3	70	130	
Ti	47	45	He	3.761	ug/l	12.0	534	104.47	70	130	
V	51	74	He	3.264	ug/l	2.0	14841	90.67	70	130	
Cr	52	74	He	3.427	ug/l	1.1	17867	95.19	70	130	
Mn	55	74	He	3.560	ug/l	1.7	13369	98.89	70	130	
Fe	56	74	He	177.653	ug/l	1.2	897895	98.7	70	130	
Co	59	74	He	3.401	ug/l	1.1	27897	94.47	70	130	
Ni	60	74	He	3.540	ug/l	2.1	7265	98.33	70	130	
Cu	65	74	He	3.588	ug/l	5.2	10407	99.67	70	130	
Cu	65	74	No Gas	3.594	ug/l	0.1	23492	99.83	70	130	
Zn	66	74	He	3.640	ug/l	1.1	4113	101.11	70	130	
As	75	74	He	3.490	ug/l	2.5	2626	96.94	70	130	
Se	78	74	HEHe	3.554	ug/l	5.0	274	98.72	70	130	
Mo	95	103	He	3.489	ug/l	3.1	14361	96.92	70	130	
Ag	109	103	No Gas	3.509	ug/l	0.6	85225	97.47	70	130	
Cd	111	103	He	3.491	ug/l	1.6	9012	96.97	70	130	
Cd	111	103	No Gas	3.595	ug/l	2.0	21585	99.86	70	130	
Sb	123	103	No Gas	3.551	ug/l	0.6	61830	98.64	70	130	
Ba	138	159	He	3.638	ug/l	2.5	68180	101.06	70	130	
Hg	201	159	No Gas	145.366	ng/l	2.6	621	100.95	70	130	
Tl	205	159	No Gas	3.510	ug/l	1.9	258330	97.5	70	130	
Pb	208	159	No Gas	3.535	ug/l	1.3	357322	98.19	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	629503	0.3	743093.21	84.71	70	120	
Ge	74	No Gas	968276	1.2	1059075.15	91.43	70	120	
Rh	103	No Gas	1139315	0.9	1231018.97	92.55	70	120	
Tb	159	No Gas	2877431	1.3	2964739.4	97.06	70	120	
Bi	209	No Gas	1818607	1.2	1828139.18	99.48	70	120	
Sc	45	He	172508	1.6	187263.33	92.12	70	120	
Ge	74	He	182813	1.8	195722.79	93.4	70	120	
Rh	103	He	629334	2.7	663778.05	94.81	70	120	
Tb	159	He	1667209	2.1	1715096.85	97.21	70	120	
Ge	74	HEHe	113591	3.3	118804.81	95.61	70	120	

Sample Report ICPMS6

Sample Name	**9110769-BLK1**	**Sample Type**	Sample
File Name	043SMPL.d	**Vial #**	3201
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 20:32:20	**Sample QC Pass/Fail**	Pass
Comment	9110769 Water AsCdCoCrCuFeMnMoNiPbVZn	**ISTD Ref FileName**	003CALB.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	-0.001	N/A	12	15.7	100	
Na	23	45	He	ug/l	19.645	1.2	19295	0.3	50000	
Mg	24	45	He	ug/l	25.345	2.4	12394	2.1	50000	
Al	27	45	He	ug/l	2.559	6.0	738	4.6	50000	
K	39	45	He	ug/l	-0.849	N/A	12710	1.2	50000	
Ca	44	45	He	ug/l	128.042	6.4	3495	6.2	50000	
Ti	47	45	He	ug/l	0.073	29.4	13	25.0	2500	
V	51	74	He	ug/l	0.166	17.3	1635	8.1	500	
Cr	52	74	He	ug/l	0.021	22.8	301	8.9	1000	
Mn	55	74	He	ug/l	0.014	69.4	130	30.2	2500	
Fe	56	74	He	ug/l	1.076	1.2	12928	0.9	50000	
Co	59	74	He	ug/l	0	N/A	26	41.9	500	
Ni	60	74	He	ug/l	0.008	54.6	102	9.4	500	
Cu	65	74	He	ug/l	0.128	13.8	716	7.2	1000	
Cu	65	74	No Gas	ug/l	0.122	3.2	1610	1.9	1000	
Zn	66	74	He	ug/l	0.022	36.3	176	4.8	2500	
As	75	74	He	ug/l	0.012	81.5	38	20.7	500	
Se	78	74	HEHe	ug/l	-0.003	N/A	0	86.6	100	
Mo	95	103	He	ug/l	0.004	74.7	57	25.6	100	
Ag	109	103	No Gas	ug/l	0	N/A	34	40.3	100	
Cd	111	103	He	ug/l	-0.002	N/A	6	34.7	1000	
Cd	111	103	No Gas	ug/l	0	385.9	14	67.0	1000	
Sb	123	103	No Gas	ug/l	0.004	30.5	222	11.4	100	
Ba	138	159	He	ug/l	0.151	3.4	3300	3.4	2500	
W	186	159	No Gas	ug/l	0	N/A	93	22.3	40	
Hg	201	159	No Gas	ng/l	-0.537	N/A	24	23.7	4000	
Tl	205	159	No Gas	ug/l	-0.004	N/A	323	16.6	100	
Pb	208	159	No Gas	ug/l	0.001	83.2	3315	2.7	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	654544	0.2	743093.21	88.08	70	120	
Sc	45	He	186646	0.7	187263.33	99.67	70	120	
Ge	74	No Gas	1047409	0.2	1059075.15	98.9	70	120	
Ge	74	He	194716	0.5	195722.79	99.49	70	120	
Ge	74	HEHe	124425	0.8	118804.81	104.73	70	120	
Rh	103	No Gas	1221730	0.4	1231018.97	99.25	70	120	
Rh	103	He	673456	0.2	663778.05	101.46	70	120	
Tb	159	No Gas	3025397	0.8	2964739.4	102.05	70	120	
Tb	159	He	1771561	0.3	1715096.85	103.29	70	120	
Bi	209	No Gas	1920515	1.1	1828139.18	105.05	70	120	

Sample Report ICPMS6

Sample Name	**9110769-BS1**	**Sample Type**	Sample
File Name	044SMPL.d	**Vial #**	3202
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 20:37:00	**Sample QC Pass/Fail**	Pass
Comment	9110769 Water AsCdCoCrCuFeMnMoNiPbVZn	**ISTD Ref FileName**	003CALB.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	24.652	0.4	67469	0.8	100	
Na	23	45	He	ug/l	2480.411	2.7	2001010	1.7	50000	
Mg	24	45	He	ug/l	2532.976	0.8	1147767	0.3	50000	
Al	27	45	He	ug/l	2455.896	1.0	573730	0.3	50000	
K	39	45	He	ug/l	2531.323	1.0	1135784	0.2	50000	
Ca	44	45	He	ug/l	2456.649	0.1	62806	0.9	50000	
Ti	47	45	He	ug/l	48.008	1.5	6987	2.4	2500	
V	51	74	He	ug/l	45.565	0.4	200740	0.8	500	
Cr	52	74	He	ug/l	46.897	0.8	247436	0.8	1000	
Mn	55	74	He	ug/l	48.217	0.5	184034	0.8	2500	
Fe	56	74	He	ug/l	2452.863	1.2	12571496	0.9	50000	
Co	59	74	He	ug/l	46.761	1.1	391321	0.4	500	
Ni	60	74	He	ug/l	47.565	1.0	98680	0.2	500	
Cu	65	74	He	ug/l	47.853	1.1	137857	1.0	1000	
Cu	65	74	No Gas	ug/l	47.809	0.7	312813	1.0	1000	
Zn	66	74	He	ug/l	46.983	2.4	52490	2.1	2500	
As	75	74	He	ug/l	45.76	1.0	34834	0.9	500	
Se	78	74	HEHe	ug/l	22.867	1.5	1840	1.5	100	
Mo	95	103	He	ug/l	24.196	0.9	101515	1.0	100	
Ag	109	103	No Gas	ug/l	25.411	0.6	627490	0.6	100	
Cd	111	103	He	ug/l	46.14	0.5	121532	0.5	1000	
Cd	111	103	No Gas	ug/l	47.749	0.1	291511	0.4	1000	
Sb	123	103	No Gas	ug/l	23.715	0.9	419309	0.6	100	
Ba	138	159	He	ug/l	48.669	0.3	947546	0.2	2500	
W	186	159	No Gas	ug/l	0.009	31.2	380	23.7	40	
Hg	201	159	No Gas	ng/l	966.458	2.1	4162	3.4	4000	
Tl	205	159	No Gas	ug/l	24.715	0.4	1891449	1.3	100	
Pb	208	159	No Gas	ug/l	47.487	0.8	4961360	0.5	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	623759	0.6	743093.21	83.94	70	120	
Sc	45	He	177491	0.9	187263.33	94.78	70	120	
Ge	74	No Gas	997404	0.7	1059075.15	94.18	70	120	
Ge	74	He	186665	0.8	195722.79	95.37	70	120	
Ge	74	HEHe	118450	0.6	118804.81	99.7	70	120	
Rh	103	No Gas	1158972	0.5	1231018.97	94.15	70	120	
Rh	103	He	642579	0.1	663778.05	96.81	70	120	
Tb	159	No Gas	2997714	1.3	2964739.4	101.11	70	120	
Tb	159	He	1738260	0.5	1715096.85	101.35	70	120	
Bi	209	No Gas	1873270	1.8	1828139.18	102.47	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9K15037-CCV 2 JB 11/16/19	**Sample Type**	CCV
File Name	046_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 20:46:16	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 11/15	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.106	ug/l	0.9	112388	40	102.76	90	110	
Na	23	45	He	3908.993	ug/l	0.3	3107909	4000	97.72	90	110	
Mg	24	45	He	4168.355	ug/l	0.6	1861892	4000	104.21	90	110	
Al	27	45	He	3970.401	ug/l	0.6	914364	4000	99.26	90	110	
K	39	45	He	4133.695	ug/l	1.7	1820640	4000	103.34	90	110	
Ca	44	45	He	4062.954	ug/l	1.7	102363	4000	101.57	90	110	
Ti	47	45	He	96.710	ug/l	3.0	13875	100	96.71	90	110	
V	51	74	He	93.092	ug/l	0.5	404349	100	93.09	90	110	
Cr	52	74	He	97.517	ug/l	1.1	508163	100	97.52	90	110	
Mn	55	74	He	101.879	ug/l	1.0	384117	100	101.88	90	110	
Fe	56	74	He	4041.188	ug/l	0.6	20460438	4000	101.03	90	110	
Co	59	74	He	98.686	ug/l	0.5	815983	100	98.69	90	110	
Ni	60	74	He	102.178	ug/l	0.6	209361	100	102.18	90	110	
Cu	65	74	He	100.371	ug/l	0.3	285352	100	100.37	90	110	
Cu	65	74	No Gas	99.860	ug/l	0.9	647507	100	99.86	90	110	
Zn	66	74	He	100.271	ug/l	0.7	110527	100	100.27	90	110	
As	75	74	He	94.086	ug/l	0.3	70737	100	94.09	90	110	
Se	78	74	HEHe	40.239	ug/l	0.6	3148	40	100.6	90	110	
Mo	95	103	He	39.851	ug/l	1.4	162969	40	99.63	90	110	
Ag	109	103	No Gas	39.944	ug/l	0.9	973302	40	99.86	90	110	
Cd	111	103	He	96.168	ug/l	1.3	246923	100	96.17	90	110	
Cd	111	103	No Gas	98.700	ug/l	1.6	594576	100	98.7	90	110	
Sb	123	103	No Gas	38.748	ug/l	1.5	675949	40	96.87	90	110	
Ba	138	159	He	105.850	ug/l	0.4	1999486	100	105.85	90	110	
Hg	201	159	No Gas	802.521	ng/l	2.4	3396	800	100.32	90	110	
Tl	205	159	No Gas	40.953	ug/l	0.8	3076422	40	102.38	90	110	
Pb	208	159	No Gas	100.513	ug/l	1.9	10305754	100	100.51	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	623176	0.4	743093.21	83.86	70	120	
Ge	74	No Gas	989694	0.6	1059075.15	93.45	70	120	
Rh	103	No Gas	1143712	0.9	1231018.97	92.91	70	120	
Tb	159	No Gas	2943138	1.4	2964739.4	99.27	70	120	
Bi	209	No Gas	1849637	0.1	1828139.18	101.18	70	120	
Sc	45	He	174979	1.1	187263.33	93.44	70	120	
Ge	74	He	184428	0.4	195722.79	94.23	70	120	
Rh	103	He	626467	0.9	663778.05	94.38	70	120	
Tb	159	He	1686838	1.4	1715096.85	98.35	70	120	
Ge	74	HEHe	115154	0.8	118804.81	96.93	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9K15037-CCB** 2	**Sample Type**	CCB
File Name	047_CCB.d JB 11/16/19	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 20:50:49	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.005	ug/l	109.3	30	0.09	
Na	23	45	He	5.026	ug/l	0.9	6622	45	
Mg	24	45	He	0.359	ug/l	7.0	471	45	
Al	27	45	He	0.219	ug/l	98.5	157	22.5	
K	39	45	He	-0.867	ug/l	N/A	12174	45	
Ca	44	45	He	-0.352	ug/l	N/A	45	45	
Ti	47	45	He	0.023	ug/l	147.8	6	1.8	
V	51	74	He	0.013	ug/l	46.5	913	0.45	
Cr	52	74	He	0.002	ug/l	179.7	192	0.45	
Mn	55	74	He	0.003	ug/l	12.5	84	0.45	
Fe	56	74	He	0.231	ug/l	9.8	8207	22.5	
Co	59	74	He	0.007	ug/l	33.8	88	0.09	
Ni	60	74	He	0.012	ug/l	116.4	109	0.45	
Cu	65	74	He	-0.007	ug/l	N/A	306	0.45	
Cu	65	74	No Gas	0.008	ug/l	36.4	800	0.45	
Zn	66	74	He	0.006	ug/l	407.5	153	1.8	
As	75	74	He	0.023	ug/l	29.5	46	0.45	
Se	78	74	HEHe	0.021	ug/l	42.8	2	0.45	
Mo	95	103	He	0.028	ug/l	24.6	153	0.45	
Ag	109	103	No Gas	0.004	ug/l	14.0	134	0.09	
Cd	111	103	He	0.006	ug/l	35.0	24	0.09	
Cd	111	103	No Gas	0.009	ug/l	44.5	65	0.09	
Sb	123	103	No Gas	0.177	ug/l	5.3	3315	0.45	
Ba	138	159	He	0.012	ug/l	6.7	523	0.45	
Hg	201	159	No Gas	1.413	ng/l	73.3	31	36	
Tl	205	159	No Gas	0.009	ug/l	8.3	1306	0.09	
Pb	208	159	No Gas	0.010	ug/l	7.6	4157	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	639289	2.4	743093.21	86.03	70	120	
Ge	74	No Gas	1013395	2.7	1059075.15	95.69	70	120	
Rh	103	No Gas	1176653	3.9	1231018.97	95.58	70	120	
Tb	159	No Gas	2950336	3.8	2964739.4	99.51	70	120	
Bi	209	No Gas	1829661	3.0	1828139.18	100.08	70	120	
Sc	45	He	178904	0.3	187263.33	95.54	70	120	
Ge	74	He	189972	0.5	195722.79	97.06	70	120	
Rh	103	He	646142	0.6	663778.05	97.34	70	120	
Tb	159	He	1705218	0.3	1715096.85	99.42	70	120	
Ge	74	HEHe	117821	1.1	118804.81	99.17	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-01**	**Sample Type**	Sample
File Name	048SMPL.d	**Vial #**	3204
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 20:55:29	**Sample QC Pass/Fail**	Pass
Comment	9110769 Water AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	371.9	16	32.7	100	
Na	23	45	He	ug/l	74.42	1.5	62850	0.5	50000	
Mg	24	45	He	ug/l	22.939	1.5	10759	1.0	50000	
Al	27	45	He	ug/l	1.419	16.8	438	13.2	50000	
K	39	45	He	ug/l	3.238	12.7	13980	0.6	50000	
Ca	44	45	He	ug/l	115.697	4.7	3026	3.6	50000	
Ti	47	45	He	ug/l	0.077	30.9	13	25.0	2500	
V	51	74	He	ug/l	0.071	13.5	1153	3.8	500	
Cr	52	74	He	ug/l	0.076	13.4	577	9.0	1000	
Mn	55	74	He	ug/l	0.026	10.3	169	6.0	2500	
Fe	56	74	He	ug/l	0.466	6.7	9301	1.4	50000	
Co	59	74	He	ug/l	0.003	87.6	50	37.1	500	
Ni	60	74	He	ug/l	0.004	37.7	90	3.7	500	
Cu	65	74	He	ug/l	0.131	2.2	699	1.5	1000	
Cu	65	74	No Gas	ug/l	0.163	10.3	1793	6.5	1000	
Zn	66	74	He	ug/l	0.164	17.0	328	9.2	2500	
As	75	74	He	ug/l	0.029	52.1	49	22.9	500	
Se	78	74	HEHe	ug/l	0.006	116.0	1	57.5	100	
Mo	95	103	He	ug/l	0.014	27.7	97	17.2	100	
Ag	109	103	No Gas	ug/l	0.001	143.5	58	31.8	100	
Cd	111	103	He	ug/l	0.003	127.4	17	52.9	1000	
Cd	111	103	No Gas	ug/l	0.007	32.0	51	24.9	1000	
Sb	123	103	No Gas	ug/l	0.069	2.9	1363	2.5	100	
Ba	138	159	He	ug/l	0.214	2.5	4452	3.3	2500	
W	186	159	No Gas	ug/l	0.002	39.2	140	12.4	40	
Hg	201	159	No Gas	ng/l	0.214	72.4	26	1.9	4000	
Tl	205	159	No Gas	ug/l	0.002	27.6	781	6.5	100	
Pb	208	159	No Gas	ug/l	0.008	6.8	3900	2.8	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	632656	0.3	743093.21	85.14	70	120	
Sc	45	He	178531	1.1	187263.33	95.34	70	120	
Ge	74	No Gas	994792	0.6	1059075.15	93.93	70	120	
Ge	74	He	187294	0.4	195722.79	95.69	70	120	
Ge	74	HEHe	117793	1.2	118804.81	99.15	70	120	
Rh	103	No Gas	1164129	0.4	1231018.97	94.57	70	120	
Rh	103	He	645302	0.3	663778.05	97.22	70	120	
Tb	159	No Gas	2938366	1.5	2964739.4	99.11	70	120	
Tb	159	He	1736400	1.0	1715096.85	101.24	70	120	
Bi	209	No Gas	1856837	0.8	1828139.18	101.57	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-02**	**Sample Type**	Sample
File Name	049SMPL.d	**Vial #**	3205
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 21:00:09	**Sample QC Pass/Fail**	Pass
Comment	9110769 Water AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	N/A	13	50.0	100	
Na	23	45	He	ug/l	87.163	1.3	72233	0.6	50000	
Mg	24	45	He	ug/l	12.035	4.0	5715	3.5	50000	
Al	27	45	He	ug/l	2.414	7.3	663	6.1	50000	
K	39	45	He	ug/l	4.984	4.8	14569	0.3	50000	
Ca	44	45	He	ug/l	67.027	5.7	1753	4.8	50000	
Ti	47	45	He	ug/l	0.156	102.0	24	92.8	2500	
V	51	74	He	ug/l	0.088	15.2	1212	4.8	500	
Cr	52	74	He	ug/l	0.078	17.7	581	12.4	1000	
Mn	55	74	He	ug/l	0.288	4.9	1160	4.6	2500	
Fe	56	74	He	ug/l	2.035	3.5	17145	2.1	50000	
Co	59	74	He	ug/l	0.007	19.9	82	13.0	500	
Ni	60	74	He	ug/l	0.055	3.4	194	2.0	500	
Cu	65	74	He	ug/l	0.337	7.5	1276	5.6	1000	
Cu	65	74	No Gas	ug/l	0.321	6.6	2800	4.6	1000	
Zn	66	74	He	ug/l	0.688	2.9	902	2.5	2500	
As	75	74	He	ug/l	0.028	11.8	48	5.2	500	
Se	78	74	HEHe	ug/l	0	2944.3	0	86.6	100	
Mo	95	103	He	ug/l	0.012	3.5	84	2.3	100	
Ag	109	103	No Gas	ug/l	0.002	31.5	93	15.6	100	
Cd	111	103	He	ug/l	0.004	65.1	20	33.4	1000	
Cd	111	103	No Gas	ug/l	0.005	48.2	43	35.1	1000	
Sb	123	103	No Gas	ug/l	0.032	6.0	708	4.3	100	
Ba	138	159	He	ug/l	0.114	3.8	2467	1.0	2500	
W	186	159	No Gas	ug/l	0	621.7	100	45.8	40	
Hg	201	159	No Gas	ng/l	0.671	111.5	28	10.4	4000	
Tl	205	159	No Gas	ug/l	0.002	88.7	719	15.1	100	
Pb	208	159	No Gas	ug/l	0.078	2.1	11038	0.9	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	630435	0.2	743093.21	84.84	70	120	
Sc	45	He	176219	0.9	187263.33	94.1	70	120	
Ge	74	No Gas	985728	0.5	1059075.15	93.07	70	120	
Ge	74	He	184931	0.0	195722.79	94.49	70	120	
Ge	74	HEHe	115178	0.8	118804.81	96.95	70	120	
Rh	103	No Gas	1160304	1.0	1231018.97	94.26	70	120	
Rh	103	He	642362	0.2	663778.05	96.77	70	120	
Tb	159	No Gas	2931414	2.1	2964739.4	98.88	70	120	
Tb	159	He	1709707	2.5	1715096.85	99.69	70	120	
Bi	209	No Gas	1854951	1.8	1828139.18	101.47	70	120	

Sample Report ICPMS6

Sample Name	**9110847-BLK1**	**Sample Type**	Sample
File Name	053SMPL.d	**Vial #**	3211
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:18:50	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.002	47.1	19	10.2	100	
Na	23	45	He	ug/l	53.402	3.4	45547	3.6	50000	
Mg	24	45	He	ug/l	0.357	65.9	466	23.0	50000	
Al	27	45	He	ug/l	0.21	61.2	153	19.9	50000	
K	39	45	He	ug/l	3.828	2.1	14159	0.7	50000	
Ca	44	45	He	ug/l	0.904	82.6	77	24.7	50000	
Ti	47	45	He	ug/l	0.054	41.9	10	33.3	2500	
V	51	74	He	ug/l	0.072	15.6	1161	4.2	500	
Cr	52	74	He	ug/l	0.008	41.3	221	8.3	1000	
Mn	55	74	He	ug/l	-0.004	N/A	56	19.3	2500	
Fe	56	74	He	ug/l	-0.108	N/A	6354	2.3	50000	
Co	59	74	He	ug/l	0	239.6	32	26.0	500	
Ni	60	74	He	ug/l	-0.015	N/A	51	29.4	500	
Cu	65	74	He	ug/l	0.008	196.1	344	13.6	1000	
Cu	65	74	No Gas	ug/l	0.014	100.1	817	10.4	1000	
Zn	66	74	He	ug/l	-0.047	N/A	92	11.6	2500	
As	75	74	He	ug/l	0.01	57.5	35	12.0	500	
Se	78	74	HEHe	ug/l	0.003	145.5	1	50.3	100	
Mo	95	103	He	ug/l	0.007	23.1	66	10.6	100	
Ag	109	103	No Gas	ug/l	0	N/A	43	0.0	100	
Cd	111	103	He	ug/l	-0.001	N/A	8	49.5	1000	
Cd	111	103	No Gas	ug/l	0.002	162.4	24	87.7	1000	
Sb	123	103	No Gas	ug/l	0.014	16.2	383	9.4	100	
Ba	138	159	He	ug/l	-0.005	N/A	191	7.9	2500	
W	186	159	No Gas	ug/l	0	N/A	87	17.6	40	
Hg	201	159	No Gas	ng/l	-0.927	N/A	21	18.2	4000	
Tl	205	159	No Gas	ug/l	0.014	7.0	1606	3.8	100	
Pb	208	159	No Gas	ug/l	-0.003	N/A	2718	0.7	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	647434	0.8	743093.21	87.13	70	120	
Sc	45	He	177452	0.4	187263.33	94.76	70	120	
Ge	74	No Gas	988343	0.9	1059075.15	93.32	70	120	
Ge	74	He	187337	0.5	195722.79	95.72	70	120	
Ge	74	HEHe	115690	0.5	118804.81	97.38	70	120	
Rh	103	No Gas	1148395	1.3	1231018.97	93.29	70	120	
Rh	103	He	633487	0.3	663778.05	95.44	70	120	
Tb	159	No Gas	2881616	1.5	2964739.4	97.2	70	120	
Tb	159	He	1681478	0.8	1715096.85	98.04	70	120	
Bi	209	No Gas	1782288	1.2	1828139.18	97.49	70	120	

Sample Report ICPMS6

Sample Name	**9110847-BS1**	**Sample Type**	Sample
File Name	054SMPL.d	**Vial #**	3212
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:23:30	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	25.677	3.1	68083	1.7	100	
Na	23	45	He	ug/l	2629.157	1.5	2030320	1.4	50000	
Mg	24	45	He	ug/l	2654.608	2.2	1151210	0.5	50000	
Al	27	45	He	ug/l	2596.242	1.6	580521	0.6	50000	
K	39	45	He	ug/l	2667.57	1.4	1145024	1.0	50000	
Ca	44	45	He	ug/l	2565.48	1.4	62774	0.9	50000	
Ti	47	45	He	ug/l	51.382	3.6	7155	2.0	2500	
V	51	74	He	ug/l	48.125	1.0	201028	0.5	500	
Cr	52	74	He	ug/l	49.468	1.1	247511	0.4	1000	
Mn	55	74	He	ug/l	50.692	2.0	183474	1.0	2500	
Fe	56	74	He	ug/l	2588.518	0.6	12582163	0.7	50000	
Co	59	74	He	ug/l	49.454	1.0	392501	0.2	500	
Ni	60	74	He	ug/l	50.348	1.7	99056	0.9	500	
Cu	65	74	He	ug/l	50.321	0.6	137472	0.7	1000	
Cu	65	74	No Gas	ug/l	51.699	2.1	314886	1.2	1000	
Zn	66	74	He	ug/l	49.368	1.4	52301	0.8	2500	
As	75	74	He	ug/l	48.543	1.8	35042	0.7	500	
Se	78	74	HEHe	ug/l	24.4	0.2	1830	0.6	100	
Mo	95	103	He	ug/l	25.354	1.7	100271	0.6	100	
Ag	109	103	No Gas	ug/l	26.667	2.4	615155	1.0	100	
Cd	111	103	He	ug/l	48.541	1.7	120521	0.8	1000	
Cd	111	103	No Gas	ug/l	50.545	2.8	288266	1.7	1000	
Sb	123	103	No Gas	ug/l	24.925	2.5	411686	1.2	100	
Ba	138	159	He	ug/l	51.687	1.7	953293	1.1	2500	
W	186	159	No Gas	ug/l	0.007	26.1	300	17.3	40	
Hg	201	159	No Gas	ng/l	958.023	1.1	3827	2.6	4000	
Tl	205	159	No Gas	ug/l	25.705	4.1	1823933	2.5	100	
Pb	208	159	No Gas	ug/l	50.513	2.4	4894311	0.7	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	604504	1.5	743093.21	81.35	70	120	
Sc	45	He	169906	1.8	187263.33	90.73	70	120	
Ge	74	No Gas	928775	1.1	1059075.15	87.7	70	120	
Ge	74	He	177036	1.1	195722.79	90.45	70	120	
Ge	74	HEHe	110380	0.8	118804.81	92.91	70	120	
Rh	103	No Gas	1082920	1.4	1231018.97	87.97	70	120	
Rh	103	He	605861	2.2	663778.05	91.27	70	120	
Tb	159	No Gas	2780754	1.8	2964739.4	93.79	70	120	
Tb	159	He	1646953	1.7	1715096.85	96.03	70	120	
Bi	209	No Gas	1726414	1.7	1828139.18	94.44	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-04**	**Sample Type**	Sample
File Name	055SMPL.d	**Vial #**	3213
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:28:06	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.626	1.5	1682	2.5	100	
Na	23	45	He	ug/l	137.495	1.1	126664	1.0	50000	
Mg	24	45	He	ug/l	3021.397	0.5	1530398	1.2	50000	
Al	27	45	He	ug/l	25727.822	0.6	6717882	1.3	50000	
K	39	45	He	ug/l	674.75	0.7	348647	0.5	50000	
Ca	44	45	He	ug/l	3141.729	0.7	89764	0.7	50000	
Ti	47	45	He	ug/l	1636.18	0.4	266098	1.0	2500	
V	51	74	He	ug/l	87.892	0.9	369451	0.2	500	
Cr	52	74	He	ug/l	31.417	1.2	158531	0.6	1000	
Mn	55	74	He	ug/l	584.798	0.2	2133291	0.7	2500	
Fe	56	74	He	ug/l	43911.17	1.0	215066081	1.0	50000	
Co	59	74	He	ug/l	14.85	1.7	118832	1.0	500	
Ni	60	74	He	ug/l	15.964	2.3	31715	1.7	500	
Cu	65	74	He	ug/l	23.412	0.9	64639	0.2	1000	
Cu	65	74	No Gas	ug/l	24.699	1.2	150112	0.9	1000	
Zn	66	74	He	ug/l	59.599	1.9	63623	1.5	2500	
As	75	74	He	ug/l	2.329	1.9	1720	1.9	500	
Se	78	74	HEHe	ug/l	0.588	18.7	44	18.7	100	
Mo	95	103	He	ug/l	0.505	7.1	2017	6.7	100	
Ag	109	103	No Gas	ug/l	0.026	2.5	628	3.8	100	
Cd	111	103	He	ug/l	0.061	8.4	159	7.4	1000	
Cd	111	103	No Gas	ug/l	0.505	5.8	2842	5.8	1000	
Sb	123	103	No Gas	ug/l	0.136	3.9	2335	4.7	100	
Ba	138	159	He	ug/l	153.894	1.4	2909387	1.0	2500	
W	186	159	No Gas	ug/l	0.086	8.4	2526	6.1	40	
Hg	201	159	No Gas	ng/l	20.275	6.7	104	5.8	4000	
Tl	205	159	No Gas	ug/l	0.158	0.1	11714	2.1	100	
Pb	208	159	No Gas	ug/l	5.16	1.6	499855	0.5	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607987	1.3	743093.21	81.82	70	120	
Sc	45	He	198400	0.8	187263.33	105.95	70	120	
Ge	74	No Gas	924578	1.9	1059075.15	87.3	70	120	
Ge	74	He	178467	0.7	195722.79	91.18	70	120	
Ge	74	HEHe	107968	0.7	118804.81	90.88	70	120	
Rh	103	No Gas	1063560	1.7	1231018.97	86.4	70	120	
Rh	103	He	601334	0.6	663778.05	90.59	70	120	
Tb	159	No Gas	2765507	2.1	2964739.4	93.28	70	120	
Tb	159	He	1688322	0.8	1715096.85	98.44	70	120	
Bi	209	No Gas	1695450	1.6	1828139.18	92.74	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-05**	**Sample Type**	Sample
File Name	056SMPL.d	**Vial #**	3214
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:32:44	**Sample QC Pass/Fail**	Fail
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.872	3.2	2371	2.9	100	
Na	23	45	He	ug/l	155.42	1.1	144348	0.5	50000	
Mg	24	45	He	ug/l	2869.877	1.9	1469205	1.4	50000	
Al	27	45	He	ug/l	27978.931	1.0	7383958	0.4	50000	
K	39	45	He	ug/l	676.162	1.5	353120	1.5	50000	
Ca	44	45	He	ug/l	3226.47	0.7	93177	0.4	50000	
Ti	47	45	He	ug/l	2229.913	0.9	366554	0.4	2500	
V	51	74	He	ug/l	123.549	0.4	513765	0.4	500	
Cr	52	74	He	ug/l	26.636	1.0	133074	0.9	1000	
Mn	55	74	He	ug/l	985.005	0.3	3556841	1.1	2500	
Fe	56	74	He	ug/l	52961.637	1.3	256761178	1.2	50000	>LDR
Co	59	74	He	ug/l	24.008	0.2	190173	1.1	500	
Ni	60	74	He	ug/l	17.518	0.9	34446	0.7	500	
Cu	65	74	He	ug/l	23.602	1.0	64502	0.9	1000	
Cu	65	74	No Gas	ug/l	25.306	0.2	155319	0.5	1000	
Zn	66	74	He	ug/l	69.245	0.5	73157	1.4	2500	
As	75	74	He	ug/l	2.705	0.4	1973	1.3	500	
Se	78	74	HEHe	ug/l	0.734	25.3	46	3.3	100	
Mo	95	103	He	ug/l	0.726	5.2	2856	5.4	100	
Ag	109	103	No Gas	ug/l	0.035	4.6	836	3.9	100	
Cd	111	103	He	ug/l	0.094	9.1	239	8.9	1000	
Cd	111	103	No Gas	ug/l	0.708	3.1	4012	2.5	1000	
Sb	123	103	No Gas	ug/l	0.257	1.5	4339	1.0	100	
Ba	138	159	He	ug/l	186.508	1.1	3484124	0.3	2500	
W	186	159	No Gas	ug/l	0.118	0.8	3498	0.3	40	
Hg	201	159	No Gas	ng/l	21.136	4.1	109	2.9	4000	
Tl	205	159	No Gas	ug/l	0.155	2.0	11631	1.2	100	
Pb	208	159	No Gas	ug/l	7.989	0.8	782903	0.4	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	616664	0.3	743093.21	82.99	70	120	
Sc	45	He	200539	0.6	187263.33	107.09	70	120	
Ge	74	No Gas	933652	0.4	1059075.15	88.16	70	120	
Ge	74	He	176660	0.8	195722.79	90.26	70	120	
Ge	74	HEHe	95161	19.6	118804.81	80.1	70	120	
Rh	103	No Gas	1073558	0.7	1231018.97	87.21	70	120	
Rh	103	He	595942	0.3	663778.05	89.78	70	120	
Tb	159	No Gas	2802920	0.7	2964739.4	94.54	70	120	
Tb	159	He	1668351	1.1	1715096.85	97.27	70	120	
Bi	209	No Gas	1732192	0.8	1828139.18	94.75	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-06**	**Sample Type**	Sample
File Name	057SMPL.d	**Vial #**	3215
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:37:21	**Sample QC Pass/Fail**	Fail
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.571	2.5	1549	3.1	100	
Na	23	45	He	ug/l	298.5	0.9	265217	0.2	50000	
Mg	24	45	He	ug/l	2760.27	2.0	1364692	1.0	50000	
Al	27	45	He	ug/l	13555.229	1.7	3454826	0.8	50000	
K	39	45	He	ug/l	461.874	1.6	237248	0.4	50000	
Ca	44	45	He	ug/l	5170.828	2.0	144168	1.0	50000	
Ti	47	45	He	ug/l	3461.163	1.1	549462	0.0	2500	>LDR
V	51	74	He	ug/l	123.12	1.3	507449	0.3	500	
Cr	52	74	He	ug/l	10.771	2.4	53428	1.3	1000	
Mn	55	74	He	ug/l	1180.19	0.4	4224151	1.2	2500	
Fe	56	74	He	ug/l	50279.235	1.0	241604781	0.2	50000	>LDR
Co	59	74	He	ug/l	28.915	1.1	226997	0.2	500	
Ni	60	74	He	ug/l	9.006	0.1	17591	1.2	500	
Cu	65	74	He	ug/l	23.736	0.3	64298	0.9	1000	
Cu	65	74	No Gas	ug/l	25.583	1.7	157871	1.0	1000	
Zn	66	74	He	ug/l	111.296	0.4	116462	1.0	2500	
As	75	74	He	ug/l	1.35	0.9	989	0.6	500	
Se	78	74	HEHe	ug/l	0.525	3.6	39	4.0	100	
Mo	95	103	He	ug/l	0.956	0.9	3744	3.1	100	
Ag	109	103	No Gas	ug/l	0.039	11.1	937	9.1	100	
Cd	111	103	He	ug/l	0.387	7.9	952	8.6	1000	
Cd	111	103	No Gas	ug/l	1.073	4.5	6106	2.7	1000	
Sb	123	103	No Gas	ug/l	0.51	2.2	8521	0.9	100	
Ba	138	159	He	ug/l	123.805	1.3	2303252	0.5	2500	
W	186	159	No Gas	ug/l	0.237	0.7	7039	1.4	40	
Hg	201	159	No Gas	ng/l	31.405	5.8	151	3.1	4000	
Tl	205	159	No Gas	ug/l	0.177	1.4	13382	1.2	100	
Pb	208	159	No Gas	ug/l	28.412	2.6	2809756	0.9	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	613135	1.4	743093.21	82.51	70	120	
Sc	45	He	193679	1.0	187263.33	103.43	70	120	
Ge	74	No Gas	938945	1.9	1059075.15	88.66	70	120	
Ge	74	He	175109	1.2	195722.79	89.47	70	120	
Ge	74	HEHe	108618	0.8	118804.81	91.43	70	120	
Rh	103	No Gas	1078543	1.8	1231018.97	87.61	70	120	
Rh	103	He	594773	2.4	663778.05	89.6	70	120	
Tb	159	No Gas	2836987	1.9	2964739.4	95.69	70	120	
Tb	159	He	1661550	1.8	1715096.85	96.88	70	120	
Bi	209	No Gas	1732721	1.9	1828139.18	94.78	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9K15037-CCV** 3 JPB 11/16/19	**Sample Type**	CCV
File Name	058_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 21:41:59	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 11/15	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.368	ug/l	1.3	112811	40	103.42	90	110	
Na	23	45	He	4055.733	ug/l	2.9	3070577	4000	101.39	90	110	
Mg	24	45	He	4301.516	ug/l	3.3	1829568	4000	107.54	90	110	
Al	27	45	He	4140.526	ug/l	2.8	908023	4000	103.51	90	110	
K	39	45	He	4253.347	ug/l	3.9	1783312	4000	106.33	90	110	
Ca	44	45	He	4177.110	ug/l	3.5	100202	4000	104.43	90	110	
Ti	47	45	He	105.078	ug/l	4.3	14349	100	105.08	90	110	
V	51	74	He	95.254	ug/l	2.3	398705	100	95.25	90	110	
Cr	52	74	He	99.704	ug/l	2.5	500692	100	99.7	90	110	
Mn	55	74	He	103.137	ug/l	2.2	374749	100	103.14	90	110	
Fe	56	74	He	4153.787	ug/l	2.7	20265831	4000	103.84	90	110	
Co	59	74	He	100.636	ug/l	2.2	801916	100	100.64	90	110	
Ni	60	74	He	103.964	ug/l	1.4	205318	100	103.96	90	110	
Cu	65	74	He	102.353	ug/l	2.9	280392	100	102.35	90	110	
Cu	65	74	No Gas	104.356	ug/l	1.3	640086	100	104.36	90	110	
Zn	66	74	He	101.044	ug/l	2.3	107338	100	101.04	90	110	
As	75	74	He	97.680	ug/l	2.1	70776	100	97.68	90	110	
Se	78	74	HEHe	39.924	ug/l	2.1	2995	40	99.81	90	110	
Mo	95	103	He	40.888	ug/l	2.5	159092	40	102.22	90	110	
Ag	109	103	No Gas	40.680	ug/l	0.7	936003	40	101.7	90	110	
Cd	111	103	He	99.202	ug/l	2.3	242359	100	99.2	90	110	
Cd	111	103	No Gas	99.224	ug/l	1.2	564420	100	99.22	90	110	
Sb	123	103	No Gas	39.084	ug/l	1.7	643818	40	97.71	90	110	
Ba	138	159	He	111.977	ug/l	2.1	1995372	100	111.98	90	110	> +/- 10%
Hg	201	159	No Gas	805.100	ng/l	1.1	3149	800	100.64	90	110	
Tl	205	159	No Gas	41.879	ug/l	1.1	2907288	40	104.7	90	110	
Pb	208	159	No Gas	103.130	ug/l	0.7	9772806	100	103.13	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	621605	0.7	743093.21	83.65	70	120	
Ge	74	No Gas	936270	0.8	1059075.15	88.4	70	120	
Rh	103	No Gas	1079978	1.1	1231018.97	87.73	70	120	
Tb	159	No Gas	2719709	0.3	2964739.4	91.74	70	120	
Bi	209	No Gas	1719636	0.7	1828139.18	94.06	70	120	
Sc	45	He	166729	3.5	187263.33	89.03	70	120	
Ge	74	He	177798	2.3	195722.79	90.84	70	120	
Rh	103	He	596284	2.8	663778.05	89.83	70	120	
Tb	159	He	1591724	2.2	1715096.85	92.81	70	120	
Ge	74	HEHe	110470	1.3	118804.81	92.98	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9K15037-CCB** 3 JB 11/16/19	**Sample Type**	CCB
File Name	059_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 21:46:32	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.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	17.2	33	0.09	
Na	23	45	He	9.609	ug/l	0.5	10099	45	
Mg	24	45	He	0.441	ug/l	19.2	496	45	
Al	27	45	He	1.482	ug/l	5.2	443	22.5	
K	39	45	He	0.826	ug/l	135.5	12623	45	
Ca	44	45	He	0.887	ug/l	82.3	75	45	
Ti	47	45	He	0.188	ug/l	71.3	29	1.8	
V	51	74	He	-0.023	ug/l	N/A	727	0.45	
Cr	52	74	He	0.010	ug/l	21.8	224	0.45	
Mn	55	74	He	0.072	ug/l	7.3	341	0.45	
Fe	56	74	He	3.148	ug/l	3.4	22587	22.5	
Co	59	74	He	0.009	ug/l	7.8	103	0.09	
Ni	60	74	He	0.001	ug/l	722.3	82	0.45	
Cu	65	74	He	0.022	ug/l	43.0	377	0.45	
Cu	65	74	No Gas	0.018	ug/l	19.8	817	0.45	
Zn	66	74	He	0.019	ug/l	24.3	162	1.8	
As	75	74	He	0.019	ug/l	68.4	41	0.45	
Se	78	74	HEHe	0.008	ug/l	116.9	1	0.45	
Mo	95	103	He	0.019	ug/l	16.0	112	0.45	
Ag	109	103	No Gas	0.004	ug/l	27.3	147	0.09	
Cd	111	103	He	0.005	ug/l	79.8	22	0.09	
Cd	111	103	No Gas	0.011	ug/l	34.5	78	0.09	
Sb	123	103	No Gas	0.129	ug/l	1.7	2326	0.45	
Ba	138	159	He	0.025	ug/l	6.0	739	0.45	
Hg	201	159	No Gas	1.299	ng/l	74.7	28	36	
Tl	205	159	No Gas	0.009	ug/l	11.2	1160	0.09	
Pb	208	159	No Gas	0.015	ug/l	8.2	4284	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	634864	0.2	743093.21	85.44	70	120	
Ge	74	No Gas	956181	0.5	1059075.15	90.28	70	120	
Rh	103	No Gas	1112360	0.7	1231018.97	90.36	70	120	
Tb	159	No Gas	2722262	1.0	2964739.4	91.82	70	120	
Bi	209	No Gas	1714969	0.6	1828139.18	93.81	70	120	
Sc	45	He	174662	0.6	187263.33	93.27	70	120	
Ge	74	He	183276	0.8	195722.79	93.64	70	120	
Rh	103	He	625356	0.2	663778.05	94.21	70	120	
Tb	159	He	1656123	1.5	1715096.85	96.56	70	120	
Ge	74	HEHe	112638	0.7	118804.81	94.81	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-07**	**Sample Type**	Sample
File Name	060SMPL.d	**Vial #**	3301
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:51:13	**Sample QC Pass/Fail**	Fail
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.578	4.7	1617	4.1	100	
Na	23	45	He	ug/l	396.107	1.7	335518	2.0	50000	
Mg	24	45	He	ug/l	3164.764	0.9	1495464	0.6	50000	
Al	27	45	He	ug/l	13176.788	1.0	3209814	0.5	50000	
K	39	45	He	ug/l	557.285	0.5	270914	0.4	50000	
Ca	44	45	He	ug/l	5028.33	0.7	134003	0.7	50000	
Ti	47	45	He	ug/l	2446.138	0.7	371139	0.2	2500	>LDR
V	51	74	He	ug/l	102.231	0.9	428736	0.5	500	
Cr	52	74	He	ug/l	10.77	1.0	54350	1.0	1000	
Mn	55	74	He	ug/l	1152.449	0.7	4195453	0.7	2500	
Fe	56	74	He	ug/l	60063.019	0.8	293576653	0.6	50000	>LDR
Co	59	74	He	ug/l	24.443	0.4	195203	0.6	500	
Ni	60	74	He	ug/l	13.423	0.3	26629	0.8	500	
Cu	65	74	He	ug/l	32.749	1.3	90115	0.7	1000	
Cu	65	74	No Gas	ug/l	33.939	2.3	212092	0.5	1000	
Zn	66	74	He	ug/l	54.571	1.1	58151	0.5	2500	
As	75	74	He	ug/l	1.39	1.7	1034	1.1	500	
Se	78	74	HEHe	ug/l	0.382	6.5	29	6.3	100	
Mo	95	103	He	ug/l	0.579	3.3	2286	3.7	100	
Ag	109	103	No Gas	ug/l	0.024	11.4	597	9.1	100	
Cd	111	103	He	ug/l	0.081	8.8	207	9.0	1000	
Cd	111	103	No Gas	ug/l	0.628	5.1	3656	2.6	1000	
Sb	123	103	No Gas	ug/l	0.126	3.6	2251	0.8	100	
Ba	138	159	He	ug/l	135.182	0.9	2540906	1.6	2500	
W	186	159	No Gas	ug/l	0.109	10.1	3314	8.4	40	
Hg	201	159	No Gas	ng/l	14.803	9.8	86	7.3	4000	
Tl	205	159	No Gas	ug/l	0.151	3.8	11694	3.3	100	
Pb	208	159	No Gas	ug/l	5.787	3.6	583536	1.1	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	631954	1.5	743093.21	85.04	70	120	
Sc	45	He	185098	0.5	187263.33	98.84	70	120	
Ge	74	No Gas	951974	1.8	1059075.15	89.89	70	120	
Ge	74	He	178108	0.6	195722.79	91	70	120	
Ge	74	HEHe	110501	0.3	118804.81	93.01	70	120	
Rh	103	No Gas	1102443	2.6	1231018.97	89.56	70	120	
Rh	103	He	596205	0.7	663778.05	89.82	70	120	
Tb	159	No Gas	2881416	2.6	2964739.4	97.19	70	120	
Tb	159	He	1678474	1.2	1715096.85	97.86	70	120	
Bi	209	No Gas	1750994	2.0	1828139.18	95.78	70	120	

Sample Report ICPMS6

Sample Name	**9110847-DUP1**	**Sample Type**	Sample
File Name	061SMPL.d	**Vial #**	3302
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 21:55:51	**Sample QC Pass/Fail**	Fail
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.682	7.4	1836	7.3	100	
Na	23	45	He	ug/l	393.801	1.1	344674	0.7	50000	
Mg	24	45	He	ug/l	3341.597	0.4	1631648	0.6	50000	
Al	27	45	He	ug/l	14018.393	2.4	3528373	1.8	50000	
K	39	45	He	ug/l	569.524	0.6	285800	1.0	50000	
Ca	44	45	He	ug/l	5097.886	1.1	140376	0.3	50000	
Ti	47	45	He	ug/l	2557.176	0.6	400914	0.2	2500	>LDR
V	51	74	He	ug/l	115.425	0.2	488224	0.5	500	
Cr	52	74	He	ug/l	11.875	1.1	60434	1.1	1000	
Mn	55	74	He	ug/l	1277.304	0.3	4690842	0.6	2500	
Fe	56	74	He	ug/l	68433.481	0.6	337428933	0.5	50000	>LDR
Co	59	74	He	ug/l	28.22	0.5	227334	0.4	500	
Ni	60	74	He	ug/l	13.473	1.2	26962	1.5	500	
Cu	65	74	He	ug/l	33.017	0.1	91650	0.4	1000	
Cu	65	74	No Gas	ug/l	36.634	1.4	220215	0.5	1000	
Zn	66	74	He	ug/l	57.128	0.4	61405	0.3	2500	
As	75	74	He	ug/l	1.43	1.2	1073	1.4	500	
Se	78	74	HEHe	ug/l	0.474	14.4	35	16.4	100	
Mo	95	103	He	ug/l	0.654	2.1	2638	2.8	100	
Ag	109	103	No Gas	ug/l	0.027	13.7	646	11.7	100	
Cd	111	103	He	ug/l	0.089	3.6	232	3.6	1000	
Cd	111	103	No Gas	ug/l	0.738	2.0	4105	1.7	1000	
Sb	123	103	No Gas	ug/l	0.113	2.9	1946	2.9	100	
Ba	138	159	He	ug/l	138.783	0.7	2620367	1.5	2500	
W	186	159	No Gas	ug/l	0.125	7.1	3641	7.5	40	
Hg	201	159	No Gas	ng/l	10.971	12.1	67	6.3	4000	
Tl	205	159	No Gas	ug/l	0.179	0.4	13145	1.1	100	
Pb	208	159	No Gas	ug/l	5.884	1.3	567781	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	608975	0.4	743093.21	81.95	70	120	
Sc	45	He	191267	0.8	187263.33	102.14	70	120	
Ge	74	No Gas	915768	1.0	1059075.15	86.47	70	120	
Ge	74	He	179670	0.4	195722.79	91.8	70	120	
Ge	74	HEHe	108250	2.0	118804.81	91.12	70	120	
Rh	103	No Gas	1053451	1.1	1231018.97	85.58	70	120	
Rh	103	He	610180	1.3	663778.05	91.93	70	120	
Tb	159	No Gas	2756473	1.5	2964739.4	92.98	70	120	
Tb	159	He	1685999	0.9	1715096.85	98.3	70	120	
Bi	209	No Gas	1676154	0.5	1828139.18	91.69	70	120	

Sample Report ICPMS6

Sample Name	**9110847-MS1**	**Sample Type**	Sample
File Name	062SMPL.d	**Vial #**	3303
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 22:00:29	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	25.776	0.9	70738	0.3	100	
Na	23	45	He	ug/l	2606.845	2.2	2158380	0.4	50000	
Mg	24	45	He	ug/l	4341.311	1.9	2018729	0.5	50000	
Al	27	45	He	ug/l	8887.001	1.4	2130662	0.8	50000	
K	39	45	He	ug/l	2791.112	2.4	1283950	0.8	50000	
Ca	44	45	He	ug/l	5247.299	3.1	137597	1.6	50000	
Ti	47	45	He	ug/l	1407.076	1.6	210113	1.1	2500	
V	51	74	He	ug/l	104.917	1.2	439735	0.8	500	
Cr	52	74	He	ug/l	55.016	0.2	276787	0.3	1000	
Mn	55	74	He	ug/l	631.964	0.4	2299427	0.1	2500	
Fe	56	74	He	ug/l	33977.364	1.9	165981844	1.4	50000	
Co	59	74	He	ug/l	61.058	0.7	487291	0.5	500	
Ni	60	74	He	ug/l	57.822	1.0	114385	0.6	500	
Cu	65	74	He	ug/l	67.999	1.2	186685	0.7	1000	
Cu	65	74	No Gas	ug/l	68.909	1.7	428562	1.3	1000	
Zn	66	74	He	ug/l	77.272	0.2	82242	0.5	2500	
As	75	74	He	ug/l	48.856	0.7	35465	0.2	500	
Se	78	74	HEHe	ug/l	24.033	1.2	1791	0.9	100	
Mo	95	103	He	ug/l	25.504	1.4	100977	1.1	100	
Ag	109	103	No Gas	ug/l	26.035	1.6	608365	0.3	100	
Cd	111	103	He	ug/l	48.903	0.8	121567	1.3	1000	
Cd	111	103	No Gas	ug/l	49.127	1.1	283828	0.3	1000	
Sb	123	103	No Gas	ug/l	21.877	1.9	366031	0.6	100	
Ba	138	159	He	ug/l	138.071	1.9	2584140	1.4	2500	
W	186	159	No Gas	ug/l	0.093	9.8	2760	8.4	40	
Hg	201	159	No Gas	ng/l	963.65	1.8	3874	1.7	4000	
Tl	205	159	No Gas	ug/l	25.271	1.1	1805685	1.0	100	
Pb	208	159	No Gas	ug/l	52.121	0.8	5084488	0.5	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	625505	0.9	743093.21	84.18	70	120	
Sc	45	He	182195	1.9	187263.33	97.29	70	120	
Ge	74	No Gas	948802	0.8	1059075.15	89.59	70	120	
Ge	74	He	178011	0.5	195722.79	90.95	70	120	
Ge	74	HEHe	109710	0.3	118804.81	92.34	70	120	
Rh	103	No Gas	1096881	1.4	1231018.97	89.1	70	120	
Rh	103	He	606485	1.7	663778.05	91.37	70	120	
Tb	159	No Gas	2799097	1.3	2964739.4	94.41	70	120	
Tb	159	He	1671658	2.1	1715096.85	97.47	70	120	
Bi	209	No Gas	1732235	1.5	1828139.18	94.75	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-08**	**Sample Type**	Sample
File Name	063SMPL.d	**Vial #**	3304
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 22:05:05	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.342	3.6	946	6.2	100	
Na	23	45	He	ug/l	584.994	0.6	486474	0.4	50000	
Mg	24	45	He	ug/l	3321.931	1.3	1545013	0.6	50000	
Al	27	45	He	ug/l	12357.142	0.7	2963156	1.6	50000	
K	39	45	He	ug/l	731.218	1.3	345877	0.5	50000	
Ca	44	45	He	ug/l	4537.491	1.0	119024	0.2	50000	
Ti	47	45	He	ug/l	1546.112	1.0	230896	0.3	2500	
V	51	74	He	ug/l	67.154	1.3	283255	0.5	500	
Cr	52	74	He	ug/l	14.339	0.7	72653	0.3	1000	
Mn	55	74	He	ug/l	329.645	1.1	1205850	0.3	2500	
Fe	56	74	He	ug/l	27401.835	1.3	134578919	0.3	50000	
Co	59	74	He	ug/l	13.219	1.4	106082	0.4	500	
Ni	60	74	He	ug/l	17.994	0.7	35842	0.6	500	
Cu	65	74	He	ug/l	15.108	1.4	41938	0.6	1000	
Cu	65	74	No Gas	ug/l	16.315	4.4	101109	1.8	1000	
Zn	66	74	He	ug/l	50.414	1.6	53989	0.8	2500	
As	75	74	He	ug/l	2.953	0.7	2180	1.0	500	
Se	78	74	HEHe	ug/l	0.405	3.3	27	12.6	100	
Mo	95	103	He	ug/l	0.321	4.4	1309	3.7	100	
Ag	109	103	No Gas	ug/l	0.021	7.9	521	9.0	100	
Cd	111	103	He	ug/l	0.04	21.8	109	20.4	1000	
Cd	111	103	No Gas	ug/l	0.35	10.4	2013	6.4	1000	
Sb	123	103	No Gas	ug/l	0.117	2.1	2065	3.1	100	
Ba	138	159	He	ug/l	83.092	1.2	1562004	1.2	2500	
W	186	159	No Gas	ug/l	0.04	12.0	1228	9.5	40	
Hg	201	159	No Gas	ng/l	12.953	9.4	75	3.7	4000	
Tl	205	159	No Gas	ug/l	0.099	3.3	7609	2.3	100	
Pb	208	159	No Gas	ug/l	2.896	3.2	284213	0.7	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	621149	3.3	743093.21	83.59	70	120	
Sc	45	He	182194	0.9	187263.33	97.29	70	120	
Ge	74	No Gas	941277	3.2	1059075.15	88.88	70	120	
Ge	74	He	178970	1.0	195722.79	91.44	70	120	
Ge	74	HEHe	97182	10.9	118804.81	81.8	70	120	
Rh	103	No Gas	1089968	4.1	1231018.97	88.54	70	120	
Rh	103	He	609075	0.9	663778.05	91.76	70	120	
Tb	159	No Gas	2790248	3.1	2964739.4	94.11	70	120	
Tb	159	He	1678714	1.6	1715096.85	97.88	70	120	
Bi	209	No Gas	1716440	4.0	1828139.18	93.89	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-09**	**Sample Type**	Sample
File Name	064SMPL.d	**Vial #**	3305
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 22:09:44	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.314	6.2	853	5.3	100	
Na	23	45	He	ug/l	563.658	2.3	457590	1.1	50000	
Mg	24	45	He	ug/l	3391.352	0.7	1539760	0.6	50000	
Al	27	45	He	ug/l	12142.532	2.3	2841702	1.1	50000	
K	39	45	He	ug/l	716.314	1.7	330995	0.7	50000	
Ca	44	45	He	ug/l	4328.849	2.5	110837	1.6	50000	
Ti	47	45	He	ug/l	1406.912	2.1	205081	0.9	2500	
V	51	74	He	ug/l	60.908	1.0	255454	0.9	500	
Cr	52	74	He	ug/l	13.958	0.6	70301	0.5	1000	
Mn	55	74	He	ug/l	280.902	0.9	1021425	0.8	2500	
Fe	56	74	He	ug/l	23786.534	0.9	116128499	0.7	50000	
Co	59	74	He	ug/l	11.85	0.9	94532	1.0	500	
Ni	60	74	He	ug/l	17.578	0.2	34805	0.1	500	
Cu	65	74	He	ug/l	16.665	0.3	45951	0.3	1000	
Cu	65	74	No Gas	ug/l	17.968	2.0	109724	0.5	1000	
Zn	66	74	He	ug/l	47.233	1.5	50291	1.5	2500	
As	75	74	He	ug/l	2.938	0.6	2156	0.7	500	
Se	78	74	HEHe	ug/l	0.372	14.3	28	14.9	100	
Mo	95	103	He	ug/l	0.29	2.5	1182	2.1	100	
Ag	109	103	No Gas	ug/l	0.019	8.1	471	5.7	100	
Cd	111	103	He	ug/l	0.041	6.3	112	4.5	1000	
Cd	111	103	No Gas	ug/l	0.336	11.1	1910	12.7	1000	
Sb	123	103	No Gas	ug/l	0.092	4.4	1621	2.3	100	
Ba	138	159	He	ug/l	79.384	3.1	1491306	2.0	2500	
W	186	159	No Gas	ug/l	0.041	8.5	1241	6.4	40	
Hg	201	159	No Gas	ng/l	12.282	5.6	72	5.1	4000	
Tl	205	159	No Gas	ug/l	0.057	2.2	4536	2.5	100	
Pb	208	159	No Gas	ug/l	3.339	1.8	322406	0.3	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	610541	1.0	743093.21	82.16	70	120	
Sc	45	He	177855	1.2	187263.33	94.98	70	120	
Ge	74	No Gas	927473	1.5	1059075.15	87.57	70	120	
Ge	74	He	177891	0.1	195722.79	90.89	70	120	
Ge	74	HEHe	109085	1.1	118804.81	91.82	70	120	
Rh	103	No Gas	1071547	1.7	1231018.97	87.05	70	120	
Rh	103	He	607272	1.5	663778.05	91.49	70	120	
Tb	159	No Gas	2747527	1.5	2964739.4	92.67	70	120	
Tb	159	He	1677912	1.7	1715096.85	97.83	70	120	
Bi	209	No Gas	1688931	1.5	1828139.18	92.39	70	120	

Sample Report ICPMS6

Sample Name	**A9K0332-10**	**Sample Type**	Sample
File Name	065SMPL.d	**Vial #**	3306
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	10.0000
Acq Time	11/15/2019 22:14:22	**Sample QC Pass/Fail**	Pass
Comment	9110847 Soil AsCdCrCuMnPbVZn	**ISTD Ref FileName**	003CALB.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	0.255	11.3	700	11.6	100	
Na	23	45	He	ug/l	511.655	1.1	403972	0.9	50000	
Mg	24	45	He	ug/l	2747.298	0.7	1212329	0.5	50000	
Al	27	45	He	ug/l	8984.233	0.5	2043758	0.4	50000	
K	39	45	He	ug/l	693.485	1.5	311840	1.1	50000	
Ca	44	45	He	ug/l	3419.582	1.4	85112	1.0	50000	
Ti	47	45	He	ug/l	1187.512	1.0	168250	0.6	2500	
V	51	74	He	ug/l	48.066	0.8	198158	0.2	500	
Cr	52	74	He	ug/l	11.946	0.5	59122	1.2	1000	
Mn	55	74	He	ug/l	232.692	0.5	831043	0.5	2500	
Fe	56	74	He	ug/l	20248.993	0.5	97095742	0.6	50000	
Co	59	74	He	ug/l	8.919	0.7	69887	0.3	500	
Ni	60	74	He	ug/l	13.071	0.5	25439	0.8	500	
Cu	65	74	He	ug/l	15.563	1.9	42167	1.7	1000	
Cu	65	74	No Gas	ug/l	16.287	1.1	100626	1.0	1000	
Zn	66	74	He	ug/l	73.285	1.0	76561	0.5	2500	
As	75	74	He	ug/l	2.459	2.0	1776	1.4	500	
Se	78	74	HEHe	ug/l	0.236	17.4	18	16.3	100	
Mo	95	103	He	ug/l	0.426	3.3	1700	3.5	100	
Ag	109	103	No Gas	ug/l	0.022	13.3	559	10.3	100	
Cd	111	103	He	ug/l	0.111	2.2	281	2.5	1000	
Cd	111	103	No Gas	ug/l	0.344	2.2	1987	3.5	1000	
Sb	123	103	No Gas	ug/l	0.177	1.6	3076	3.4	100	
Ba	138	159	He	ug/l	67.831	1.4	1254247	0.2	2500	
W	186	159	No Gas	ug/l	0.095	10.1	2790	8.3	40	
Hg	201	159	No Gas	ng/l	21.143	6.5	107	4.1	4000	
Tl	205	159	No Gas	ug/l	0.044	3.0	3699	1.1	100	
Pb	208	159	No Gas	ug/l	6.795	2.5	655986	0.7	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	612899	1.6	743093.21	82.48	70	120	
Sc	45	He	172848	0.5	187263.33	92.3	70	120	
Ge	74	No Gas	937611	1.3	1059075.15	88.53	70	120	
Ge	74	He	174720	0.8	195722.79	89.27	70	120	
Ge	74	HEHe	107634	0.6	118804.81	90.6	70	120	
Rh	103	No Gas	1089712	2.4	1231018.97	88.52	70	120	
Rh	103	He	599316	0.4	663778.05	90.29	70	120	
Tb	159	No Gas	2760037	1.8	2964739.4	93.1	70	120	
Tb	159	He	1651242	1.4	1715096.85	96.28	70	120	
Bi	209	No Gas	1711580	2.6	1828139.18	93.62	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9K15037-CCV 4 JPB 11/16/19	**Sample Type**	CCV
File Name	070_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 22:37:31	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 11/15	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.605	ug/l	2.9	115700	40	104.01	90	110	
Na	23	45	He	3876.574	ug/l	2.9	3095072	4000	96.91	90	110	
Mg	24	45	He	4183.322	ug/l	2.1	1876645	4000	104.58	90	110	
Al	27	45	He	3958.934	ug/l	2.2	915647	4000	98.97	90	110	
K	39	45	He	4104.483	ug/l	1.3	1815886	4000	102.61	90	110	
Ca	44	45	He	3952.041	ug/l	2.0	99999	4000	98.8	90	110	
Ti	47	45	He	98.374	ug/l	2.6	14172	100	98.37	90	110	
V	51	74	He	94.392	ug/l	1.8	405063	100	94.39	90	110	
Cr	52	74	He	98.048	ug/l	2.0	504794	100	98.05	90	110	
Mn	55	74	He	101.661	ug/l	1.7	378698	100	101.66	90	110	
Fe	56	74	He	4042.856	ug/l	1.8	20224091	4000	101.07	90	110	
Co	59	74	He	98.890	ug/l	2.0	807837	100	98.89	90	110	
Ni	60	74	He	101.937	ug/l	1.6	206365	100	101.94	90	110	
Cu	65	74	He	100.991	ug/l	1.8	283665	100	100.99	90	110	
Cu	65	74	No Gas	105.226	ug/l	3.6	649230	100	105.23	90	110	
Zn	66	74	He	98.658	ug/l	1.1	107453	100	98.66	90	110	
As	75	74	He	96.258	ug/l	1.7	71503	100	96.26	90	110	
Se	78	74	HEHe	40.137	ug/l	0.9	2940	40	100.34	90	110	
Mo	95	103	He	39.515	ug/l	2.0	160238	40	98.79	90	110	
Ag	109	103	No Gas	41.026	ug/l	3.4	944764	40	102.57	90	110	
Cd	111	103	He	94.447	ug/l	1.5	240484	100	94.45	90	110	
Cd	111	103	No Gas	99.727	ug/l	3.3	567787	100	99.73	90	110	
Sb	123	103	No Gas	39.235	ug/l	2.7	646978	40	98.09	90	110	
Ba	138	159	He	107.077	ug/l	1.9	1990137	100	107.08	90	110	
Hg	201	159	No Gas	821.625	ng/l	4.9	3223	800	102.7	90	110	
Tl	205	159	No Gas	41.881	ug/l	4.9	2916935	40	104.7	90	110	
Pb	208	159	No Gas	102.317	ug/l	4.1	9729635	100	102.32	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	634207	3.0	743093.21	85.35	70	120	
Ge	74	No Gas	942426	3.0	1059075.15	88.99	70	120	
Rh	103	No Gas	1081606	3.2	1231018.97	87.86	70	120	
Tb	159	No Gas	2731974	3.8	2964739.4	92.15	70	120	
Bi	209	No Gas	1701725	3.6	1828139.18	93.09	70	120	
Sc	45	He	175758	1.4	187263.33	93.86	70	120	
Ge	74	He	182247	1.5	195722.79	93.11	70	120	
Rh	103	He	621285	1.6	663778.05	93.6	70	120	
Tb	159	He	1659942	1.4	1715096.85	96.78	70	120	
Ge	74	HEHe	107828	2.2	118804.81	90.76	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9K15037-CCB** 4 JB 11/16/19	**Sample Type**	CCB
File Name	071_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 22:42:03	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.004	ug/l	74.3	27	0.09	
Na	23	45	He	3.145	ug/l	3.5	5044	45	
Mg	24	45	He	0.363	ug/l	18.6	468	45	
Al	27	45	He	0.876	ug/l	19.8	308	22.5	
K	39	45	He	0.300	ug/l	179.0	12571	45	
Ca	44	45	He	0.386	ug/l	79.9	63	45	
Ti	47	45	He	0.116	ug/l	23.3	19	1.8	
V	51	74	He	0.004	ug/l	400.3	852	0.45	
Cr	52	74	He	0.004	ug/l	195.5	198	0.45	
Mn	55	74	He	0.032	ug/l	8.6	191	0.45	
Fe	56	74	He	2.066	ug/l	5.0	17390	22.5	
Co	59	74	He	0.006	ug/l	34.7	81	0.09	
Ni	60	74	He	0.007	ug/l	209.4	96	0.45	
Cu	65	74	He	0.001	ug/l	512.4	320	0.45	
Cu	65	74	No Gas	0.012	ug/l	46.1	791	0.45	
Zn	66	74	He	0.049	ug/l	26.0	198	1.8	
As	75	74	He	0.017	ug/l	34.6	40	0.45	
Se	78	74	HEHe	0.012	ug/l	36.7	1	0.45	
Mo	95	103	He	0.014	ug/l	32.3	94	0.45	
Ag	109	103	No Gas	0.003	ug/l	5.0	120	0.09	
Cd	111	103	He	0.004	ug/l	103.3	19	0.09	
Cd	111	103	No Gas	0.010	ug/l	37.4	71	0.09	
Sb	123	103	No Gas	0.114	ug/l	1.6	2084	0.45	
Ba	138	159	He	0.020	ug/l	11.9	662	0.45	
Hg	201	159	No Gas	0.905	ng/l	116.0	27	36	
Tl	205	159	No Gas	0.007	ug/l	11.9	1069	0.09	
Pb	208	159	No Gas	0.011	ug/l	7.9	3896	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	657588	0.8	743093.21	88.49	70	120	
Ge	74	No Gas	965338	0.3	1059075.15	91.15	70	120	
Rh	103	No Gas	1123878	1.1	1231018.97	91.3	70	120	
Tb	159	No Gas	2748562	1.6	2964739.4	92.71	70	120	
Bi	209	No Gas	1705898	1.4	1828139.18	93.31	70	120	
Sc	45	He	177138	0.4	187263.33	94.59	70	120	
Ge	74	He	185842	0.2	195722.79	94.95	70	120	
Rh	103	He	631467	0.3	663778.05	95.13	70	120	
Tb	159	He	1662443	0.5	1715096.85	96.93	70	120	
Ge	74	HEHe	113697	1.2	118804.81	95.7	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9K15037-CCV 5 JPB 11/15/2019	**Sample Type**	CCV
File Name	076_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:05:14	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 11/15	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.012	ug/l	1.6	116472	40	102.53	90	110	
Na	23	45	He	3965.456	ug/l	1.8	3091757	4000	99.14	90	110	
Mg	24	45	He	4227.519	ug/l	1.0	1851994	4000	105.69	90	110	
Al	27	45	He	4049.883	ug/l	1.4	914644	4000	101.25	90	110	
K	39	45	He	4214.101	ug/l	0.6	1820172	4000	105.35	90	110	
Ca	44	45	He	4066.970	ug/l	0.5	100492	4000	101.67	90	110	
Ti	47	45	He	101.731	ug/l	1.7	14311	100	101.73	90	110	
V	51	74	He	94.888	ug/l	1.2	403854	100	94.89	90	110	
Cr	52	74	He	98.868	ug/l	1.5	504845	100	98.87	90	110	
Mn	55	74	He	101.817	ug/l	1.3	376168	100	101.82	90	110	
Fe	56	74	He	4108.778	ug/l	0.6	20385799	4000	102.72	90	110	
Co	59	74	He	99.619	ug/l	1.2	807146	100	99.62	90	110	
Ni	60	74	He	103.177	ug/l	2.0	207150	100	103.18	90	110	
Cu	65	74	He	101.034	ug/l	1.5	281461	100	101.03	90	110	
Cu	65	74	No Gas	103.734	ug/l	1.2	644333	100	103.73	90	110	
Zn	66	74	He	100.082	ug/l	0.6	108105	100	100.08	90	110	
As	75	74	He	96.310	ug/l	1.1	70955	100	96.31	90	110	
Se	78	74	HEHe	40.620	ug/l	1.5	2985	40	101.55	90	110	
Mo	95	103	He	39.925	ug/l	0.9	159051	40	99.81	90	110	
Ag	109	103	No Gas	40.487	ug/l	2.3	939839	40	101.22	90	110	
Cd	111	103	He	95.818	ug/l	0.6	239674	100	95.82	90	110	
Cd	111	103	No Gas	98.602	ug/l	2.1	565919	100	98.6	90	110	
Sb	123	103	No Gas	38.806	ug/l	2.4	644949	40	97.02	90	110	
Ba	138	159	He	108.929	ug/l	0.8	2002093	100	108.93	90	110	
Hg	201	159	No Gas	798.367	ng/l	0.4	3153	800	99.8	90	110	
Tl	205	159	No Gas	41.228	ug/l	0.6	2890464	40	103.07	90	110	
Pb	208	159	No Gas	101.453	ug/l	0.6	9709179	100	101.45	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	647353	0.7	743093.21	87.12	70	120	
Ge	74	No Gas	948153	1.1	1059075.15	89.53	70	120	
Rh	103	No Gas	1089850	1.9	1231018.97	88.53	70	120	
Tb	159	No Gas	2746662	0.6	2964739.4	92.64	70	120	
Bi	209	No Gas	1713886	1.0	1828139.18	93.75	70	120	
Sc	45	He	171604	0.9	187263.33	91.64	70	120	
Ge	74	He	180735	0.9	195722.79	92.34	70	120	
Rh	103	He	610254	0.7	663778.05	91.94	70	120	
Tb	159	He	1641290	0.4	1715096.85	95.7	70	120	
Ge	74	HEHe	108195	0.7	118804.81	91.07	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9K15037-CCB** 5 JPS 11/16/19a	**Sample Type**	CCB
File Name	077_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:09:47	**Sample QC Pass/Fail**	Pass
Comment	ICB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.003	ug/l	52.1	24	0.09	
Na	23	45	He	1.961	ug/l	4.2	4117	45	
Mg	24	45	He	0.393	ug/l	24.2	485	45	
Al	27	45	He	0.636	ug/l	44.0	253	22.5	
K	39	45	He	0.568	ug/l	24.6	12770	45	
Ca	44	45	He	0.111	ug/l	124.9	57	45	
Ti	47	45	He	0.130	ug/l	36.3	21	1.8	
V	51	74	He	0.009	ug/l	148.1	880	0.45	
Cr	52	74	He	0.005	ug/l	73.1	206	0.45	
Mn	55	74	He	0.020	ug/l	42.8	149	0.45	
Fe	56	74	He	1.314	ug/l	5.8	13656	22.5	
Co	59	74	He	0.006	ug/l	15.5	77	0.09	
Ni	60	74	He	0.011	ug/l	153.0	104	0.45	
Cu	65	74	He	0.000	ug/l	14135.7	320	0.45	
Cu	65	74	No Gas	0.008	ug/l	185.3	761	0.45	
Zn	66	74	He	0.004	ug/l	387.6	149	1.8	
As	75	74	He	0.016	ug/l	16.3	40	0.45	
Se	78	74	HEHe	0.015	ug/l	20.2	2	0.45	
Mo	95	103	He	0.020	ug/l	32.4	118	0.45	
Ag	109	103	No Gas	0.003	ug/l	17.9	118	0.09	
Cd	111	103	He	0.004	ug/l	56.8	20	0.09	
Cd	111	103	No Gas	0.004	ug/l	39.5	37	0.09	
Sb	123	103	No Gas	0.138	ug/l	1.8	2489	0.45	
Ba	138	159	He	0.017	ug/l	11.7	607	0.45	
Hg	201	159	No Gas	0.029	ng/l	132.6	24	36	
Tl	205	159	No Gas	0.011	ug/l	14.4	1340	0.09	
Pb	208	159	No Gas	0.011	ug/l	12.0	3943	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	655021	0.1	743093.21	88.15	70	120	
Ge	74	No Gas	965721	0.4	1059075.15	91.19	70	120	
Rh	103	No Gas	1118546	0.8	1231018.97	90.86	70	120	
Tb	159	No Gas	2756634	0.6	2964739.4	92.98	70	120	
Bi	209	No Gas	1695387	1.1	1828139.18	92.74	70	120	
Sc	45	He	178266	2.1	187263.33	95.2	70	120	
Ge	74	He	187292	1.4	195722.79	95.69	70	120	
Rh	103	He	636181	2.0	663778.05	95.84	70	120	
Tb	159	He	1680419	2.5	1715096.85	97.98	70	120	
Ge	74	HEHe	112021	2.4	118804.81	94.29	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL8**	**Sample Type**	CRL1
File Name	078CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:14:26	**Sample QC Pass/Fail**	Fail
Comment	A19K144 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.177	ug/l	4.8	534	98.33	70	130	
Na	23	45	He	10.685	ug/l	3.7	11284	118.72	70	130	
Mg	24	45	He	9.162	ug/l	4.2	4517	101.8	70	130	
Al	27	45	He	9.860	ug/l	3.7	2441	109.56	70	130	
K	39	45	He	9.054	ug/l	6.4	16709	100.6	70	130	
Ca	44	45	He	8.585	ug/l	15.1	277	95.39	70	130	
Ti	47	45	He	0.166	ug/l	40.7	27	92.22	70	130	
V	51	74	He	0.199	ug/l	7.4	1709	110.56	70	130	
Cr	52	74	He	0.183	ug/l	2.8	1138	101.67	70	130	
Mn	55	74	He	0.199	ug/l	4.2	830	110.56	70	130	
Fe	56	74	He	10.053	ug/l	1.6	58304	111.7	70	130	
Co	59	74	He	0.178	ug/l	9.5	1516	98.89	70	130	
Ni	60	74	He	0.174	ug/l	9.1	441	96.67	70	130	
Cu	65	74	He	0.173	ug/l	15.3	816	96.11	70	130	
Cu	65	74	No Gas	0.165	ug/l	8.8	1770	91.67	70	130	
Zn	66	74	He	0.123	ug/l	7.6	281	68.33	70	130	CRL1 Failed
As	75	74	He	0.193	ug/l	3.6	174	107.22	70	130	
Se	78	74	HEHe	0.219	ug/l	14.1	17	121.67	70	130	
Mo	95	103	He	0.185	ug/l	1.3	802	102.78	70	130	
Ag	109	103	No Gas	0.176	ug/l	5.1	4261	97.78	70	130	
Cd	111	103	He	0.181	ug/l	4.4	481	100.56	70	130	
Cd	111	103	No Gas	0.184	ug/l	1.5	1103	102.22	70	130	
Sb	123	103	No Gas	0.207	ug/l	3.3	3688	115	70	130	
Ba	138	159	He	0.190	ug/l	1.6	3848	105.56	70	130	
Hg	201	159	No Gas	6.357	ng/l	25.9	49	88.29	70	130	
Tl	205	159	No Gas	0.172	ug/l	4.6	12716	95.56	70	130	
Pb	208	159	No Gas	0.172	ug/l	2.2	19484	95.56	70	130	

< MRL

JB3 11/16/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	669702	0.4	743093.21	90.12	70	120	
Ge	74	No Gas	973219	0.6	1059075.15	91.89	70	120	
Rh	103	No Gas	1127043	1.2	1231018.97	91.55	70	120	
Tb	159	No Gas	2764275	2.5	2964739.4	93.24	70	120	
Bi	209	No Gas	1689673	0.4	1828139.18	92.43	70	120	
Sc	45	He	179948	0.5	187263.33	96.09	70	120	
Ge	74	He	186434	0.8	195722.79	95.25	70	120	
Rh	103	He	636330	0.1	663778.05	95.86	70	120	
Tb	159	He	1676516	0.7	1715096.85	97.75	70	120	
Ge	74	HEHe	111415	1.7	118804.81	93.78	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRL9**	**Sample Type**	CRL2
File Name	079_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:19:05	**Sample QC Pass/Fail**	Pass
Comment	A19K145 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.929	ug/l	8.4	2781	103.22	70	130	
Na	23	45	He	45.203	ug/l	1.0	39459	100.45	70	130	
Mg	24	45	He	45.850	ug/l	1.7	21354	101.89	70	130	
Al	27	45	He	45.890	ug/l	4.4	10964	101.98	70	130	
K	39	45	He	45.886	ug/l	2.7	33258	101.97	70	130	
Ca	44	45	He	46.375	ug/l	3.0	1254	103.06	70	130	
Ti	47	45	He	1.101	ug/l	20.3	164	122.33	70	130	
V	51	74	He	0.889	ug/l	3.2	4771	98.78	70	130	
Cr	52	74	He	0.866	ug/l	3.0	4773	96.22	70	130	
Mn	55	74	He	0.888	ug/l	3.3	3482	98.67	70	130	
Fe	56	74	He	44.729	ug/l	0.1	237648	99.4	70	130	
Co	59	74	He	0.877	ug/l	3.0	7420	97.44	70	130	
Ni	60	74	He	0.891	ug/l	4.9	1942	99	70	130	
Cu	65	74	He	0.893	ug/l	3.1	2906	99.22	70	130	
Cu	65	74	No Gas	0.879	ug/l	2.1	6365	97.67	70	130	
Zn	66	74	He	0.813	ug/l	7.3	1057	90.33	70	130	
As	75	74	He	0.888	ug/l	1.3	707	98.67	70	130	
Se	78	74	HEHe	0.936	ug/l	6.0	72	104	70	130	
Mo	95	103	He	0.859	ug/l	2.1	3617	95.44	70	130	
Ag	109	103	No Gas	0.874	ug/l	2.6	21281	97.11	70	130	
Cd	111	103	He	0.873	ug/l	2.9	2297	97	70	130	
Cd	111	103	No Gas	0.880	ug/l	1.3	5299	97.78	70	130	
Sb	123	103	No Gas	0.878	ug/l	1.5	15403	97.56	70	130	
Ba	138	159	He	0.913	ug/l	1.6	17562	101.44	70	130	
Hg	201	159	No Gas	34.187	ng/l	1.1	159	94.96	70	130	
Tl	205	159	No Gas	0.840	ug/l	1.6	60082	93.33	70	130	
Pb	208	159	No Gas	0.850	ug/l	1.2	85125	94.44	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	679241	0.7	743093.21	91.41	70	120	
Ge	74	No Gas	980398	0.4	1059075.15	92.57	70	120	
Rh	103	No Gas	1140389	0.4	1231018.97	92.64	70	120	
Tb	159	No Gas	2775585	0.7	2964739.4	93.62	70	120	
Bi	209	No Gas	1719939	0.6	1828139.18	94.08	70	120	
Sc	45	He	179832	0.8	187263.33	96.03	70	120	
Ge	74	He	187958	0.2	195722.79	96.03	70	120	
Rh	103	He	639024	0.5	663778.05	96.27	70	120	
Tb	159	He	1689909	0.2	1715096.85	98.53	70	120	
Ge	74	HEHe	112155	1.3	118804.81	94.4	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRLA**	**Sample Type**	CRL3
File Name	080CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:23:45	**Sample QC Pass/Fail**	Pass
Comment	A19K146 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.751	ug/l	3.7	5223	97.28	70	130	
Na	23	45	He	87.863	ug/l	0.8	75046	97.63	70	130	
Mg	24	45	He	90.048	ug/l	3.0	42053	100.05	70	130	
Al	27	45	He	88.259	ug/l	1.4	21206	98.07	70	130	
K	39	45	He	90.051	ug/l	4.5	53642	100.06	70	130	
Ca	44	45	He	86.343	ug/l	8.3	2311	95.94	70	130	
Ti	47	45	He	1.886	ug/l	10.7	283	104.78	70	130	
V	51	74	He	1.617	ug/l	1.8	8034	89.83	70	130	
Cr	52	74	He	1.669	ug/l	2.9	9091	92.72	70	130	
Mn	55	74	He	1.722	ug/l	2.3	6724	95.67	70	130	
Fe	56	74	He	87.074	ug/l	1.2	458662	96.75	70	130	
Co	59	74	He	1.687	ug/l	0.6	14330	93.72	70	130	
Ni	60	74	He	1.779	ug/l	2.4	3818	98.83	70	130	
Cu	65	74	He	1.715	ug/l	3.6	5314	95.28	70	130	
Cu	65	74	No Gas	1.844	ug/l	5.8	12472	102.44	70	130	
Zn	66	74	He	1.667	ug/l	4.0	2027	92.61	70	130	
As	75	74	He	1.745	ug/l	3.1	1372	96.94	70	130	
Se	78	74	HEHe	1.684	ug/l	5.7	126	93.56	70	130	
Mo	95	103	He	1.711	ug/l	2.0	7210	95.06	70	130	
Ag	109	103	No Gas	1.741	ug/l	2.6	41581	96.72	70	130	
Cd	111	103	He	1.638	ug/l	4.9	4320	91	70	130	
Cd	111	103	No Gas	1.770	ug/l	2.2	10455	98.33	70	130	
Sb	123	103	No Gas	1.764	ug/l	5.0	30250	98	70	130	
Ba	138	159	He	1.817	ug/l	3.7	35068	100.94	70	130	
Hg	201	159	No Gas	68.872	ng/l	5.2	295	95.66	70	130	
Tl	205	159	No Gas	1.669	ug/l	4.0	118156	92.72	70	130	
Pb	208	159	No Gas	1.693	ug/l	3.5	165726	94.06	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	678343	2.9	743093.21	91.29	70	120	
Ge	74	No Gas	975034	2.9	1059075.15	92.06	70	120	
Rh	103	No Gas	1120664	3.6	1231018.97	91.04	70	120	
Tb	159	No Gas	2763232	3.1	2964739.4	93.2	70	120	
Bi	209	No Gas	1697603	3.9	1828139.18	92.86	70	120	
Sc	45	He	181679	1.9	187263.33	97.02	70	120	
Ge	74	He	189042	1.1	195722.79	96.59	70	120	
Rh	103	He	642331	2.1	663778.05	96.77	70	120	
Tb	159	He	1710666	2.4	1715096.85	99.74	70	120	
Ge	74	HEHe	110196	1.3	118804.81	92.75	70	120	

CRL Verification ICPMS6

Sample Name	**9K15037-CRLB**	**Sample Type**	CRL4
File Name	081CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9K15037A.b	**Total Dilution**	1.0000
Acq Time	11/15/2019 23:28:24	**Sample QC Pass/Fail**	Pass
Comment	A19K147 - JPB 11/15	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.689	ug/l	4.1	10764	102.47	70	130	
Na	23	45	He	181.705	ug/l	0.8	147687	100.95	70	130	
Mg	24	45	He	184.004	ug/l	1.9	82953	102.22	70	130	
Al	27	45	He	186.330	ug/l	0.7	43259	103.52	70	130	
K	39	45	He	186.204	ug/l	1.4	94295	103.45	70	130	
Ca	44	45	He	180.480	ug/l	4.2	4624	100.27	70	130	
Ti	47	45	He	3.707	ug/l	7.9	537	102.97	70	130	
V	51	74	He	3.468	ug/l	1.7	15756	96.33	70	130	
Cr	52	74	He	3.557	ug/l	1.3	18575	98.81	70	130	
Mn	55	74	He	3.614	ug/l	0.7	13599	100.39	70	130	
Fe	56	74	He	181.369	ug/l	0.9	918488	100.76	70	130	
Co	59	74	He	3.495	ug/l	2.3	28724	97.08	70	130	
Ni	60	74	He	3.536	ug/l	2.1	7273	98.22	70	130	
Cu	65	74	He	3.662	ug/l	1.4	10642	101.72	70	130	
Cu	65	74	No Gas	3.875	ug/l	2.7	24705	107.64	70	130	
Zn	66	74	He	3.653	ug/l	4.2	4135	101.47	70	130	
As	75	74	He	3.608	ug/l	2.0	2720	100.22	70	130	
Se	78	74	HEHe	3.665	ug/l	5.0	276	101.81	70	130	
Mo	95	103	He	3.579	ug/l	0.5	14561	99.42	70	130	
Ag	109	103	No Gas	3.627	ug/l	3.7	84302	100.75	70	130	
Cd	111	103	He	3.477	ug/l	2.1	8871	96.58	70	130	
Cd	111	103	No Gas	3.546	ug/l	4.9	20371	98.5	70	130	
Sb	123	103	No Gas	3.565	ug/l	3.6	59414	99.03	70	130	
Ba	138	159	He	3.737	ug/l	0.6	69329	103.81	70	130	
Hg	201	159	No Gas	149.874	ng/l	4.8	589	104.08	70	130	
Tl	205	159	No Gas	3.530	ug/l	3.2	239254	98.06	70	130	
Pb	208	159	No Gas	3.549	ug/l	3.7	330298	98.58	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	664767	3.0	743093.21	89.46	70	120	
Ge	74	No Gas	947073	2.8	1059075.15	89.42	70	120	
Rh	103	No Gas	1091505	3.8	1231018.97	88.67	70	120	
Tb	159	No Gas	2651822	3.5	2964739.4	89.45	70	120	
Bi	209	No Gas	1665349	3.4	1828139.18	91.1	70	120	
Sc	45	He	175998	0.7	187263.33	93.98	70	120	
Ge	74	He	183182	0.6	195722.79	93.59	70	120	
Rh	103	He	621797	1.0	663778.05	93.68	70	120	
Tb	159	He	1650110	0.7	1715096.85	96.21	70	120	
Ge	74	HEHe	110919	1.4	118804.81	93.36	70	120	

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

Metals IFA/IFB Metals Internal Standards Recovery Summary

A19K233 IFA
A19K234 IFB
A9K0332 (I.S Tables)

APEX LABORATORIES

Analytical Standard Record

Apex Laboratories

A19K233

Description:	ICSA working std	Expires:	12/03/19
Standard Type:	Calibration Standa	Prepared:	11/18/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	John P. Beck
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	11/19/19 16:12 by jsj

Analyte	CAS Number	Concentration	Units
Aluminum	7429-90-5	100	ug/mL
Calcium	7440-70-2	300	ug/mL
Carbon	7440-44-0	200	ug/mL
Chlorine	7782-50-5	2000	ug/mL
Iron	7439-89-6	250	ug/mL
Magnesium	7439-95-4	100	ug/mL
Molybdenum	7439-98-7	2	ug/mL
Phosphorus	7723-14-0	100	ug/mL
Potassium	7440-09-7	100	ug/mL
Sodium	7440-23-5	250	ug/mL
Sulfur	7704-34-9	100	ug/mL
Titanium	7440-32-6	2	ug/mL
Tungsten	7440-33-7	0.1	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
A18L138	6020A ICS Interferents A	12/11/18	John P. Beck	12/03/19	07/23/19 16:48 by arf	5
A19H398	Conc. HCl - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:38 by jsj	0.2
A19J277	Conc. HNO3 - Omnitrace	10/18/19	Kevin Taucher	04/15/20	10/28/19 13:30 by jsj	1.75
A19J281	1 W 10 ppm	10/18/19	Emily S. Stefansson	04/15/20	10/28/19 12:35 by jsj	0.5

Reviewed By Date

APEX LABORATORIES

Analytical Standard Record

Apex Laboratories

A19K234

Description:	ICSA+B working std	Expires:	12/03/19
Standard Type:	Calibration Standa	Prepared:	11/18/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	John P. Beck
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	11/19/19 16:12 by jsj

Analyte	CAS Number	Concentration	Units
Aluminum	7429-90-5	100	ug/mL
Arsenic	7440-38-2	0.1	ug/mL
Cadmium	7440-43-9	0.1	ug/mL
Calcium	7440-70-2	300	ug/mL
Carbon	7440-44-0	200	ug/mL
Chlorine	7782-50-5	2000	ug/mL
Chromium	7440-47-3	0.2	ug/mL
Cobalt	7440-48-4	0.2	ug/mL
Copper	7440-50-8	0.2	ug/mL
Iron	7439-89-6	250	ug/mL
Magnesium	7439-95-4	100	ug/mL
Manganese	7439-96-5	0.2	ug/mL
Mercury	7439-97-6	0.002	ug/mL
Molybdenum	7439-98-7	2	ug/mL
Nickel	7440-02-0	0.2	ug/mL
Phosphorus	7723-14-0	100	ug/mL
Potassium	7440-09-7	100	ug/mL
Selenium	7782-49-2	0.1	ug/mL
Silver	7440-22-4	0.05	ug/mL
Sodium	7440-23-5	250	ug/mL
Sulfur	7704-34-9	100	ug/mL
Titanium	7440-32-6	2	ug/mL
Tungsten	7440-33-7	0.1	ug/mL
Vanadium	7440-62-2	0.2	ug/mL
Zinc	7440-66-6	0.1	ug/mL

Reviewed By Date

Analytical Standard Record

Apex Laboratories

A19K234

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
A18L138	6020A ICS Interferents A	12/11/18	John P. Beck	12/03/19	07/23/19 16:48 by arf	5
A18L139	6020A & CLP-M ICS Analytes B	12/11/18	John P. Beck	12/03/19	12/18/18 13:34 by jsj	0.5
A19H398	Conc. HCl - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:38 by jsj	0.2
A19J028	Hg Stock 1.00ppm Std Primary	10/02/19	Emily S. Stefansson	03/30/20	10/23/19 17:40 by jsj	0.1
A19J277	Conc. HNO3 - Omnitrace	10/18/19	Kevin Taucher	04/15/20	10/28/19 13:30 by jsj	1.75
A19J281	1 W 10 ppm	10/18/19	Emily S. Stefansson	04/15/20	10/28/19 12:35 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
11/15/2019 16:46	rinse										
11/15/2019 16:50	rinse										
11/15/2019 16:55	9K15037-CAL0	100	100	100	100	100	100	100	100	100	100
11/15/2019 17:00	9K15037-CAL1	100.2285851	99.81836095	99.58623962	100.3076034	99.40813001	99.74198042	99.43490449	99.93201583	99.2609807	100.8287197
11/15/2019 17:05	9K15037-CAL2	100.6185926	100.1214991	100.219985	99.27658569	99.39737848	100.1917203	99.81897413	100.8228894	99.47332401	101.1126069
11/15/2019 17:10	9K15037-CAL3	100.9912094	99.77083429	99.5653903	99.9816969	99.11790045	99.08305989	99.70455285	99.4035568	99.88437543	100.8671005
11/15/2019 17:15	9K15037-CAL4	100.4096714	99.89100909	99.03459731	100.0034488	100.2558258	98.461376	100.083772	98.84169493	99.88749712	100.58426
11/15/2019 17:20	9K15037-CAL5	99.63163796	97.53405356	98.689827	96.96402924	99.11006407	97.98470531	96.74258739	98.10490775	97.26834046	100.2940967
11/15/2019 17:26	9K15037-CAL6	100.1372152	98.76127196	98.43727237	98.95083926	97.81719269	97.56864728	98.57124632	99.43008392	98.89555955	101.0499921
11/15/2019 17:31	9K15037-CAL7	98.4969315	96.64991355	96.513046	97.01678754	95.87392957	95.5699291	95.91597876	99.27955309	97.46369794	100.3993363
11/15/2019 17:36	9K15037-CAL8	94.46124713	91.04259389	91.78110543	91.48332871	91.74638894	90.61546011	90.27296303	95.83046546	95.04890487	98.04375854
11/15/2019 17:40	9K15037-CAL9	93.45905433	94.61104664	89.95032883	91.80975467	91.82534197	87.51506733	90.27677253	94.85751373	98.3279471	94.47218255
11/15/2019 17:53	9K15037-ICV1	93.96559195	93.6204754	92.68256522	93.11659959	93.8418569	92.26212143	92.357464	96.04163388	95.42979823	96.74490867
11/15/2019 17:58	9K15037-ICB1	93.04988135	92.55511464	92.49610537	93.48169419	93.21017932	93.24904407	93.48872165	95.03256306	94.19824717	97.33654743
11/15/2019 18:05	9K15037-CRL1	92.14224421	94.95781146	91.48132878	94.78889164	94.48497342	91.46472728	94.38336206	93.25258998	96.02188413	94.7692914
11/15/2019 18:09	9K15037-CRL2	92.79035491	93.8736305	92.18601689	95.00333099	93.6315203	92.06615667	93.90800387	93.2695275	95.08153879	95.28736902
11/15/2019 18:14	9K15037-CRL3	94.01182617	95.55461812	93.60642884	95.23198261	94.16917812	93.68382576	95.19212587	95.36098451	95.9827464	96.73285306
11/15/2019 18:30	9K15037-IFA1	83.26850282	87.17548149	83.86876292	84.23762847	90.61960232	80.12323217	82.8084976	91.46823675	96.83018076	90.46442478
11/15/2019 18:38	9K15037-IFB1	80.49278914	88.89679556	87.05420542	86.81056509	96.18835287	81.8180322	85.65051182	94.42048588	98.73563583	93.4927686
11/15/2019 18:45	A9K0295-01RE1	76.7818137	93.41951596	94.87330306	95.24577422	105.636649	95.0345393	96.76950854	104.1604122	102.234275	112.2663498
11/15/2019 18:49	9110739-BLK2	79.13126726	92.9691626	96.10838161	94.56153267	105.0436371	97.33670365	97.76673695	105.4993298	101.9352518	108.8827994
11/15/2019 18:54	A9K0295-01RE1	80.31393764	95.49637749	96.37046153	96.54304437	106.7754161	95.60262586	98.55401064	104.086154	103.022179	109.0343532
11/15/2019 18:59	A9K0264-06RE2	83.60947261	98.53933849	99.31931491	100.6651925	110.5002822	98.08951821	100.8238657	105.3433506	105.4106476	108.3912947
11/15/2019 19:04	9110784-BLK1	85.09850653	101.0050322	104.515011	102.277776	111.5948844	104.9514593	105.1930912	109.1887255	106.1936267	112.6126363
11/15/2019 19:08	A9K0302-02	86.6655208	100.1184357	103.5059243	101.8925049	109.5572003	103.6364706	103.8946552	107.7544675	105.3014477	109.6367256
11/15/2019 19:13	A9K0302-03	86.90442174	98.55551535	102.6961688	100.3614875	107.3393327	102.9077063	102.5443239	108.1124973	103.7082755	109.6887601
11/15/2019 19:18	9110784-BS1	83.51688889	95.02122128	98.44935178	96.81376059	104.2303984	98.6143861	99.04913046	105.120809	102.2065294	106.4933317
11/15/2019 19:22	A9K0264-02RE1	82.46460099	94.66264955	96.05755959	96.39042035	103.5771084	96.61056537	98.88017137	103.9377524	101.6896589	108.528611
11/15/2019 19:27	A9K0264-03RE1	81.77417527	92.33451974	94.67937064	93.03118797	100.8216054	95.70767894	96.22935409	103.0407207	99.97927697	106.4452027
11/15/2019 19:32	9K15037-CCV1	83.73595024	94.9855033	95.2334887	96.38114873	101.1530706	94.62225131	97.37390886	100.9020069	101.6155844	103.4302968
11/15/2019 19:36	9K15037-CCB1	83.90174954	91.842747	94.24681399	94.60880531	99.7385291	94.37535693	96.07855218	99.30608359	99.05788644	102.1868944
11/15/2019 19:41	9K15037-CRL4	84.80620852	91.12946265	94.16116946	92.8246731	96.9864547	94.82551274	94.8544397	100.1332396	98.25767138	101.5764347
11/15/2019 19:45	9K15037-CRL5	83.87917588	90.57812316	92.06694004	92.24851468	96.12781099	91.99827957	93.66555938	96.80886331	97.43660715	98.92131517
11/15/2019 19:50	9K15037-CRL6	84.06183578	90.2872173	91.6744372	92.05277525	93.74214994	91.49207914	93.4169803	97.14119415	96.3281473	98.85728576
11/15/2019 19:55	9K15037-CRL7	84.71387959	92.1205056	91.42651869	93.4038545	95.61153839	92.55056296	94.81084882	97.05509181	97.20789159	99.47857179
11/15/2019 19:59	A9K0342-01	81.66008909	91.59619045	89.49532083	92.04681615	95.68139527	88.35403409	92.04512115	94.87575243	97.79516008	98.92039256
11/15/2019 20:04	A9K0343-01	86.06132158	99.13283074	94.68988894	98.64498491	102.4468623	93.13845723	97.66798205	99.60300288	101.9806106	99.50483493
11/15/2019 20:09	9110784-DUP1	92.26296572	104.4271224	100.9689492	103.5701174	105.749094	98.60576587	101.2835264	103.6428487	105.7552435	103.2636414
11/15/2019 20:13	9110784-MS1	92.32278011	105.0122325	101.3733838	104.7440686	106.2368605	98.11406914	102.5683063	103.3511412	106.5678728	102.6613222
11/15/2019 20:18	A9K0348-01	90.87168535	102.3764575	98.67952273	100.6934621	104.9717265	93.88908688	97.94585455	102.6179038	107.6519315	106.942397
11/15/2019 20:23	A9K0368-01	95.25078559	105.4382867	104.4629084	105.7096264	109.7288937	102.8155418	105.1152485	105.8052483	107.0585744	108.6817631
11/15/2019 20:27	A9K0369-01	91.29864076	103.0945248	101.769018	102.8729477	107.5515267	99.49106363	102.8674123	104.9272846	105.6664023	106.9313255
11/15/2019 20:32	9110769-BLK1	88.08373991	99.67022374	98.89848043	99.48546786	104.7306083	99.24539641	101.4579708	102.0459792	103.2921834	105.0530139
11/15/2019 20:37	9110769-BS1	83.94086127	94.78147332	94.17688694	95.37205316	99.70112601	94.14736586	96.80630949	101.11223	101.3505494	102.4686902
11/15/2019 20:41	A9K0327-01	85.06922084	93.8798766	94.67060073	95.517296	99.63737719	94.59484881	96.48416768	100.4180771	100.3859345	103.9760198
11/15/2019 20:46	9K15037-CCV2	83.86245388	93.44014644	93.44893703	94.22909139	96.92743633	92.90771072	94.37896902	99.2713807	98.35231909	101.1759282
11/15/2019 20:50	9K15037-CCB2	86.03080993	95.53612366	95.68680372	97.06169459	99.17220521	95.58366108	97.34302002	99.51417529	99.42399366	100.0832506
11/15/2019 20:55	A9K0332-01	85.13820859	95.33710445	93.93027335	95.69342606	99.14856139	94.56629523	97.21655907	99.11042637	101.2420752	101.5697599
11/15/2019 21:00	A9K0332-02	84.83930486	94.10234764	93.07442882	94.48638727	96.94700905	94.25561142	96.7736068	98.87592481	99.68571882	101.4666434
11/15/2019 21:04	A9K0336-02	93.19245656	102.2013493	97.14346144	100.9258111	102.8917292	89.98731002	96.15730792	97.67083935	105.8772119	95.60877617
11/15/2019 21:09	9110769-DUP1	96.01170852	107.6778407	99.65768089	105.3796392	105.2130944	94.58959679	101.2599437	99.86000737	107.7816274	97.76220849
11/15/2019 21:14	9110769-MS1	93.7263963	102.4807651	98.34162382	101.7741845	103.8457703	93.23425267	97.56686492	99.32231031	104.8000003	96.93564342
11/15/2019 21:18	9110847-BLK1	87.12693622	94.76061677	93.32135024	95.71551342	97.37799049	93.28813161	95.43654291	97.19626723	98.0398189	97.49191525
11/15/2019 21:23	9110847-BS1	81.34972515	90.73094006	87.69683593	90.45222923	92.90911406	87.96938283	91.2746829	93.79419767	96.02683293	94.43558431
11/15/2019 21:28	A9K0332-04	81.81846222	105.947073	87.30049547	91.18340281	90.87883986	86.39673986	90.5925794	93.27994989	98.43885454	92.74185678
11/15/2019 21:32	A9K0332-05	82.98608738	107.0894874	88.15729869	90.26035241	80.09901788	87.20887573	89.78032296	94.54188261	97.27443205	94.75166947
11/15/2019 21:37	A9K0332-06	82.51117702	103.4260472	88.65705485	89.46769221	91.42549002	87.6138592	89.604124	95.69094718	96.87790362	94.78060983
11/15/2019 21:41	9K15037-CCV3	83.65107618	89.03458549	88.4044924	90.84182617	92.98409419	87.73041657	89.83190094	91.7351904	92.80668241	94.06481841
11/15/2019 21:46	9K15037-CCB3	85.43535525	93.27055993	90.28454433	93.64080357	94.80910453	90.36095306	94.21160033	91.82129386	96.56150983	93.80956305
11/15/2019 21:51	A9K0332-07	85.04376508	98.84374228	89.88727067	90.99995117	93.01034734	89.55534159	89.81996623	97.18951554	97.8646786	95.78013438
11/15/2019 21:55	9110847-DUP1	81.95130648	102.1380143	86.46864137	91.7981396	91.11573544	85.57550285	91.92536324	92.97521518	98.30345577	91.68632792
11/15/2019 22:00	9110847-MS1	84.17578559	97.29353841	89.5877905	90.95054286	92.3444203	89.10348314	91.36862394	94.41290613	97.4672509	94.75397801
11/15/2019 22:05	A9K0332-08	83.58958412	97.29300441	88.87724036	91.44056755	81.79967578	88.54194996	91.7588834	94.11444673	97.87868617	93.89001371
11/15/2019 22:09	A9K0332-09	82.16207815	94.97583243	87.57385662	90.88925039	91.81891126	87.04550051	91.48719972	92.67346724	97.83191388	92.38523659
11/15/2019 22:14	A9K0332-10	82.47941025	92.30193639	88.53114028	89.26899962	90.59740624	88.52110787	90.28861233	93.09542575	96.27688878	93.62417964
11/15/2019 22:19	A9K0421-02	76.21048609	95.43009471	81.53319085	91.22434337	88.56687112	81.14221483	91.87723772	87.02446933	98.5791953	87.1457637
11/15/2019 22:23	A9K0421-03	81.93646536	90.99541078	87.75385045	87.60162779	90.54062964	87.39078492	87.5914161	93.04497151	93.57555814	93.75891227
11/15/2019 22:28	A9K0421-04	81.63695067	94.01726425	86.85741486	91.16744316	90.60299524	86.82770478	92.07590152	92.17766661	97.50469427	92.87542028
11/15/2019 22:32	A9K0421-05	82.06180764	92.28973254	87.18149227	89.85555029	93.00753881	86.91429836	90.23818785	93.37019751	96.0685054	92.84878627
11/15/2019 22:37	9K15037-CCV4	85.34693566	93.85619516	88.98575265	93.11486755	90.76058988	87.86263197	93.59829894	92.14888848	96.78418413	93.08509833
11/15/2019 22:42	9K15037-CCB4	88.49339108	94.59279605	91.14916161	94.95144297	95.70077159	91.29660097	95.13226951	92.70837767	96.92998795	93.31338201
11/15/2019 22:46	A9K0421-06	82.07473424	95.28838695	85.57454807	90.0414118	76.5016017	85.54683636	91.24350581	91.57932959	98.14102646	92.38649725
11/15/2019 22:51	A9K0421-07	81.81252039	92.76643204	85.62377624	89.6241601	92.60920195	85.08295209	89.66684878	91.046484	95.69653185	91.6385996
11/15/2019 22:55	A9K0421-08	82.52150457	92.25173436	86.18508422	89.0076504	89.48915423	86.14535706	88.98235392	92.27964061	95.65022135	92.55564211
11/15/2019 23:00	9110847-MSD1	84.9589	91.88309482	87.62692808	91.40648533	94.64388955	87.18682056	90.67682593	90.61999794	94.41659228	92.71273263
11/15/2019 23:05	9K15037-CCV5	87.11597976	91.63797119	89.526476	92.34239235	91.0698731	88.53235763	91.93651557	92.64430391	95.69664244	93.75030097
11/15/2019 23:09	9K15037-CCB5	88.14787408	95.19549281	91.1852903	95.69265286	94.28958009	90.86344951	95.84239895	92.98066355	97.97809144	92.73841174
11/15/2019 23:14	9K15037-CRL8	90.12354278	96.09329985	91.8933348	95.25390818	93.78026849	91.55367066	95.86488287	93.23837726	97.7505177	92.42586242
11/15/2019 23:19	9K15037-CRL9	91.40728034	96.03183738	92.57113719	96.03256047	94.40280503	92.637775	96.27075749	93.61986161	98.53140266	94.08139392
11/15/2019 23:23	9K15037-CRLA	91.28645835	97.01778946	92.06463929	96.58659236	92.75364055	91.03549398	96.76897673	93.20320408	99.74165094	92.8596124
11/15/2019 23:28	9K15037-CRLB	89.45937262	93.98404721	89.42452321	93.59281904	93.36275451	88.66675361	93.67540554	89.44534968	96.2108857	91.09533407
11/15/2019 23:33	rinse	90.78213086	94.64047935	92.55178571	95.02814499	94.53101533	92.05581429	94.85582721	94.03355497	97.2493223	95.12425051
11/15/2019 23:37	rinse	87.01167028	96.29318415	88.8178741	95.67091122	94.27295899	88.02591702	95.6859797	90.20938119	97.44030296	89.59440276

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 9111083
Sequence 9K22008 (A9K0332-04RE1,05RE1,06RE1,07RE1,08RE1,09RE1, 10RE3)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 1 5 2019

BATCH #: 9110803 (Soil)

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
	9110803-BLK1		QC	11/14/19 11:45	11	5				100					
	9110803-BS1		QC	11/14/19 11:45	10	5	A19J426		100	100					
	A9K0332-04	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.55	5				100	PDI-140RAB-00-10-191108				
	9110803-DUP1		QC	11/14/19 11:45	10.59	5		A9K0332-04		100					
	A9K0332-05	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.63	5				100	PDI-140RAB-10-12.7-191108				
	A9K0332-06	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.8	5				100	PDI-141RAB-00-10-191107				
	A9K0332-07	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.7	5				100	PDI-141RAB-10-17.7-191107				
	A9K0332-08	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.21	5				100	PDI-143RAB-00-10-191111				
	A9K0332-09	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.34	5				100	PDI-143RAB-10-20-191112				
	A9K0332-10	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.85	5				100	PDI-143RAB-20-31.1-191111				
	A9K0333-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.81	5				100	45.4259-122.582 1BG				
	A9K0333-01RE1	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.81	5				100	45.4259-122.582 1BG	Added 11/15/2019 by BLL			
	A9K0334-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.09	5				100	N 45.663232° W122.567394°	mineral oil only			
	A9K0349-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.32	5				100	North				
	A9K0349-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.38	5				100	43.582886 W 123.259537				
	A9K0349-03	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.1	5				100	Middle				
	A9K0349-04	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.27	5				100	43.582830 W 123.259655				
	A9K0349-05	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.1	5				100	South				
	A9K0349-06	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.46	5				100	Background				

Prepared By: Date

Ben Hattig 11-15-19
Reviewed By: Date

Printed: 11/15/2019 9:15:07AM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
	A9K0360-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.16	5				100	8063-SS1	include Mineral Oil			
	A9K0361-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.24	5				100	8065-SS1	include Mineral Oil			
	A9K0361-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.31	5				100	8065-SS2	include Mineral Oil			
	A9K0362-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.36	5				100	8048-SS1	include Mineral Oil			
	A9K0363-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10.38	5				100	SS-1				
	9110803-DUP2		QC	11/14/19 11:45	10.36	5		A9K0363-01		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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J426	03/30/20	NWTPH-DX Spike in Methanol

Surrogate(s)

Std ID	Exp. Date	Description
A19K049	04/27/20	NWTPH-DX Soil Surrogate in DCM

Method 3546 digestion time and temperature achieved.
Initial:

Witness: _____

Prepared By: _____ Date

Reviewed By: [signature] 11.15.19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
1	9110803-BLK1		QC	11/14/19 11:45	10	5				100					
2	9110803-BS1		QC	11/14/19 11:45	10	5	~~A19K160~~ A19U426		100	100					
3	A9K0332-04	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.35	5		JAG 11/14/19		100	PDI-140RAB-00-10-191108	soil, small rocks			
4	9110803-DUP1		QC	11/14/19 11:45	10 10.59	5		A9K0332-04		100		soil, small rocks			
5	A9K0332-05	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.63	5				100	PDI-140RAB-10-12.7-191108	soil, small rocks			
6	A9K0332-06	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.80	5				100	PDI-141RAB-00-10-191107	soil, small rocks			
7	A9K0332-07	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.70	5				100	PDI-141RAB-10-17.7-191107	soil, small rocks, odor			
8	A9K0332-08	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.21	5				100	PDI-143RAB-00-10-191111	soil			
9	A9K0332-09	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.34	5				100	PDI-143RAB-10-20-191112	soil			
10	A9K0332-10	F	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.85	5				100	PDI-143RAB-20-31.1-191111	soil			
11	A9K0333-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.81	5				100	45.4259-122.582 1BG	soil			
12	A9K0334-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.09	5				100	N 45.663232° W122.567394°	mineral oil only soil			
13	A9K0349-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.37	5				100	North	soil			
14	A9K0349-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.38	5				100	43.582886 W 123.259537	soil			
15	A9K0349-03	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.10	5				100	Middle	soil			
16	A9K0349-04	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.27	5				100	43.582830 W 123.259655	soil			
17	A9K0349-05	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.10	5				100	South	soil			
18	A9K0349-06	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.46	5				100	Background	soil			
19	A9K0360-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10.16	5				100	8063-SS1	include Mineral Oil small rocks			

JAG 11/14/19
Prepared By: Date

CAS 11/14/19
Reviewed By: Date

Printed: 11/14/2019 11:46:00AM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9110803 (Soil)

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
20	A9K0361-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:24	5				100	8065-SS1	include Mineral Oil Soil			
21	A9K0361-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:31	5				100	8065-SS2	include Mineral Oil Soil			
22	A9K0362-02	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:36	5				100	8048-SS1	include Mineral Oil Soil			
23	A9K0363-01	A	NWTPH-Dx (Diesel/Oil)	11/14/19 11:45	10 10:38	5				100	SS-1	Soil			
24	9110803-DUP2		QC	11/14/19 11:45	10 10:36	5		A9K0363-01		100		Soil			

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
A19K010	10/29/25	Sodium Sulfate Lot # 188777

Analyte Spike(s)

Std ID	Exp. Date	Description
~~A19K160~~ A19U426	~~04/16/20~~ 03/30/20	NWTPH-DX Spike in Methanol

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19K049	04/27/20	NWTPH-DX Soil Surrogate in DCM

JAG

Method 3546 digestion time and temperature achieved.

Initial: JAG

Witness: 11/14/19

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

APEX LABORATORIES

Apex Laboratories

DEC 0 6 2019

Sequence: **9K22008** Instrument: **OIA FS3000-2**

Date: **11/22/19 06:44** Calibration: **A9K2201**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K22008-CAL1	Soil	QC	QC				
2	9K22008-CAL2	Soil	QC	QC				A19J298
3	9K22008-CAL3	Soil	QC	QC				A19J299
4	9K22008-CAL4	Soil	QC	QC				A19J300
5	9K22008-CAL5	Soil	QC	QC				A19J301
6	9K22008-CAL6	Soil	QC	QC				A19J302
7	9K22008-CAL7	Soil	QC	QC				A19J303
8	9K22008-ICV1	Soil	QC	QC				A19K298
9	9K22008-ICB1	Soil	QC	QC				
10	9111083-BS2	Soil	QC	QC		9111083		
11	9111083-BLK1	Soil	QC	QC		9111083		
12	9111083-BS1	Soil	QC	QC		9111083		
13	A9K0332-04RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
14	9111083-MS1	Soil	QC	QC		9111083		
15	9111083-MSD1	Soil	QC	QC		9111083		
16	A9K0332-05RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
17	A9K0332-06RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
18	A9K0332-07RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
19	A9K0332-08RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
20	9K22008-CCV1	Soil	QC	QC				A19J302
21	9K22008-CCB1	Soil	QC	QC				
22	A9K0332-09RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
23	A9K0332-10RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
24	9111086-BLK1	Water	QC	QC		9111086		
25	9111086-BS1	Water	QC	QC		9111086		
26	A9K0442-02RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/02/19	9111086		
27	9111086-MS1	Water	QC	QC		9111086		
28	9111086-MSD1	Water	QC	QC		9111086		
29	A9K0473-01RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/02/19	9111086		
30	A9K0493-08RE1	Water	Cyanide, Total (ASTM D7511, OIA)		11/22/19	9111086		
31	9K22008-CCV2	Soil	QC	QC				A19J302
32	9K22008-CCB2	Soil	QC	QC				
33	A9K0498-02RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/03/19	9111086		
34	A9K0537-02RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/04/19	9111086		
35	A9K0576-01RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/04/19	9111086		
36	A9K0576-02RE1	Water	Cyanide, Total (ASTM D7511, OIA)		12/04/19	9111086		
37	9K22008-CCV3	Soil	QC	QC				A19J302
38	9K22008-CCB3	Soil	QC	QC				
39	A9K0332-10RE2	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
40	9110933-BLK2	Soil	QC	QC		9110933		
41	9110933-BS3	Soil	QC	QC		9110933		
42	A9K0421-02RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
43	A9K0421-03RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
44	9110933-MS2	Soil	QC	QC		9110933		
45	9110933-MSD2	Soil	QC	QC		9110933		
46	A9K0421-04RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
47	A9K0421-05RE2	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
48	A9K0421-06RE2	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
49	9K22008-CCV4	Soil	QC	QC				A19J302
50	9K22008-CCB4	Soil	QC	QC				
51	A9K0421-07RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		

Sequence:	**9K22008**	Instrument:	**OIA FS3000-2**
Date:	**11/22/19 06:44**	Calibration:	**A9K2201**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	A9K0421-08RE1	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/27/19	9110933		
53	9K22008-CCV5	Soil	QC	QC				A19J302
54	9K22008-CCB5	Soil	QC	QC				
55	A9K0332-10RE3	Soil	Cyanide, Total (ASTM D7511, OIA)	Anchor QEA, LLC	11/25/19	9111083		
56	A9K0498-02RE2	Water	Cyanide, Total (ASTM D7511, OIA)		12/03/19	9111086		
57	9K22008-CCV6	Soil	QC	QC				A19J302
58	9K22008-CCB6	Soil	QC	QC				

Data Entered By: JLP 11-22-19

Data Reviewed By: CMR 11/22/19

Comments:

Run Results Report

Apex Laboratories OIA FS3000-2

Operator Name	jkp
Operator ID	jkp
Platform	FS 3000
Software Rev Code	234
Data system ID	57
Result path	C:\FLOW_4\9K22008.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	22-Nov-19
Time acquired	14:02

	TOTAL CN 50ppb					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
Sync 25 ppb	482680	24.562	OL			
Sync 25 ppb	506827	25.692				
Sync 25 ppb	504394	25.578				
(Statistics)				505610	25.635	2.63%
Carryover	16895	1.557				
Read Baseline	64	0.683	BL			
Cal 0.0 ppb	-8471	0.238				
Cal 1.0 ppb	2192	0.794				
Cal 2.0 ppb	15215	1.470				
Cal 5.0 ppb	72316	4.415				
Cal 10.0 ppb	192608	10.507				
Cal 25.0 ppb	489590	24.886				
Cal 50.0 ppb	1063400	50.010				
Blank	18436	1.637				
Read Baseline	-434	0.657	BL			
9K22008-ICV1	520218	26.316				
9K22008-ICB1	6441	1.014				
Read Baseline	460	0.703	BL			
9111083-BS2	75242	4.565				
9111083-BLK1	1201	0.742				
9111083-BS1	445485	22.810				
Read Baseline	2688	0.819	BL			
A9K0332-04RE1	61977	3.885				
9111083-MS1	471153	24.021				
9111083-MSD1	472073	24.064				
Read Baseline	493	0.705	BL			
A9K0332-05RE1	32605	2.371				

< 3%
11/22/19

JKP
11-22-19

Result path C:\FLOW_4\9K22008.RST
Sample table path C:\FLOW_4\totcn50.tbl
Method path C:\FLOW_4\totcn50.mth
Date acquired 22-Nov-19
Time acquired 14:02

TOTAL CN 50ppb

Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
A9K0332-06RE1	267230	14.208				
A9K0332-07RE1@5	982482	46.679				
Read Baseline	4757	0.927	BL			
A9K0332-08RE1	16989	1.562				
Read Baseline	-111	0.674	BL			
9K22008-CCV1	489742	24.893				
9K22008-CCB1	14609	1.439				
Read Baseline	-7937	0.266	BL			
A9K0332-09RE1	312488	16.424				
A9K0332-10RE1	7527033	91.019	HI			
Read Baseline	9220	1.159	BL			
9111086-BLK1	-60604	-2.494	LO FL			
9111086-BS1	559283	28.124				
Read Baseline	-639	0.646	BL			
A9K0442-02RE1	47787	3.155				
9111086-MS1	608695	30.389				
9111086-MSD1	644530	32.015				
Read Baseline	2806	0.825	BL			
A9K0473-01RE1	57367	3.648				
A9K0493-08RE1@5	761708	37.237				
Read Baseline	3688	0.871	BL			
9K22008-CCV2	504128	25.566				
9K22008-CCB2	14158	1.415				
Read Baseline	2972	0.834	BL			
A9K0498-02RE1	2739384	103.333	HI			
A9K0537-02RE1	48615	3.197	FL			
A9K0576-01RE1	33752	2.430	FL			
A9K0576-02RE1	18431	1.637				
Read Baseline	-871	0.634	BL			
9K22008-CCV3	510214	25.850				
9K22008-CCB3	9237	1.160				
Read Baseline	5993	0.991	BL			
A9K0332-10RE2@25	354977	18.485				
Read Baseline	4180	0.897	BL			
9110933-BLK2	-11477	0.081				
9110933-BS2 3 JKP 11-22-19	457940	23.398				
Read Baseline	-1812	0.585	BL			

JKP 11-22-19

Result path	C:\FLOW_4\9K22008.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	22-Nov-19
Time acquired	14:02

TOTAL CN 50ppb

Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	RSD
A9K0421-02RE1@10	2653436	101.325	HI			
A9K0421-03RE1	119833	6.840	FL			
9110933-MS2	515354	26.089	FL			
9110933-MSD2	493587	25.073				
Read Baseline	-6877	0.321	BL			
A9K0421-04RE1	44754	2.998				
A9K0421-05RE2@5	7726100	85.225	HI			
A9K0421-06RE2	161668	8.955	FL			
Read Baseline	-481	0.654	BL			
9K22008-CCV4	558583	28.092				
9K22008-CCB4	9110	1.153				
Read Baseline	-832	0.636	BL			
A9K0421-07RE1	300054	15.817				
A9K0421-08RE1	589482	29.512				
Read Baseline	-1881	0.582	BL			
9K22008-CCV5	514949	26.070				
9K22008-CCB5	5201	0.950				
Read Baseline	1635	0.765	BL			
A9K0332-10RE3@25	372298	19.319				
A9K0498-02RE2@10	292118	15.429				
Read Baseline	-1208	0.617	BL			
9K22008-CCV6	515736	26.107				
9K22008-CCB6	9145	1.155				
Read Baseline	-323	0.663	BL			

JKP 11-22-19

Run Results Report

Apex Laboratories OIA FS3000-2

Operator Name	jkp
Operator ID	jkp
Platform	FS 3000
Software Rev Code	234
Data system ID	57
Result path	C:\FLOW_4\9K22008.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	22-Nov-19
Time acquired	14:02

Date	Time	Cup	Name
22-Nov-19	10:29	106	Sync 25 ppb
22-Nov-19	10:31	106	Sync 25 ppb
22-Nov-19	10:33	106	Sync 25 ppb (Statistics)
22-Nov-19	10:35	0	Carryover
22-Nov-19	10:37	0	Read Baseline
22-Nov-19	10:39	101	Cal 0.0 ppb
22-Nov-19	10:41	102	Cal 1.0 ppb
22-Nov-19	10:43	103	Cal 2.0 ppb
22-Nov-19	10:45	104	Cal 5.0 ppb
22-Nov-19	10:47	105	Cal 10.0 ppb
22-Nov-19	10:49	106	Cal 25.0 ppb
22-Nov-19	10:51	107	Cal 50.0 ppb
22-Nov-19	10:54	0	Blank
22-Nov-19	10:56	0	Read Baseline
22-Nov-19	10:58	108	9K22008-ICV1
22-Nov-19	11:00	0	9K22008-ICB1
22-Nov-19	11:02	0	Read Baseline
22-Nov-19	11:04	109	9111083-BS2
22-Nov-19	11:06	110	9111083-BLK1
22-Nov-19	11:08	111	9111083-BS1
22-Nov-19	11:10	0	Read Baseline
22-Nov-19	11:12	112	A9K0332-04RE1
22-Nov-19	11:14	113	9111083-MS1
22-Nov-19	11:16	114	9111083-MSD1
22-Nov-19	11:18	0	Read Baseline
22-Nov-19	11:20	115	A9K0332-05RE1

JKP 11-22-19

Result path	C:\FLOW_4\9K22008.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	22-Nov-19
Time acquired	14:02

Date	Time	Cup	Name
22-Nov-19	11:22	116	A9K0332-06RE1
22-Nov-19	11:24	117	A9K0332-07RE1@5
22-Nov-19	11:26	0	Read Baseline
22-Nov-19	11:28	118	A9K0332-08RE1
22-Nov-19	11:30	0	Read Baseline
22-Nov-19	11:32	106	9K22008-CCV1
22-Nov-19	11:34	0	9K22008-CCB1
22-Nov-19	11:36	0	Read Baseline
22-Nov-19	11:38	119	A9K0332-09RE1
22-Nov-19	11:40	120	A9K0332-10RE1
22-Nov-19	11:42	0	Read Baseline
22-Nov-19	11:44	121	9111086-BLK1
22-Nov-19	11:46	122	9111086-BS1
22-Nov-19	11:48	0	Read Baseline
22-Nov-19	11:50	123	A9K0442-02RE1
22-Nov-19	11:52	124	9111086-MS1
22-Nov-19	11:54	125	9111086-MSD1
22-Nov-19	11:56	0	Read Baseline
22-Nov-19	11:58	126	A9K0473-01RE1
22-Nov-19	12:00	127	A9K0493-08RE1@5
22-Nov-19	12:02	0	Read Baseline
22-Nov-19	12:04	106	9K22008-CCV2
22-Nov-19	12:06	0	9K22008-CCB2
22-Nov-19	12:08	0	Read Baseline
22-Nov-19	12:10	128	A9K0498-02RE1
22-Nov-19	12:12	129	A9K0537-02RE1
22-Nov-19	12:14	130	A9K0576-01RE1
22-Nov-19	12:16	131	A9K0576-02RE1
22-Nov-19	12:18	0	Read Baseline
22-Nov-19	12:20	106	9K22008-CCV3
22-Nov-19	12:22	0	9K22008-CCB3
22-Nov-19	12:24	0	Read Baseline
22-Nov-19	12:38	120	A9K0332-10RE2@25
22-Nov-19	12:40	0	Read Baseline
22-Nov-19	12:42	132	9110933-BLK2
22-Nov-19	12:44	133	9110933-BS2
22-Nov-19	12:46	0	Read Baseline

JKP
11-22-19

Result path	C:\FLOW_4\9K22008.RST
Sample table path	C:\FLOW_4\totcn50.tbl
Method path	C:\FLOW_4\totcn50.mth
Date acquired	22-Nov-19
Time acquired	14:02

Date	Time	Cup	Name
22-Nov-19	12:48	134	A9K0421-02RE1@10
22-Nov-19	12:50	135	A9K0421-03RE1
22-Nov-19	12:52	136	9110933-MS2
22-Nov-19	12:54	137	9110933-MSD2
22-Nov-19	12:56	0	Read Baseline
22-Nov-19	12:58	138	A9K0421-04RE1
22-Nov-19	13:00	139	A9K0421-05RE2@5
22-Nov-19	13:02	140	A9K0421-06RE2
22-Nov-19	13:04	0	Read Baseline
22-Nov-19	13:06	106	9K22008-CCV4
22-Nov-19	13:08	0	9K22008-CCB4
22-Nov-19	13:10	0	Read Baseline
22-Nov-19	13:12	141	A9K0421-07RE1
22-Nov-19	13:14	142	A9K0421-08RE1
22-Nov-19	13:17	0	Read Baseline
22-Nov-19	13:19	106	9K22008-CCV5
22-Nov-19	13:21	0	9K22008-CCB5
22-Nov-19	13:23	0	Read Baseline
22-Nov-19	13:37	120	A9K0332-10RE3@25
22-Nov-19	13:39	128	A9K0498-02RE2@10
22-Nov-19	13:41	0	Read Baseline
22-Nov-19	13:43	106	9K22008-CCV6
22-Nov-19	13:45	0	9K22008-CCB6
22-Nov-19	13:47	0	Read Baseline

JKP
11-22-19

TOTAL CN 50ppb:Calibration 1: Peak 6-87

File name: C:\FLOW_4\9K22008.RST
Date: 22-Nov-19
Operator: jkp

*	Name	Conc	Area
*	Cal 0.0 ppb	0.000000	-8471.155273
*	Cal 1.0 ppb	1.000000	2191.549561
*	Cal 2.0 ppb	2.000000	15215.231445
*	Cal 5.0 ppb	5.000000	72315.820312
*	Cal 10.0 ppb	10.000000	192608.125000
*	Cal 25.0 ppb	25.000000	489590.062500
*	Cal 50.0 ppb	50.000000	1063399.500000

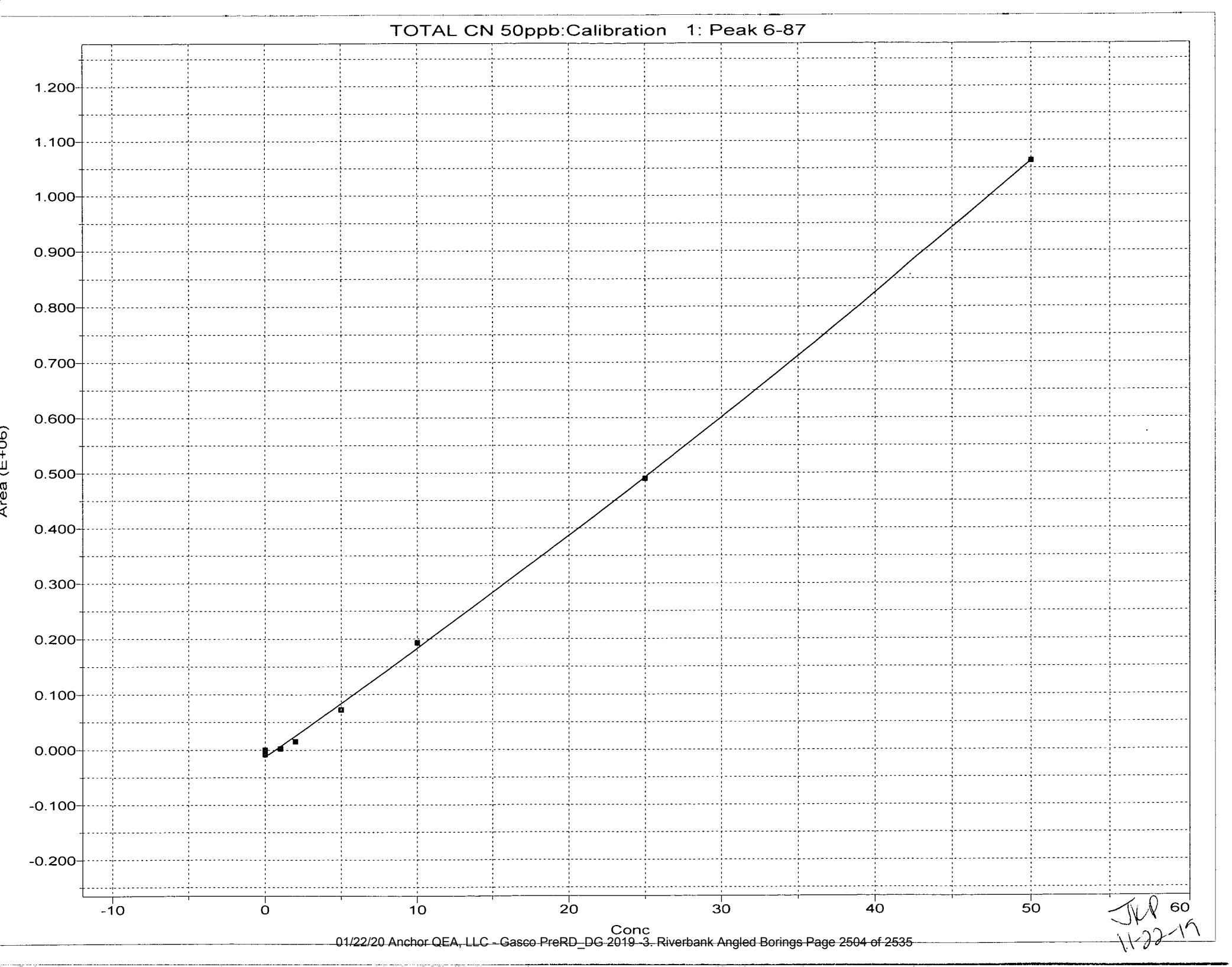
Calib Coef:
x=cyy+by+a
a: (intercept) 6.7947e-01
b: 5.2047e-05
c: -5.3202e-12

Corr Coef: 0.999666 11/22/2019

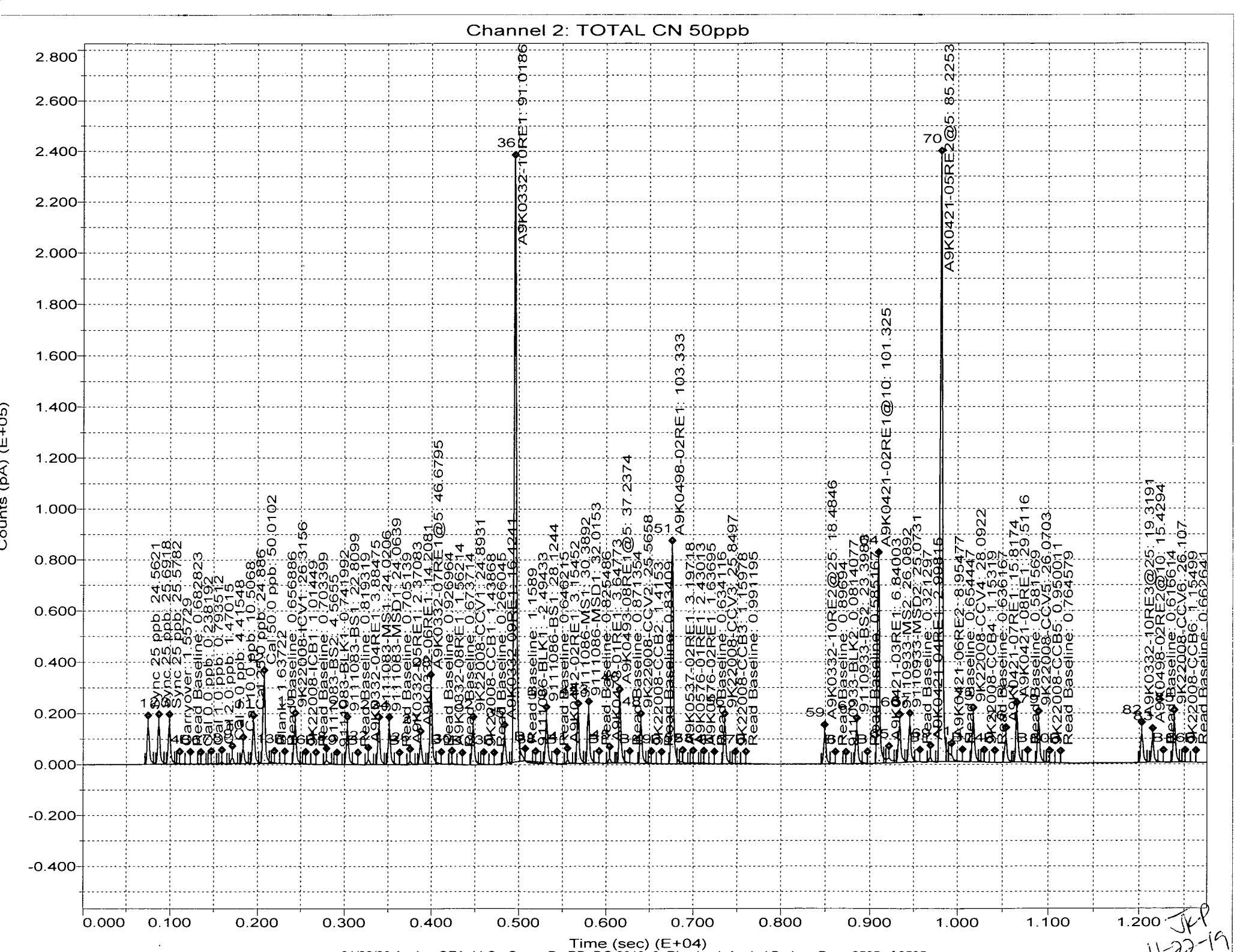
Carryover: n/a

No Drift Peaks

JKP 11-22-19


TOTAL CN 50ppb:Calibration 1: Peak 6-87
Area (E+06)
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
-0.200
-10
0
10
20
30
40
50
60
Conc

JKP 11-22-19


Channel 2: TOTAL CN 50ppb
Counts (pA) (E+05)
Time (sec) (E+04)
2.800
2.600
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
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
A9K0332-10RE1: 91.0186
A9K0421-05RE2@5: 85.2253
A9K0498-02RE1: 103.333
A9K0421-02RE1@10: 101.325
A9K0332-07RE1@5: 46.6795
A9K0332-10RE2@25: 18.4846
A9K0332-10RE3@25: 19.3191
A9K0498-02RE2@10: 15.4294
Sync 25 ppb 24.5621
Sync 25 ppb 25.6918
Sync 25 ppb 25.5782
Carryover 1.55729
Read Baseline: 0.682823
Cal 1.0 ppb 0.238192
Cal 2.0 ppb 0.793512
Cal 5.0 ppb 1.47015
Cal 10.0 ppb 4.41548
Cal 25.0 ppb 10.5068
Cal 50.0 ppb 24.886
Cal 100.0 ppb 50.0102
Blank 1.63722
Read Baseline: 0.656886
9K22008-ICV1: 26.3156
9K22008-ICB1: 1.01449
Read Baseline: 0.703399
A9K0332-BS2: 4.5655
9111083-BLK1: 0.741992
9111083-BS1: 22.8099
Read Baseline: 0.819319
A9K0332-04RE1: 3.88475
9111083-MSD1: 24.0206
Read Baseline: 0.705139
A9K0332-05RE1: 2.37083
A9K0332-06RE1: 14.2081
A9K0332-07RE1: 46.6795
9K22008-CCV1: 24.8931
9K22008-CCB1: 1.43868
A9K0332-09RE1: 16.4241
9111086-BLK1: -2.49433
9111086-BS1: 28.1244
Read Baseline: 0.646215
A9K0332-02RE1: 3.15452
9111086-MS1: 30.3892
9111086-MSD1: 32.0153
Read Baseline: 0.825486
A9K0493-01RE1: 3.64773
A9K0493-08RE1@5: 37.2374
Read Baseline: 0.871354
9K22008-CCV2: 25.5658
9K22008-CCB2: 1.4153
Read Baseline: 0.83409
A9K0332-08RE1: 1.56214
9K22008-CCV1: 24.8931
9K22008-CCB1: 1.43868
A9K0332-09RE1: 16.4241
9111086-BLK1: -2.49433
9111086-BS1: 28.1244
Read Baseline: 0.646215
A9K0332-02RE1: 3.15452
9111086-MS1: 30.3892
9111086-MSD1: 32.0153
Read Baseline: 0.825486
A9K0493-01RE1: 3.64773
A9K0493-08RE1@5: 37.2374
Read Baseline: 0.871354
9K22008-CCV2: 25.5658
9K22008-CCB2: 1.4153
Read Baseline: 0.83409
A9K0332-08RE1: 1.56214
9K22008-CCV1: 24.8931
9K22008-CCB1: 1.43868
A9K0332-09RE1: 16.4241
9111086-BLK1: -2.49433
9111086-BS1: 28.1244
Read Baseline: 0.646215
A9K0332-02RE1: 3.15452
9111086-MS1: 30.3892
9111086-MSD1: 32.0153
Read Baseline: 0.825486
A9K0493-01RE1: 3.64773
A9K0493-08RE1@5: 37.2374
Read Baseline: 0.871354
9K22008-CCV2: 25.5658
9K22008-CCB2: 1.4153
Read Baseline: 0.83409
A9K0537-02RE1: 3.19718
A9K0576-01RE1: 2.43013
A9K0576-02RE1: 1.63695
Read Baseline: 0.634116
9K22008-CCV3: 25.8497
9K22008-CCB3: 1.15978
Read Baseline: 0.991195
A9K0421-03RE1: 6.84003
9110933-MSD2: 26.0892
9110933-MS2: 25.0731
Read Baseline: 0.321297
A9K0421-04RE1: 2.99816
A9K0421-06RE2: 8.95477
Read Baseline: 0.654447
9K22008-CCV4: 28.0922
9K22008-CCB4: 1.15319
Read Baseline: 0.636167
A9K0421-07RE1: 15.8174
A9K0421-08RE1: 29.5116
Read Baseline: 0.581569
9K22008-CCV5: 26.0703
9K22008-CCB5: 0.950011
Read Baseline: 0.764579
A9K0498-02RE2@10: 15.4294
Read Baseline: 0.616614
9K22008-CCV6: 26.107
9K22008-CCB6: 1.15499
Read Baseline: 0.662641

JKP 11-22-19

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

Conventional Chemistry Parameters
Benchsheet & Analysis Sequence Data

Total Organic Carbon- Soil (5310 B)

Batch 9110807
Sequence 9K15016 (A9K0332-04,05,06,07,08,09,10)

Apex Laboratories

PREPARATION BENCH SHEET

NOV 19 2019

BATCH #: 9110807 (Sediment)

Prep Method: PSEP-5310B TOC

#	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
	9110807-BLK1		QC	11/13/19 19:28	0.2	0.2									
	9110807-BS1		QC	11/13/19 19:28	0.2	0.2	~~A19J279~~ A19K203		1						
	A9K0332-04	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-140RAB-00-10-191108				
	9110807-DUP1		QC	11/13/19 19:28	0.2	0.2		A9K0332-04							
	A9K0332-05	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-140RAB-10-12.7-191108				
	A9K0332-06	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-141RAB-00-10-191107				
	A9K0332-07	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-141RAB-10-17.7-191107				
	A9K0332-08	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-143RAB-00-10-191111				
	A9K0332-09	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-143RAB-10-20-191112				
	A9K0332-10	A	Total Organic Carbon - Soil (5310 B)	11/13/19 19:28	0.2	0.2					PDI-143RAB-20-31.1-191111				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L221	11/30/23	Wet Chem Balance 3
A19F020	06/03/29	TOC Soil Drying Oven @70oC
A19F088	12/08/19	10% Phosphoric Acid
A19J023	11/30/23	Wet Chem Balance 4
A19J145	05/30/22	TOC Soil Blank Matrix

Analyte Spike(s)

Std ID	Exp. Date	Description
~~A19J279~~ A19K203	~~04/15/20~~ 04/14/20	TOC 10k ppm secondary

11/15/19

Surrogate(s)

Std ID	Exp. Date	Description

11/15/19

JKP 11-14-19
Prepared By: Date

11/15/19
Reviewed By: Date

Batch 9110807 TOC PSEP preweigh Analyst JKP

Date/Time:	11-14-19@1321	11-15-19@0830	11-15-19@1005	11-15-19@1128	Effervesces?	Comments
T(°C) IN / OUT:	69.9/70.5	70.5/69.1	70.1/68.4	69.8/70.9		
Sample ID	Wt 1(g)	Wt 2(g)	Wt 3(g)	Wt 4(g)	(yes/no)	
AMK0332-04	10.0824	10.0557	10.0619	10.0634	no	
AMK0332-04DUP	5.4868	5.4689	5.4701		no	
AMK0332-05	9.7124	9.7187	9.7227		no	
AMK0332-06	11.6124	11.6163			no	
AMK0332-07	13.5358	13.5437	13.5461		no	
AMK0332-08	8.5633	8.5688	8.5708		no	
AMK0332-09	8.7235	8.7246			no	
AMK0332-10	9.8673	9.8660			no	

In oven on 11-13-19 @ 1928 JKP

Pre-drying sample aliquot > 10g. Constant wt = change of < 0.005g

APEX LABORATORIES

ELEMENT SEQUENCE LOG

Apex Laboratories

NOV 2 0 2019

Sequence: **9K15016** Instrument: **TOC**

Date: **11/15/19 07:53** Calibration: **A8B0203**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9K15016-CCV1	Sediment	QC	QC				A19K222
2	9K15016-CCB1	Sediment	QC	QC				
3	A9J0893-20	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/06/19	9101582		
4	A9J0893-21	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/06/19	9101582		
5	9110589-BLK1	Sediment	QC	QC		9110589		
6	9110589-BS1	Sediment	QC	QC		9110589		
7	A9J1137-06	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/13/19	9110589		
8	9110589-DUP1	Sediment	QC	QC		9110589		
9	A9J1137-12	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/13/19	9110589		
10	A9J1137-18	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/13/19	9110589		
11	A9J1137-24	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/13/19	9110589		
12	9K15016-CCV2	Sediment	QC	QC				A19K222
13	9K15016-CCB2	Sediment	QC	QC				
14	9110807-BLK1	Sediment	QC	QC		9110807		
15	9110807-BS1	Sediment	QC	QC		9110807		
16	A9K0332-04	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
17	9110807-DUP1	Sediment	QC	QC		9110807		
18	A9K0332-05	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
19	A9K0332-06	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
20	A9K0332-07	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
21	A9K0332-08	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
22	A9K0332-09	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
23	9K15016-CCV3	Sediment	QC	QC				A19K222
24	9K15016-CCB3	Sediment	QC	QC				
25	A9K0332-10	Sediment	Total Organic Carbon - Soil (5310 B)	Anchor QEA, LLC	11/25/19	9110807		
26	9K15016-CCV4	Sediment	QC	QC				A19K222
27	9K15016-CCB4	Sediment	QC	QC				

Data Entered By: 11/16/19

Data Reviewed By: 11/18/19

Comments:

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9K15016-CCV1	1	20	266.30	191.73	9,586.55	9,736	11/15/19 08:21 AM
	2	20	272.30	197.72	9,886.16		
9K15016-CCB1	1	100	0.51	5.63	56.30	54	11/15/19 08:39 AM
	2	100	0	5.15	51.53		
A9J0893-20	1	84.8	32.070	32.76	386.28	323	11/15/19 08:46 AM
	2	85.6	21.460	24.19	282.62	RSD: 17.2%	
	3	88.3	24.270	26.51	300.24		
A9J0893-21	1	58.6	315.8	248.56	4,241.59	4,425	11/15/19 09:08 AM
	2	58.9	346.5	293.6	4,984.78	RSD: 11.2%	
	3	63.6	322.4	257.54	4,049.40		
9110589-BLK1	1	99.1	1.82	6.86	69.26	72	11/15/19 09:29 AM
	2	98.4	2.22	7.24	73.54	RSD: 3%	
	3	96.2	1.9	6.94	72.10		
9110589-BS1	1	20.0	278.1	203.73	10,186.58	10,119	11/15/19 09:47 AM
	2	20.0	274.9	200.39	10,019.49	RSD: 0.9%	
	3	20.0	277.4	202.99	10,149.74		
A9J1137-06	1	18.8	435.9	481.01	25,585.46	23,077	11/15/19 10:21 AM
	2	20.9	426.7	457.25	21,878.07	RSD: 9.4%	
	3	17.6	394.7	383.08	21,766.07		
9110589-DUP1	1	15.6	366.2	327.2	20,974.13	21,064	11/15/19 11:05 AM
	2	16.5	367.8	330.1	20,005.99	RSD: 5.2%	
	3	17.8	400.4	395.37	22,211.91		
A9J01137-12	1	18.6	361.2	318.3	17,112.83	18,778	11/15/19 11:28 AM
	2	19.3	376.8	346.93	17,975.81	RSD: 11.6%	
	3	18.9	403.2	401.55	21,246.08		

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
A9J1137-18	1	17.4	360.2	316.55	18,192.53	18,205	11/15/19 11:57 AM
	2	17.6	356.2	309.66	17,594.16	RSD: 3.4%	
	3	16.4	355.7	308.81	18,829.69		
A9J1137-24	1	18.3	324.5	260.48	14,233.78	14,798 DMF 11/18/19	11/15/19 12:59 PM
	2	18.9	336.1 DMF 11/18/19	277.44 39	~~14,679.32~~ 14676.92	RSD: 4.3%	
	3	20.0	356.2	309.66	15,482.86		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
9K15016-CCV2	1	20.0	291.4	218.36	10,917.87	10,292	11/15/19 01:28 PM
	2	20.0	267.9	193.31	9,665.37		
9K15016-CCB2	1	100.0	0	5.15	51.53	52	11/15/19 01:48 PM
	2	100.0	0	5.15	51.53		
9110807-BLK1	1	98.1	2.301	7.31	74.56	71	11/15/19 01:55 PM
	2	98.6	1.947	6.98	70.83	RSD: 4.3%	
	3	99.2 DMF 11/18/19	1.744	6.79	~~68.55~~ 68.48 DMF 11/18/19		
9110807-BS1	1	20.0	278	203.63	10,181.31	9,988	11/15/19 02:23 PM
	2	20.0	274	199.46	9,973.10	RSD: 1.9%	
	3	20.0	270.8	196.2	9,810.22		
A9K0332-04	1	90.4	319.2	253.14	2,800.22	2,886	11/15/19 02:50 PM
	2	88.9	331.2	270.1	3,038.27	RSD: 4.6%	
	3	92.3	324.3	260.2	2,819.03		
9110807-DUP1	1	93.6	305	234.62	2,506.66	2,733	11/15/19 03:25 PM
	2	95.4	342.9	287.88	3,017.58	RSD: 9.5%	
	3	96.3	322.4	257.54	2,674.37		
A9K0332-05	1	83.9	329.1	267.04	3,182.88	3,576	11/15/19 04:00 PM
	2	87.0	382.8	358.65	4,122.38	RSD: 13.7%	
	3	87.8	350.7	300.44	3,421.88		

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
A9K0332-06	1	88.0	426	455.49	5,176.03	6,211	11/15/19 04:30 PM
	2	83.6	480.8	614.07	7,345.33	RSD: 17.5%	
	3	84.8	449.5	518.24	6,111.29		
A9K0332-07	1	11.4	430	465.64	40,845.83	37,079	11/15/19 04:58 PM
	2	13.1	406.5	408.96	31,217.98	RSD: 13.9%	
	3	13.1	447.7	513.16	39,172.63		
A9K0332-08	1	93.7	21.33	24.08	257.03	259	11/15/19 05:43 PM
	2	98.7	23.69	26.04	263.79	RSD: 1.5%	
	3	99.6	23.12	25.57	256.69		
A9K0332-09	1	95.0	89.43	71.91	756.91	610	11/15/19 06:09 PM
	2	99.0	65.36	56.69	572.59	RSD: 21.6%	
	3	98.5	54.6	49.38	501.32		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
9K15016-CCV3	1	20.0	292.3	219.39	10,969.58	10,261	11/15/19 06:32 PM
	2	20.0	265.6	191.05	9,552.32		
9K15016-CCB3	1	100.0	0	5.15	51.53	52	11/15/19 06:51 PM
	2	100.0	0	5.15	51.53		

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9K15016	1	20		5.15	257.64	258	
Continued	2	20		5.15	257.64		
-CCB1	1	100		5.15	51.53	52	
	2	100		5.15	51.53		
A9K0332-10	1	99.4	147.000	105.21	1,058.49	1,543	11/15/19 07:00 PM
	2	95	249.200	175.81	1,850.68	RSD: 27.5% ✓	
	3	97	238.600	166.74	1,718.94		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		

<30 ok, aw 11/16/19

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
9K15016-CCV4	1	20.0	268.5	193.9	9,695.12	9,673	11/15/19 1930
	2	20.0	267.6	193.01	9,650.53		
9K15016-CCB4	1	100.0	0.31	5.44	54.45	53	11/15/19 1954
	2	100.0	0	5.15	51.53		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		

LW 11/16/19

TOC Data

amr 11/16/19

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9K15016-CCV1	1	20	266.3	5.15	257.64	258	11/15/19 08:21 AM
	2	20	272.3	5.15	257.64		
9K15016-CCB1	1	100	0.505	5.15	51.53	52	0839
	2	100	0	5.15	51.53		
A9J0893-20	1	84.8	32.07	5.15	#DIV/0!	#DIV/0!	0846
	2	85.6	21.46	5.15	#DIV/0!	#DIV/0!	
	3	88.3	24.27	5.15	#DIV/0!		
A9J0893-21	1	58.6	315.8	5.15	#DIV/0!	#DIV/0!	0903
	2	58.9	346.5	5.15	#DIV/0!	#DIV/0!	
	3	63.6	322.4	5.15	#DIV/0!		
9110589-BLK1	1	99.1	1.819	5.15	#DIV/0!	#DIV/0!	0929
	2	98.4	2.218	5.15	#DIV/0!	#DIV/0!	
	3	96.2	1.896	5.15	#DIV/0!		
9110589-BS1	1	20	278.1	5.15	#DIV/0!	#DIV/0!	0947
	2	20	274.9	5.15	#DIV/0!	#DIV/0!	
	3	20	277.4	5.15	#DIV/0!		
A9J1137-06	1	18.8	435.9	5.15	#DIV/0!	#DIV/0!	1021
	2	20.9	426.7	5.15	#DIV/0!	#DIV/0!	
	3	17.6	394.7	5.15	#DIV/0!		
9110589-DUP1	1	15.6	366.2	5.15	#DIV/0!	#DIV/0!	1105
	2	16.5	367.8	5.15	#DIV/0!	#DIV/0!	
	3	17.8	400.4	5.15	#DIV/0!		
A9J01137-12	1	18.6	361.2	5.15	#DIV/0!	#DIV/0!	1128
	2	19.3	376.8	5.15	#DIV/0!	#DIV/0!	
	3	18.9	407.2	5.15	#DIV/0!		

Time out error amr 11/15/19

A19K203 amr 11/15/19

Time out error amr 11/15/19

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
A9J1137-18	1	17.4	360.2	5.15	#DIV/0!	#DIV/0!	1157
	2	17.6	356.2	5.15	#DIV/0!	#DIV/0!	
	3	16.4	355.7	5.15	#DIV/0!		
A9J1137-24	1	18.3	324.5	5.15	#DIV/0!	#DIV/0!	1259
	2	18.9	336.1	5.15	#DIV/0!	#DIV/0!	
	3	20.0	356.2	5.15	#DIV/0!		
~~Sample ID~~	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
9K15016-CCV2	1	20.0	291.4	5.15	257.64	258	1328
	2	20.0	267.9	5.15	257.64		
9K15016-CCB2	1	100.0	0	5.15	51.53	52	1348
	2	100.0	0	5.15	51.53		
~~Sample ID~~	1	98.1	2.301	5.15	#DIV/0!	#DIV/0!	1355
9110807-BLK1	2	98.6	1.947	5.15	#DIV/0!	#DIV/0!	
	3	~~99.1~~ 99.2	1.744	5.15	#DIV/0!		
~~Sample ID~~	1	20	278	5.15	#DIV/0!	#DIV/0!	1423
9110807-BS1	2	20	274	5.15	#DIV/0!	#DIV/0!	
	3	20	270.8	5.15	#DIV/0!		
~~Sample ID~~	1	90.4	319.2	5.15	#DIV/0!	#DIV/0!	1450
A9K0332-04	2	88.9	331.2	5.15	#DIV/0!	#DIV/0!	
	3	92.3	324.3	5.15	#DIV/0!		
~~Sample ID~~	1	93.6	305	5.15	#DIV/0!	#DIV/0!	~~1325~~ 1525 an 11/15/19
9110807-DUP1	2	95.4	342.9	5.15	#DIV/0!	#DIV/0!	
	3	96.3	322.4	5.15	#DIV/0!		
~~Sample ID~~	1	83.9	329.1	5.15	#DIV/0!	#DIV/0!	1600
A9K0332-05	2	87.0	382.8	5.15	#DIV/0!	#DIV/0!	
	3	87.8	350.7	5.15	#DIV/0!		

Handwritten annotations (right margin):

Time out error an 11/15/19 (beside 9K15016-CCV2)

Inst. aspired sample an 11/15/19 A19K203 Time out error (beside 9110807-BLK1 / BS1)

Time out error (beside A9K0332-04)

Time out error (beside 9110807-DUP1)

Time out error an 11/15/19

Time out error 11/15/19 (beside A9K0332-05)

" " "

Left margin: an 11/15/19

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
A9K0332-06	1	88.0	426	5.15	#DIV/0!	#DIV/0!	1630
	2	83.6	480.8	5.15	#DIV/0!	#DIV/0!	
	3	84.8	449.5	5.15	#DIV/0!		
A9K0332-07	1	(92.1)/(24.1)	(765 RE-2)/556.4 RE-2	5.15	#DIV/0!	#DIV/0!	1658
	2	28.1/11.4	430	5.15	#DIV/0!	#DIV/0!	
	3	13.1/13.1	406.5/447	5.15	#DIV/0!		
A9K0332-08	1	93.7	21.33	5.15	#DIV/0!	#DIV/0!	1743
	2	98.7	23.69	5.15	#DIV/0!	#DIV/0!	
	3	99.6	23.12	5.15	#DIV/0!		
A9K0332-09	1	95.0	89.43	5.15	#DIV/0!	#DIV/0!	1809
	2	99.0	65.36	5.15	#DIV/0!	#DIV/0!	
	3	98.5	54.6	5.15	#DIV/0!		
A9K0332-10	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!	#DIV/0!	
	3			5.15	#DIV/0!		
9K15016-CCV3	1	20.0	292.3	5.15	257.64	258	1832
	2	20.0	265.6	5.15	257.64		
9K15016-CCB3	1	100.0	0	5.15	51.53	52	1851
	2	100.0	0	5.15	51.53		
A9K0332-10	1	99.4	147				1900
	2	95.0	249.2				
	3	97.0	238.6				
9K15016-CCV4	1	20	268.5				1930
	2	↓	267.6				
9K15016-CCB4	1	100	0.309				1954
	2	↓	0				

5 reps. run! am 11/15/19

Time out error am 11/15/19

Time out. error

on 9K15016-2.ods Time out error. " " " am 11/15/19

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

Conventional Chemistry Parameters
Calibration Data

Sequence 8B02022 (Cal ID A8B0203) TOC

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	8B02022	Instrument:	TOC
Date:	02/02/18 10:15	Calibration:	A8B0203

Order	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	8B02022-CAL1	Soil	QC	QC				
2	8B02022-CAL2	Soil	QC	QC				A18B030
3	8B02022-CAL3	Soil	QC	QC				A18B029
4	8B02022-CAL4	Soil	QC	QC				A18B028
5	8B02022-CAL5	Soil	QC	QC				A18B027
6	8B02022-CAL6	Soil	QC	QC				A18B026
7	8B02022-CAL7	Soil	QC	QC				A18B025
8	8B02022-CAL8	Soil	QC	QC				A18B024
9	8B02022-CAL9	Soil	QC	QC				A18B023
10	8B02022-CALA	Soil	QC	QC				A18B022
11	8B02022-CALB	Soil	QC	QC				A18B021
12	8B02022-ICV1	Soil	QC	QC				A18B031
13	8B02022-ICB1	Soil	QC	QC				
14	8B02022-ICV2	Soil	QC	QC				A18B031
15	8B02022-ICB2	Soil	QC	QC				

Data Entered By: JKP 2-2-18

Comments:

Data Reviewed By: JCS 2/14/18

2/2/2018 5:40:11PM

TOC Data

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL1	1	20	1.847	6.89	344.50	323	
	2	20	1.106	6.2	309.77		
	3	20	1.192	6.28	313.81		
[redacted]	1	20.0	14.4	18.2	909.78	[redacted]	
	2	20.0	16.65	20.13	1,006.70		
	3	20.0	15.74	19.35	967.66		
[redacted]	1	20.0	44.37	42.07	2,103.69	[redacted]	
	2	20.0	48.3	44.93	2,246.27		
	3	20.0	47.81	44.57	2,228.65		
[redacted]	1	20.0	123.9	92.03	4,601.40	[redacted]	
	2	20.0	131.8	96.53	4,826.34		
	3	20.0	132.4	96.87	4,843.42		
[redacted]	1	20.0	278.8	204.47	10,223.57	[redacted]	
	2	20.0	287.6	214.05	10,702.70		
	3	20.0	284.1	210.18	10,508.98		
[redacted]	1	20.0	350.7	300.44	15,022.06	[redacted]	
	2	20.0	345	291.2	14,560.12		
	3	20.0	361	317.95	15,897.40		
[redacted]	1	20.0	399.1	392.54	19,626.76	[redacted]	
	2	20.0	402.2	399.33	19,966.67		
	3	20.0	410.3	417.65	20,882.38		

TOC Data

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
8B02022-CAL8	1	20.0	437.8	486.05	24,302.72	24,424	
	2	20.0	440.9	494.4	24,719.83		
	3	20.0	437.4	484.99	24,249.38		
8B02022-CAL9	1	20.0	473.2	589.45	29,472.51	29,844	
	2	20.0	473.6	590.72	29,536.19		
	3	20.0	479.7	610.45	30,522.56		
8B02022-CAL7	1	20.0	503.7	693.77	34,688.41	34,756	
	2	20.0	504.4	696.34	34,816.94		
	3	20.0	504.6	697.07	34,853.73		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL6	1	20	529.100	792.36	39,618.21	40,444	
	2	20	532.500	806.41	40,320.67		
	3	20	537.600	827.87	41,393.75		
8B02022-ICV1	1	20.0	298.2	226.32	11,315.89	11,747	
	2	20.0	312	243.55	12,177.38		
	3			5.15	#DIV/0!		
8B022-ICB1	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		
8B02022-ICV2	1	20.0	277.9	203.52	10,176.04	10,428	
	2	20.0	287.2	213.61	10,680.34		
	3			5.15	#DIV/0!		
8B02022-ICB2	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		

⇒ ICV1 failed high. Reprepped and reanalyzed below as ICV2. JKP 2-2-18

Page 2

Sequence 8B02022
Batch

TOC Soil data log

Date/Time 2-2-18 @ ~~1520~~ 1735
Analyst ~~JKP~~ JKP 2-2-18

Sample ID	Wt1(mg or ul)**	raw TOC (ug)	Comments
	Wt2(mg or ul)**	raw TOC (ug)	
	Wt3(mg or ul)**	raw TOC (ug)	
8B02022-Cal1	20	1.847	
	20	1.106	
	20	1.192	
8B02022-Cal2	20	14.4	Time Out
	20	16.65	
	20	15.74	
8B02022-Cal3	20	44.37	
	20	48.3	
	20	47.81	
8B02022-Cal4	20	123.9	Time Out
	20	131.8	
	20	132.4	
8B02022-Cal5	20	278.8	
	20	287.6	
	20	284.1	
8B02022-Cal6	20	350.7	Time Out
	20	345	
	20	361	
8B02022-Cal7	20	399.1	Time Out
	20	402.2	
	20	410.3	
8B02022-Cal8	20	437.8	Time Out
	20	440.9	
	20	437.4	

Sample ID	Wt1(mg or ul)**	raw TOC (ug)	Comments
	Wt2(mg or ul)**	raw TOC (ug)	
	Wt3(mg or ul)**	raw TOC (ug)	
8B02022-Cal9	20	473.2	Time Out
	20	473.6	Time Out
	20	479.7	Time Out
8B02022-CalA JKP 2-2-18	20	503.7	
	20	504.4	Time Out
	20	504.6	Time Out
8B02022-CalB JKP 2-2-18	20	529.1	Time Out
	20	532.5	Time Out
	20	537.6	Time Out
8B02022-ICV1	20	298.2	Time Out
	20	312	Time Out
	JKP 2-2-18 ~~20~~		
8B02022-ICB1	20	0	
	20	0	
	JKP 2-2-18 ~~20~~		
8B02022-ICV2	20	277.9	Time Out
	20	287.2	Time Out
8B02022-ICB2	20	0	
	20	0	

ICV1 failed high. Reprepped and reanalyzed below as ICV2
JKP 2-2-18

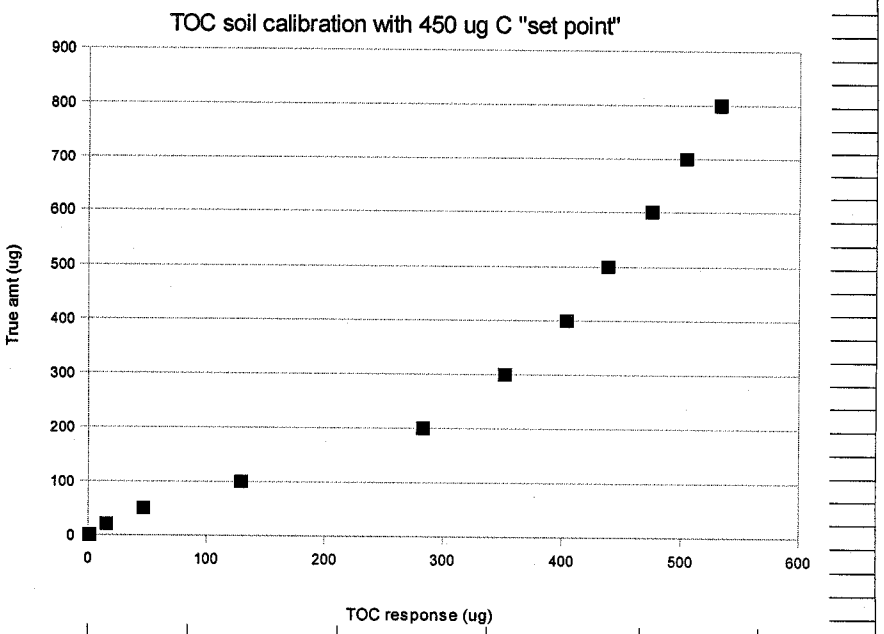
**Sample mass input into instrument as 1000 mg to output actual ug C

Cal Standard	Instrument Reponse	Average Instrument Response
1	1.85	1.38
	1.11	
	1.19	
2	14.4	15.6
	16.65	
	15.74	
3	44.37	46.83
	48.3	
	47.81	
4	123.9	129.37
	131.8	
	132.4	
5	278.8	283.5
	287.6	
	284.1	
6	350.7	352.23
	345	
	361	
7	399.1	403.87
	402.2	
	410.3	
8	437.8	438.7
	440.9	
	437.4	
9	473.2	475.5
	473.6	
	479.7	
10	503.7	504.23
	504.4	
	504.6	
11	529.1	533.07
	532.5	
	537.6	

450 ug curve

TOC resp ug C		True ug C
533.07		800
504.23		700
475.5		600
438.7		500
403.87		400
352.23		300
283.5		200
129.37		100
46.83		50
15.6		20
1.38		0

TOC resp ug C	Requant	% recovery
533.07	808.77	101.1
504.23	695.73	99.39
475.5	596.81	99.47
438.7	488.46	97.69
403.87	403.04	100.76
352.23	302.98	100.99
283.5	209.52	104.76
129.37	95.14	95.14
46.83	43.86	87.73
15.6	19.23	96.15
1.38	6.45	N/A



X (response)	X^2	X^3	y (ug C)
533.07	284160.07	151476261.9	800
504.23	254251.25	128201957.5	700
475.5	226100.25	107510668.9	600
438.7	192457.69	84431188.6	500
403.87	163108.28	65873999.14	400
352.23	124068.32	43700998.31	300
283.5	80372.25	22785532.88	200
129.37	16735.73	2165046.18	100
46.83	2192.74	102678.55	50
15.6	243.26	3793.98	20
1.38	1.91	2.64	0

curve calculations

0.00000740	-0.00289199	0.94586231	5.15285875
0	0	0.14	5.96
0.99945	8.03	#N/A	#N/A
4233.13	7	#N/A	#N/A
818003.66	450.89	#N/A	#N/A

TOC Data

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL1	1	20	1.847	6.89	344.50	323	
	2	20	1.106	6.2	309.77		
	3	20	1.192	6.28	313.81		
8B02022-CAL2	1	20.0	14.4	18.2	909.78	961	
	2	20.0	16.65	20.13	1,006.70		
	3	20.0	15.74	19.35	967.66		
8B02022-CAL3	1	20.0	44.37	42.07	2,103.69	2,193	
	2	20.0	48.3	44.93	2,246.27		
	3	20.0	47.81	44.57	2,228.65		
8B02022-CAL4	1	20.0	123.9	92.03	4,601.40	4,757	
	2	20.0	131.8	96.53	4,826.34		
	3	20.0	132.4	96.87	4,843.42		
8B02022-CAL5	1	20.0	278.8	204.47	10,223.57	10,478	
	2	20.0	287.6	214.05	10,702.70		
	3	20.0	284.1	210.18	10,508.98		
8B02022-CAL6	1	20.0	350.7	300.44	15,022.06	15,160	
	2	20.0	345	291.2	14,560.12		
	3	20.0	361	317.95	15,897.40		
8B02022-CAL7	1	20.0	399.1	392.54	19,626.76	20,159	
	2	20.0	402.2	399.33	19,966.67		
	3	20.0	410.3	417.65	20,882.38		

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
8B02022-CAL8	1	20.0	437.8	486.05	24,302.72	24,424	
	2	20.0	440.9	494.4	24,719.83		
	3	20.0	437.4	484.99	24,249.38		
8B02022-CAL9	1	20.0	473.2	589.45	29,472.51	29,844	
	2	20.0	473.6	590.72	29,536.19		
	3	20.0	479.7	610.45	30,522.56		
8B02022-CALA	1	20.0	503.7	693.77	34,688.41	34,786	
	2	20.0	504.4	696.34	34,816.94		
	3	20.0	504.6	697.07	34,853.73		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CALB	1	20	529.100	792.36	39,618.21	40,444	
	2	20	532.500	806.41	40,320.67		
	3	20	537.600	827.87	41,393.75		
8B02022-ICV1	1	20.0	298.2	226.32	11,315.89	11,747	
	2	20.0	312	243.55	12,177.38		
	3			5.15	#DIV/0!		
8B022-ICB1	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		
8B02022-ICV2	1	20.0	277.9	203.52	10,176.04	10,428	
	2	20.0	287.2	213.61	10,680.34		
	3			5.15	#DIV/0!		
8B02022-ICB2	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		

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

Total Solids by SM 2540G
Benchsheet Data

Batch 9110765 (A9K0332-04,05,06,07,08,09,10)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 2 0 2019

Percent Solids + Dry Weight Worksheet

BATCH #: 9110765 (Matrix: Sediment)

Lab Number	Analysis	QC Source ID	Prepared (Time In)	Weighed (Time Out)	Tare Wt. (g)	Wet Weight (+Tare) (g)	Dry Weight (+Tare) (g)	% Solids (Calc)	LogComments
A9K0332-04	Dry Weight		11/13/19 13:30		1.253	28.323	23.183	81.0	Use Results from TS. Make NR once completed.
A9K0332-04	Solids, Total (SM 254		11/13/19 13:30		1.253	28.323	23.183	81.0	Use Results for Dry Weight.
9110765-DUP1	QC	A9K0332-04	11/13/19 13:30		1.254	26.774	22.035	81.4	
A9K0332-05	Dry Weight		11/13/19 13:30		1.259	28.912	23.262	79.6	Use Results from TS. Make NR once completed.
A9K0332-05	Solids, Total (SM 254		11/13/19 13:30		1.259	28.912	23.262	79.6	Use Results for Dry Weight.
A9K0332-06	Dry Weight		11/13/19 13:30		1.262	29.895	26.419	87.9	Use Results from TS. Make NR once completed.
A9K0332-06	Solids, Total (SM 254		11/13/19 13:30		1.262	29.895	26.419	87.9	Use Results for Dry Weight.
A9K0332-07	Dry Weight		11/13/19 13:30		1.262	28.529	23.855	82.9	Use Results from TS. Make NR once completed.
A9K0332-07	Solids, Total (SM 254		11/13/19 13:30		1.262	28.529	23.855	82.9	Use Results for Dry Weight.
A9K0332-08	Dry Weight		11/13/19 13:30		1.252	27.462	25.529	92.6	Use Results from TS. Make NR once completed.
A9K0332-08	Solids, Total (SM 254		11/13/19 13:30		1.252	27.462	25.529	92.6	Use Results for Dry Weight.
A9K0332-09	Dry Weight		11/13/19 13:30		1.257	26.684	24.547	91.6	Use Results from TS. Make NR once completed.
A9K0332-09	Solids, Total (SM 254		11/13/19 13:30		1.257	26.684	24.547	91.6	Use Results for Dry Weight.
A9K0332-10	Dry Weight		11/13/19 13:30		1.266	26.556	24.074	90.2	Use Results from TS. Make NR once completed.
A9K0332-10	Solids, Total (SM 254		11/13/19 13:30		1.266	26.556	24.074	90.2	Use Results for Dry Weight.

NRP 11/14/19
Prepared By: Date

James A Johnson 11/15/19
Reviewed By: Date

Batch #: 9110765

Analyst: nrp

Total Solids Worksheet

Method: SM 2540 G

Date: 11/13/2019

Sample ID	Tare Wt. (g)	Vessel ID	Initial (wet) Wt. (g)	Final Weight (g)			Comments
				1st weighing	2nd Weighing	3rd Weighing	
A9K0332-04	1.253	332-04	28.323	23.183	23.189	[redacted]	
9110765-DUP1	1.254	332-04 DUP	26.774	22.035	22.041	[redacted]	source: A9K0332-04
A9K0332-05	1.259	332-05	28.912	23.265	23.262	[redacted]	
A9K0332-06	1.262	332-06	29.895	26.425	26.419	[redacted]	
A9K0332-07	1.262	332-07	28.529	23.859	23.855	[redacted]	
A9K0332-08	1.252	332-08	27.462	25.529	25.530	[redacted]	
A9K0332-09	1.257	332-09	26.684	24.547	24.550	[redacted]	
A9K0332-10	1.266	332-10	26.556	24.080	24.074	[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):**		**103.7/103.0**	**104/103.1**	/	
11/13/19@18:00		**Time of weighing:**		11/14@10:07	11/14@16:20		

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

Balance Checksheets

Extractions November 2019
Dry Weight November 2019
Wet Chem November 2019
Metals November 2019
Sample Rec. November 2019

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: November
Year: 2019

Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1 07:40	JAG		.48		299.98
2					
3					
4 07:25	JAG		.51		300.00
5 07:25	JAG		.50		299.98
6 07:55	JAG		.51		299.99
7 07:20	JAG		.49		299.95
8 0734	AJJ		0.51		299.98
9					
10					
11 07:15	JAG		.50		299.98
12 10:20	CmA		0.49		299.99
13					
14 07:20	JAG		.50		299.97
15 0710	AJJ		0.50		299.97
16		0.50g		300.00g	
17					
18 0720	AJJ		0.49		299.95
19 9/15	xc		0.50		299.96
20 0718	AJJ		0.50		299.98
21 0724	AJJ		0.51		299.96
22 0733	AJJ		0.50		299.97
23 ~~0~~					
24					
25 07:20	JAG		~~JAG 11/25/19 49.99~~ .49		299.95
26 08:05	JAG		.49		299.97
27 07:05	JAG		.49		300.00
28					
29					
30					
31					

Balance Challenge Log

Dredd
Intelli-lab PC-6001
ID# 190408014

Weight ID	weight (g) =/<1g >1g	acceptance range (g) ± 0.02g ± 2%	
03-J68814-10	10.0	9.8	10.2
15477	200.0	196.0	204.0
15477 + 1000139353	1 kg + 2kg	2940.0	3060.0

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: November
Year: 2019

KT 11/4/19

Alternate Weight/ID used:

Date Range:

	Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1	750	KT		9.9		200.0		3002.1
2	~~800~~	~~KT~~						~~3002.3~~
3								
4	800	KT		9.9		200.1		3002.3
5	807	MJG		10.0		200.1		3002.1
6	750	MJG		10.0		200.1		3002.2
7	759	MJG		10.0		200.0		3002.2
8	806	MJG		10.0		200.1		3002.1
9								
10								
11	750	MJG		10.0		200.1		3002.2
12	815	MJG		10.0		200.1		3002.3
13	750	KT		10.0		200.1		3002.3
14	815	MJG		10.0		200.1		3002.2
15	720	KT		10.0		200.1		3002.3
16			10.0 g		200.0 g		3000.0 g	
17								
18	800	KT		9.9		200.1		3002.3
19	945	MJG		9.9		200.1	11/19/19 MJG	~~3002.4~~ 3002.4
20	812	MJG		9.9		200.1		3002.3
21	800	~~KT~~		10.0		200.1		3002.3
22	817	MJG		10.0		200.1		3002.1
23								
24								
25	800	KT		10.0		200.1		3002.3
26	740	MJG		9.9		200.2		3002.2
27	835	MJG		9.9		199.9		2999.9
28								
29								
30								
31								

Balance Challenge Log

Metals Prep Balance 2
Sartorius LC 620 P
40020073

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
03-J68049-19	0.100g	0.080	0.120
03-J68814-10	10g	9.800	10.200
15477 (100g + 500g)	600g	588.000	612.000

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: November
Year: 2019

~~[illegible]~~ KT 11/4/19

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1 750	KT		599.990		9.998		0.097
2 ~~8~~							
3							
4 800	KT		599.985		10.000		0.099
5 805	MJG		599.980		9.999		0.100
6 748	MJG		599.985		9.998		0.099
7 757	MJG		599.985		10.000		0.100
8 805	MJG		599.980		9.997		0.098
9							
10							
11 748	MJG		599.990		9.999		0.099
12 813	MJG		599.990		10.004		0.103
13 750	KT		599.995		10.001		0.100
14 813	MJG		599.990		9.999		0.099
15 720	KT		599.990		10.000		0.099
16		600.000g		10.000g		0.100g	
17							
18 800	KT		600.000		9.999		0.098
19 942	MJG		600.000		10.000		0.101
20 810	MJG		600.000		10.001		0.101
21 800	KT		599.995		10.001		0.101
22 815	MJG		599.990		9.999		0.100
23							
24							
25 800	KT		599.990		10.000		0.100
26 737	MJG		599.990		10.001		0.101
27 834	MJG		599.985		10.000		0.100
28							
29							
30							
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: NOV
Year: 2019

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1							
2							
3							
4 9:59	MRE		99.9986		0.1001		0.0050
5 0:720	MRF		99.9989		0 1000		0.0050
6 0710	MVD		99.9986		0.0999		0.0050
7 0749	MRE		99.9981		0.1001		0.0051
8 0845	MVD		99.9987		0.1000		0.0051
9							
10							
11 7:55	MRF		99.9994		0.1001		0.0050
12 8:00	MRF		99.9993		0.1000		0.0051
13 9:46	MRE		99.9997		0.1002		0.0051
14 0827	CMM		99.9995		0.0998		0.0048
15 0613	JKP		100.0002		0.1001		0.0050
16		100.0000g		0.1000g		.0050g	
17							
18 9:25	MRF		100.0011		0.1000		0.0050
19 7:43	MRF		100.0014		0.0999		0.0049
20 10:30	MRF		100.0012		0.1000		0.0050
21 11:00	MRF		100.0011		0.1001		0.0049
22							
23							
24 12							
25 14:22	MRF		100.0017		0.1000		0.0051
26 7:35	MRE		100.0002		0.1000		0.0050
27 8:58	MRE		99.9997		0.1000		0.0050
28							
29							
30							
31							

Balance Challenge Log

BalanceName
Lady Justice
S/N 593312

Weight ID	weight (g) =/<1g >1g	acceptance range (g) ± 0.02g ± 2%	
10660	0.10g	0.08	0.12
10581	50.00g	49.00	51.00
15477	500.00g	490.00	510.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: ~~October~~ November
Year: 2019

Alternate Weight/ID used: | Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1 8:20	MS		0.10		49.99	ONLY	
2							
3						NEEDED	
4 7:35	MS		0.10		49.99	WHEN	
5 8:25	MS		0.08		49.97		
6 8:05	MS		0.10		49.99	WEIGHING	
7 9:25	MS		0.09	MS 11/8	49.99	OVER	
8 7:45	MS		4998	⟷	0.10	50 g	499.76 MS 11/8/19 14:13
9 9:00	AAG		0.10		4998	KEPT	
10						IN METALS	
11 13:40	MS		0.09		4997	DEPT.	
12 8:42	MS		0.09		4997		
13 9:40	SO		0.09		49.91		
14 7:45	MS		0.10		49.98	500.00g	
15 8:00	MS		0.09		49.97		199.78 +49.99 549.77
16 10:30	AKK	0.10g	0.09	50.00g	49.98		
17							
18 7:43	MS		0.09		49.98		
19 7:46	MS		0.10		49.97		499.70
20 8:45	MS		0.09		49.97		
21 7:40	MS		0.09		49.98		499.72 MS 11/12/19 12:50
22 7:35	MS		0.09		49.97		
23 10:59	MS		0.09 10M 11/23		49.97		
MS 11/25 24							
7:45 25 ~~499~~	MS		0.10		4997		
26 7:40	MS		0.09		49.97		
27 9:40	MS		0.09		49.99		
28							
29							
30							
31							